

Table S2. Pharmacological evaluation of the extracts related to inflammatory processes in species of the Nepetoideae (Lamiaceae) subfamily.

Species	Plant part(s)	Pharmacology activity	Extract(s)	Reference
<i>Agastache mexicana</i> Lint. & Epling	Aerial parts & inflorescences	Antinociceptive effects at 10-1000 mg/kg, i.p. in both neurogenic and inflammatory phases in the formalin test in Wistar rats. Antinociceptive and anti-inflammatory activities in the writhing (ED ₅₀ = 2 mg/kg, i.p.) & formalin (ED ₅₀ = 44 mg/kg i.p.) tests in Swiss albino mice and Wistar rats, respectively. Reduction on the colonic inflammatory cytokines at doses of 3-300 mg/kg, p.o. using the oxazolone-induced colitis model in male BALB/c mice.	Essential oil, hexane, ethyl acetate, & methanol extracts.	González-Ramírez et al., 2012; Verano et al., 2013; González-Ramírez et al., 2021.
<i>Agastache rugosa</i> Kuntze	Aerial parts & leaves	Antioxidant activity using 2,2-difenil-1-picrilhidrazilo (DPPH) with a scavenging concentration fifty (SC ₅₀ = 77.4 ± 1.9 µg/mL). Reduction on the nitric oxide (NO) and nitric oxide synthase (NOS), and down regulation of the mARN of IL-6. NO decrease with an inhibitory concentration fifty (IC ₅₀) =7.9 µg/mL, and in the reactive oxygen species (ROS) IC ₅₀ =4.3 µg/mL, NOS IC ₅₀ =30.0 µg/mL. Reduction of DPPH with a SC ₅₀ =2.9 mg/mL; ROS SC ₅₀ =1.4 mg/mL, and NO SC ₅₀ =1.7 mg/mL.	Ethyl acetate, aqueous fermented extract with <i>Lactobacillus rhamnosus</i> HK-9, & aqueous extract.	Kim et al., 2017; Lim et al., 2017; Lee et al., 2020.
<i>Asterohyptis stellulata</i> (Benth.) Epling	Aerial parts	Reduction of DPPH, SC ₅₀ = 112.84 ± 3.71 µg/mL. Promotion of skin regeneration in male mice CD-1 et/et line.	Methanol extract	Álvarez-Santos et al., 2022.
<i>Cedronella canariensis</i> (L.) Webb & Berthel.	Flowers	Anti-inflammatory activity in carrageenan-induced edema model in HC/CFLP mice (1000 mg/kg, p.o.).	Chloroformic fraction from methanol extract.	Lopez-García et al., 1991.
<i>Clinopodium bolivianum</i> (Benth.) Kuntze	Aerial parts	Reduction of IL-8 in urothelial cells infected with <i>Escherichia coli</i> .	Aqueous extract	Mohanty et al., 2017.
<i>Clinopodium chinense</i> (Benth.) Kuntze	Whole plant	Inhibition on the inflammation induced by LPS-TLR4-NF-κB-iNOS/COX-2 signaling pathway in RAW264.7 cells. Decrease expression of PR, MMP-9, & VEGF. Increase in levels of TXB2 and the expression of VEGF. Oxidative stress inhibition by antioxidant activity.	Aqueous extract	Yu et al., 2019; Kim et al., 2020; Li et al., 2020; Li et al., 2022; Wang et al., 2023.

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<i>Clinopodium gracile</i> (Benth.) Kuntze	Aerial parts	Inhibition of mast cell-derived cells that cause allergic inflammation.	Aqueous extract	Park et al., 2010.
<i>Clinopodium polycephalum</i> (Vaniot) C.Y. Wu & S.J. Hsuan	Root & stem	Anti-inflammatory activity in RAW 264.7 macrophages induced with LPS.	Ethanol extract 70%.	Liu et al., 2022.
<i>Clinopodium vulgare</i> L.	Flowers	Modulation of COX-2 inhibitors. Suppresses NF-κB activation by preventing Iκ-B phosphorylation and inhibits the phosphorylation of p38 and SAPK/JNK MAPKs. It down-regulates iNOS expression with a drastic decrease of NO production, inhibits MMP-9 activation, but does not affect COX-2.	Aqueous extract	Petrova et al., 2023; Dobrev, 2021; Amirova et al., 2019; Burk et al., 2009.
<i>Coleus amboinicus</i> Lour.	Leaves	Administration reduced cisplatin-induced renal cell damage and an inhibition on the process of kidney fibrosis in Wistar rats. Promote the anti-inflammatory cytokine TGF-β1 and glutathione peroxidase (GPx) concentrations to regulate cell proliferation, apoptosis, chemotaxis, immunity, inflammatory response, and tissue repair (fibrosis) of kidney tissue. It could effectively reduce the blood urea nitrogen, serum creatinine, GPx, & the TGF-β1 concentrations in the uric acid induced rats.	Ethanol extract	Sahrial & Solfaine 2019; Solfaine et al. 2021.
<i>Coleus scutellarioides</i> (L.) Benth.	Leaves	Anti-inflammatory properties of quercetin by inhibiting the production of PGs through inhibition of COX-2 activity.	Hexane & essential oil.	Mustaricihie et al., 2017; Mustaricihie et al., 2022.
<i>Collinsonia canadensis</i> L.	Aerial parts	Reduction of the NO concentrations.	Thymol & carvacrol.	Mahomoodall et al., 2021.
<i>Dracocephalum heterophyllum</i> Benth.	Whole plant	Extracts can effectively suppress CD4+ T cell proliferation & prolong the survival and reduced mortality in mice. Rosmarinate, luteolin & diosmetin suppress abnormal CD4+ T-cell proliferation	Ethanol- ethyl acetate, petroleum ether, ethyl acetate, <i>n</i> -BuOH, & water.	Shi et al. 2016; Bian et al., 2020.

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<i>Dracocephalum forrestii</i> W.W. Sm.	Whole plant	Ethanol extract and 4-hydroxi-3-methoxyphenylethanol-8-O-[(6-O-siringoil)- β -D-glucopiranoside] (1) decrease NO levels in macrophages RAW 264.7. Inhibition of 33.3%-41.6% at 100 μ g/mL.	Ethanol extract	Li et al., 2009.
<i>Dracocephalum kotschy</i> Boiss.	Aerial parts and leafy branches	Ethyl acetate extract and apigenin produce anti-inflammatory effects in colitis induced by acetic acid model in male Wistar rats (10-40 mg/kg & 5-20 mg/kg, p.o.). The ethyl acetate extract reduces the expression of iNOS, COX-2, IL-1 β , tumor necrosis factor (TNF)- α in LPS-stimulated J774.1 mouse macrophages at 25 μ g/mL. Prevent hydroxyproline & malondialdehyde increase levels in fibrosis model induced by bleomycin in Wistar rats (20-80 mg/kg, p.o.) Extracts prevent the severity of gastric ulcer induction by indomethacin in male Wistar rats (80 and 40 mg/kg, p.o.)	Ethyl acetate, hydroalcoholic, aqueous extract, & flavonoid extract.	Sandraei et al. 2017; Kalantar et al., 2018; Hosseini-Sharifabad et al, 2021; Minaiyan et al., 2021.
<i>Dracocephalum moldavica</i> L.	Aerial parts	Suppression of PCNA, NF- κ B p65, ICAM-1, & CAM-1 in rat vascular smooth muscle cells induced by TNF- α . Tiliarin reduces mRNA of TNF- α , NF- κ B, MCP-1 & iNOS at 50 μ M in macrophages induced by LPS. It suppresses the release of NO & PGE2. Inhibits the mRNA and protein expression level of iNOS & COX-2, respectively. Reduces the release of proinflammatory cytokines such as IL-6, IL-1 β in RAW 364.7 cells induced with LPS. Dracocefalumoides A, uncinatona, tricotonoma F, & cariopterissoide C produced inhibition against TNF- α , IL-1 β & NO im macrophages RAW 264.7 induced by LPS, IC ₅₀ = 1.12 – 5.84 μ M.	Ethanol & ethanol-aqueous extracts.	Xing et al., 2013; Shen et al., 2019; Kim et al., 2021; Nie et al., 2021; Sheychenko et al., 2021.
<i>Dracocephalum palmatum</i> Stephan ex Willd.	Aerial parts. The plant's young shoots and flowers.	Anti-inflammatory, diuretic, gastrointestinal improvement, & alcoholism treatment. Cosmosiin possesses anti-inflammatory, insulin mimetic, & cancer preventive activities. Cynaroside produces anti-atherosclerotic, anti-inflammatory, anti-diabetic and cardioprotective effects. Eriodictyol possesses anticancer, antioxidant, antidiabetic, anti-inflammatory, & cytoprotective properties.	Decoction, infusion, & tincture.	Olennikov et al., 2013; Andreyeva et al., 2020; Chirikova et al., 2021.

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<i>Dracocephalum rupestre</i> Hance	Whole plant	Total phenolic & flavonoids contribute to the high radical-scavenging activity. Fraction EA protects on the hepatic injury by <i>in vivo</i> antioxidant action. Eriodictyol produced neuroprotective effects on memory deficits and neuroinflammation in mice subjected to permanent middle cerebral artery occlusion (pMCAO).	Ethanol-aqueous (EA) from petroleum ether or ethyl acetate extracts	Ferreira et al., 2016; Zhu et al., 2017.
<i>Elsholtzia ciliata</i> (Thunb.) Hyl.	Leaves & aerial parts	Anti-inflammatory activity at 100 mg/kg, p.o. in the formalin test in Swiss Webster mice. Attenuates renal inflammation in renal interstitial fibrosis induced by unilateral ureteral obstruction model in male Sprague Dawley (300 & 500 mg/kg, p.o. for 14 days). Reduction on the levels of proinflammatory cytokines (TNF- α , IL-6) and prostaglandin E2 induced by LPS in mouse macrophages. Luteolin, caffeic acid, vitexin, pedalin, luteolin-7-O- β -D-glucopyranoside, apigenin-5-O- β -D-glucopyranoside, apigenin-7-O- β -D-glucopyranoside, chrysoeriol-7-O- β -D-glucopyranoside, 7,3'-methoxy luteolin-6-O- β -D-glucopyranoside, 5,6,4'-trihydroxy-7,3'-dimethoxyflavone, 5-hydroxy-6,7-dimethoxyflavone, 4-(E)-caffeoyl-L-threonic acid, 4-O-(E)-p-coumaroyl-L-threonic acid, α -linolenic acid, all of them reduced ROS released in macrophages J774A.1 LPS-induced at 10-2.5 μ M doses. Inhibits mast cell-mediated allergic inflammatory reactions by suppressing histamine release and proinflammatory cytokine expression, and involvement of calcium, NF- κ B & p38 MAPK in these effects.	Hexane, dichloromethane, ethanol, petroleum ether, diethyl ether, ethyl acetate, & aqueous extracts.	Wang et al., 2022; Zhang et al., 2021; Zotsenko et al., 2021; Nguyen et al., 2021; Pudziuelyte et al., 2020; Kim et al., 2016; Kim et al., 2011.
<i>Elsholtzia densa</i> Benth.	Aerial parts	Anti-inflammatory effects by inhibition of 27.27% at 300 mg/kg, p.o. in the carrageenan induced- edema in Wistar rats. Significant decrease of the secretion of proinflammatory cytokines TNF- α , IL-1 β , & IL-6 of 80.93%, 75.33%, & 67.09%, respectively, in serum of Wistar rats.	Methanol extract	Zargar et al., 2019.
<i>Elsholtzia rugulosa</i> Hemsl.	Aerial parts	All the isolated compounds were evaluated for the anti-inflammatory activity by assessing the inhibition of LPS-induced NO production in RAW264.7 mouse macrophages. Compounds such as rugulolides A, nepetoidin B, methyl rosmarinat, & syringaresinol, mildly inhibited NO production with IC ₅₀ values ranging from 12.46 to 23.10 μ M, and others were inactive (IC ₅₀ > 50 μ M).	Aqueous-ethanol (70%) extract.,	Yang et al., 2021.

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<i>Elsoltzia stachyodes</i> (Link) C.Y. Wu	Whole plant	Anti-inflammatory effect observed by 25 ± 1.08 inhibition at 200 mg/kg, p.o. in the edema induced with carrageenan in Wistar rats.	Aqueous extract	Banerjee et al., 2021.
<i>Elsholtzia stauntonii</i> Benth.	Aerial parts	Non-toxic extract (class V) according to the Sidorov classification. Antinociceptive and anti-inflammatory effects in the writhing test and edema induced with carrageenan test in a murine model using 100 mg/kg, p.o.	Ethanol extract	Zotsenko et al., 2021.
<i>Elsoltzia splendens</i> Nakai	Aerial parts	Antinociceptive and anti-inflammatory effects by inhibition of 44.6% using a dosage of 400 mg/kg, p.o. in the croton oil-induced ear edema and 50% in the writhing test in ICR mice. A PGE ₂ inhibition was also observed in RAW 264.7 macrophages induced with LPS.	Ethanol extract 75%.	Kim et al., 2003.
<i>Eplingiella fruticosa</i> (Salzm. ex Benth.) Harl & J.F.B. Pastore	Leaves	Anti-inflammatory activity was evaluated using the paw oedema model induced by 1% carrageenan.	Ethanol extract 90%.	Andrade et al., 2010; Beserra-Filho et al., 2019.
<i>Glechoma hederacea</i> L.	Whole plant	Inhibition of NO, (IL)-12p70, IL-12p40, & TNF- α in LPS-induced mouse peritoneal macrophages. Anti-inflammatory activity in the luciferase assay in HepG2 cells, where methyl isoferuloyl-7-(3,4-dihydroxyphenyl) lactate reduced NF- κ B activation in 45.4% at 20 μ M; methyl rosmarinate reduced 44.3% & ethyl rosmarinate, benzyl-4'-hydroxy-benzoyl-3'-O- β -D-glucopyranoside in 57.0% at 20 μ M. Inhibition of PPAR- α , PPAR- γ , NF- κ B, E-selectin, IL-8 in LPS-induced endothelial cells. Protective effect in rat model of induced cholestasis by attenuation of NF- κ b & AP-1. Attenuation of NO levels, regulation of iNOS, COX-2, HO-1, & TNF- α in RAW 264.7 macrophages induced with LPS.	Aqueous, ethanol, & methanol destanified extract. Essential oil.	An et al., 2006; Kim et al., 2011; Vogl et al., 2013; Wang et al., 2017; Chou et al., 2018.
<i>Glechoma longituba</i> (Nakai) Kuprian.	Whole plant	Apigenin-7-diglucoronide produced attenuation of proinflammatory gene expression in retinas exposed to bright light in BALB/c mice.	Aqueous extract	Bian et al., 2017.
<i>Horminum pyrenaicum</i> L.	Root	Suppression of (IFN- γ -)-dependent immunometabolic pathways, tryptophan breakdown via IDO-1, & neopterin formation by GTP-CH-I. Pathways related to inflammatory processes.	Petroleum ether extract	Becker et al., 2018.
<i>Hoslundia opposita</i> Vahl	Root	Antinociceptive, anti-inflammatory, & antipyretic effects in Swiss mice and Wistar rats using the writhing test (22.7% inhibition at 100 mg/kg, p.o.), carrageenan-induced edema	Chloroform extract	Olajide et al., 1998.

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		(76% inhibition at 100 mg/kg, p.o.), and yeast-induced hyperthermia (significant decrease at 100 mg/kg).		
<i>Hyptis capitata</i> Jacq.	Leaves & seeds	The anti-inflammatory potential of the extract by determining their ability to inhibit NO production using LPS activated macrophages, and the effect on the production of TNF- α , & interleukins 1 β or 6 (IL-1 β & IL-6) in macrophages. Inhibitor of the NO production in <i>in vitro</i> assay.	96% ethanol extract. Alkaloids, coumarins, glycosides, flavonoids, quinones.	Castro et al., 2021.
<i>Hyptis crenata</i> Pohl ex Benth.	Leaves & aerial parts.	Reduction of the pro-inflammatory cytokines (IL-6, MCP-1, IFN- γ , TNF- α , & IL-12p70) & increase in the anti-inflammatory cytokine IL-10, as well as an inhibitory myeloperoxidase activity.	Aqueous extract	De Jesus et al., 2009; Coelho-De-Souza et al., 2021; Alves-Soares et al., 2022; Shipa et al., 2022; De Lima et al., 2023.
<i>Hyptis pectinata</i> (L.) Poit.	Flowers	Antinociceptive and anti-inflammatory activities in the 2 nd phase of the formalin test (37.4% inhibition at 200 mg/kg, p.o.), carrageenan-induced peritonitis (reduction of leukocyte migration 3.97×10^6 cells/mL at 200 mg/kg, p.o.), & TPA-induced edema (0.27 ± 0.02 mm decrease at 3.0 mg/ear) in Swiss mice.	Dichloromethane fraction from ethanol extract (60%).	Santana et al., 2022.
<i>Hyptis suaveolens</i> (L.) Poit.	Leaves	Anti-inflammatory activity in the edema induced with carrageenan in albino rats. Suaveolol ID ₅₀ = 0.71 μ mol/cm ² & methyl suaveolate ID ₅₀ = 0.60 μ mol/cm ² in the TPA-induced edema.	Ethanol extract	Almeida-Bezerra et al., 2022.
<i>Hyptis umbrosa</i> Salzm. ex Benth.	Leaves	Antinociceptive and anti-inflammatory activity in writhing test by significant inhibition at 100-400 mg/kg & formalin test with significant inhibition in the first phase at 400 mg/kg, p.o. in Swiss mice.	Ethanol extract 95%.	Anjos et al., 2017.
<i>Hissopus cuspidatus</i> Boriss.	Aerial parts	Attenuation of the LPS-induced inflammatory responses by inhibition of iNOS and COX-2 expression through suppression of NF- κ B activation. JAX2 significantly inhibits airway remodeling in asthma, inhibiting the proliferation and migration of hASMCs, releasing inflammatory factors and metalloproteinases, activating the ERK1/2 signal pathway, & promoting the secretion of anti-inflammatory factors.	Ethanol extract	Qin et al., 2023; Aihaiti et al., 2023; Cai et al., 2023; Ling-Fei, K. et al, 2023; Liu et al., 2021; Liu et al., 2021b: Yuan et al., 2019; Zhao et al., 2013.

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<i>Hyssopus officinalis</i> L.	Aerial parts	Anti- inflammatory effect of the extract at 200 mg/kg, p.o. in the edema induced by carrageenan in Wistar rats. Inflammation reduced at 5 mg/kg by modulation of the IL-1B & IL-10 in the carrageenan-induced edema. Immune and inflammatory regulation of the airways in BALB/c mouse model of chronic asthma. A decrease in levels of eosinophils & IgE in bronchial alveolar fluid at 0.04 g/10 g, p.o.	Aqueous extract, aqueous-nanoparticles of ZnO, methanol extract.	Ma et al., 2014; Mohammad et al., 2019; Micovic et al., 2022.
<i>Isodon adenanthus</i> (Diels) Kudô	Leaves	Adenanthine prevents encephalomyelitis by inhibiting NF-κB signaling in C57BL/6 mice.	Adenanthine	Yin et al., 2013.
<i>Isodon amethystoides</i> (Benth.) H. Hara	Whole plant	Glaucocalyxin A inhibited LPS-induced production of NO and reversed the morphological changes in primary microglia. It suppressed expression of iNOS & COX-2 dose-dependently at the mRNA and protein levels. The production of proinflammatory cytokines such as TNF-a, IL-1b & IL-6 was inhibited by suppressing their transcriptional activity.	Methanol extract	Xiang et al. 2014.
<i>Isodon coetsa</i> (Buch.-Ham. ex D. Don) Kudô	Leaves	Clastogenic activity with increasing concentrations and time durations. The major abnormalities included chromosome fragments, stickiness, ring chromosomes, chromosome bridges, pulverization, binucleate cell, micronucleus, ball metaphase, chromosome laggards, and shift in microtubule organizing center. Possible toxic activity of the extract suggests judicious use.	Aqueous extract	Neelamkavil & Thoppil, 2013; 2014.
<i>Isodon excisus</i> (Maxim.) Kudô	Leaves	Inflexinol (1, 5, 10 μM) suppressed the expression of iNOS & COX-2, as well as the production of NO in LPS-stimulated RAW 264.7 cells and astrocytes. Consistent with the inhibitory effect on iNOS and COX-2 expression, inflexinol also inhibited transcriptional and DNA binding activity of NF-κB via inhibition of IκB degradation as well as p50 and p65 translocation into nucleus. Inflexin exhibits antiinflammatory effects suppressing NO release in primary culture of rat microglia cells and BV-2 microglial cells. Inflexin also significantly inhibited the release of proinflammatory mediators and the release of iNOS, COX-2, IL-1β, IL-6 and TNF-α in LPS-stimulated BV-2 microglial cells. The anti-inflammatory properties of inflexin are mediated by down-regulation of NF-κB and Akt but not MAPKs activation in BV-2 microglial cells.	Methanol extract	Lee et al., 2007; Ko et al., 2010.

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<i>Isodon henryi</i> (Hemsl.) Kudô	Whole plant	Rabdoternin A, lasiodonin : Inhibición de NO en macrófagos RAW 264.7 inducidos con LPS (IC ₅₀ = 6.70, 5.85 µM, respectivamente)	Ethanol extract 70%.	Cheng et al., 2022.
<i>Isodon japonicus</i> (Burm. f.) H. Hara	Aerial parts	Inhibitory effects on LPS-induced NO & PGE ₂ production in RAW264.7 cells. Kamebanin (IC ₅₀ = 0.06 µM), kamebacetal A (IC ₅₀ = 0.58 µM), kamebakaurin (IC ₅₀ = 0.15 µM), excisanin A (IC ₅₀ = 0.35 µM). Oridonin strongly suppressed particulate-induced cell death accompanied by the release of IL-1α & IL-1β in mouse and human macrophages. The extract attenuated expression of NO, iNOS & TNF-α in BV2 microglial cell LPS-stimulated. The extract inhibited compound 48/80-induced systemic reactions and plasma histamine release in mice. Decreased the PCA reaction activated by antidinitrophenyl (DNP) IgE antibody. Kamebakaurin inhibited the LPS-induced production of NO in activated microglial cells. The mRNA and protein levels of inducible iNOS and COX-2 were also decreased. Effusanin C inhibited the production of inflammatory mediators NO, IL-1β, and TNF-α in macrophages and dendritic cells. Pretreatment with isodojaponin D (5 and 10 µg/ml) prior to treatment with LPS significantly decreased LPS-induced production of COX-2 and iNOS in a dose-dependent manner. In addition, LPS-induced pro-inflammatory cytokines (IL-1β, IL-6, and TNF-α) were also decreased by pretreatment with isodojaponin D.	Methanol extract & Aqueous extract.	Hwang et al. 2001; Shin et al., 2004; Hong et al., 2009; Lim et al. 2010; Kim et al., 2011; Kim et al., 2013; Kang, 2018; Ikoma et al., 2022.
<i>Isodon melissoides</i> (Benth.) H.W. Li	Aerial parts	Overproduction of pro-inflammatory cytokines was significantly decreased in the essential oil treated cells in LPS-induced inflammation in HaCaT cells in a dose-dependent manner without any cytotoxic effect. Melissoidesin inhibited the growth of human leukemia cell lines and primary acute myeloid leukemia (AML) blasts via induction of apoptosis, with the evidence of mitochondrial DWm loss, ROS production, caspases activation, & nuclear fragmentation.	Essential oil	Yu et al., 2007; Kumar et al., 2021.
<i>Isodon scoparius</i> C.Y. Wu & H.W. Li) H. Hara	Aerial parts	Scopariusol L inhibited NO in RAW 264.7 macrophages induced with LPS (IC ₅₀ = 0.6 µM*L ⁻¹)	Acetone extract 70%.	Jiang et al., 2018.
<i>Isodon serra</i> (Maxim.) Kudô	Aerial parts	Oridonin (12 µg/mL) inhibited BAFF expression in mouse macrophages, and <i>in vivo</i> administration (9 mg/kg) ameliorated the serological and clinical manifestations of systemic lupus erythematosus in MRLlpr/lpr mice. Serrin F, 14b-hydroxyrabdocoestin A,	Non described	Zhang et al., 2005; Li et al., 2010; Zhou et al. 2013; Wan et al., 2016; Xing et al., 2020.

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		serrin H, serrin I, enanderianin N, & megathyrin B strongly inhibited NO production in LPS-stimulated RAW264.7 cells. Enmein produced potential immunosuppressive action in <i>in vitro</i> and <i>in vivo</i> models. Isoserrin A, B, C, D, E, F, G, H & I exhibited notable NO production inhibition in LPS-stimulated BV-2 cells (IC ₅₀ = 15.6-7.3 µM). Nodosin depressed the murine ear-swelling extent and the IL-2 levels in the blood serum.		
<i>Isodon sculponeatus</i> (Vaniot) Kudô	Aerial parts	Sculponeatin J produced cytotoxic activity against five human tumor cell lines with IC ₅₀ values ranging from 1.8 mmol/L to 3.3 mmol/L, and it also inhibited NO production in LPS-stimulated RAW264.7 cells, with IC ₅₀ value of 3.3 mmol/L. Sculponin T & sculponeatin C showed moderate cytotoxicity in the same tumor cell lines. Sculponins Y exhibited weak cytotoxic activity against HL-60, SMMC-7721, MCF-7, & SW-480 cell lines. It also inhibited NO production in LPS-stimulated RAW264.7 cells with IC ₅₀ value of 13.8 µM.	70% aqueous acetone, and then partitioned between ethyl acetate & water.	Jiang et al., 2014a; 2014b.
<i>Isodon ternifolius</i> (D.Don) Kudô	Root	Ternifoliuslignane A-D & 3-carboxy-6,7-dihydroxy-1-(3',4'-dihydroxyphenyl)-naphthalene produced NO inhibition in LPS-induced RAW 264.7 macrophages (IC ₅₀ = 9.98–29.14 µM).	Methanol extract	Zhang et al., 2018.
<i>Isodon rubescens</i> (Hemsl.) H. Hara	Aerial parts	Isojiangrubesina B, isojiangrubesina E, effusanin A, longikaurin A, & 7,14-O-(1-metiletilidene) oridonin produced inhibition of NO in RAW 264.7 macrophages induced with LPS (IC ₅₀ = 1.2, 1.3, 1.3, 0.8, 1.1 µM, respectively). Orodinin was covalent and specific inhibitor for the NLRP3 inflammasome in mouse models of peritonitis, gouty arthritis, & type 2 diabetes. It significantly suppressed the production of MMP1, MMP3 and MMP13. It attenuated NO and PGE2 production, as well as iNOS and COX-2 expression in IL-1β-induced human osteoarthritis chondrocytes.	Ethanol extract 80%, acetone extract 70%.	Du et al., 2013; Zhang et al., 2017; He et al., 2018; Jia et al., 2019.
<i>Isodon wikstroemioides</i> (Hand.-Mazz.) H. Hara	Aerial parts	Isowikstroemins A–D were evaluated for their cytotoxicity against five human tumor cell lines & exhibited significant activity with IC ₅₀ values ranging from 0.9 to 7.0 µM. Isowikstroemins A–D and G exhibited inhibitory activity against NO production in LPS-activated RAW264.7 macrophages. Isowikstroemins H, J, & macrocalyxin B were evaluated for their cytotoxicity against human tumor cell lines (HL-60, SMMC-7721, A-549, MCF-7, SW-480), and exhibited significant cytotoxicity with IC ₅₀ values ranging from (0.84 ± 0.02) to (4.09 ± 0.34) µmol/L.	70% aqueous acetone partitioned between ethyl acetate and water.	Wu et al., 2014; 2015.

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		Isowikstroemins H, J, K, & macrocalyxin B exhibited inhibitory activity against NO production in LPS-activated RAW264.7 macrophages.		
<i>Lallemantia royleana</i> (Benth.) Benth.	No identified	Anti-inflammatory activity in rheumatoid arthritis. The natural mucilage, used in the gel, possesses anti-inflammatory properties. suggesting exerting a synergistic action of niosomal gel system at the target site to improve overall effect	Mucilage	Bhardwaj et al., 2020; Bhardwaj & Bhatia, 2020.
<i>Lavandula angustifolia</i> Mill.	Leaves & flowers	Anti-inflammatory effect of the EE with 96% inhibition at 1600 mg/kg, p.o. in the second phase of the formalin test in mouse . FP produced 70% inhibition at 1600 mg/kg, p.o., whereas AE produced 90% inhibition at 200 mg/kg, p.o. Antiaging effect by decreasing MDA levels and increased SOD and GSH-Px at 17.4, 34.8 and 69.6 mg/kg. Downregulation of genes encoding IL-6 & IL-1A in human macrophages infected with <i>S. aureus</i> . Effect on ROS production in WBP and human neutrophils. Anti-inflammatory effect in the edema induced with croton oil (0.25-1 mg/ear, by decreasing NO and MPO in Swiss mouse. In the edema induced by carrageenan at 75-250 mg/kg, p.o. & in the dextran-induced edema (75-100 mg/kg, p.o. decreases MPO activity). Reduction of TNF- α , IL-1 β , IL-10 at 100-300 mg/kg, i.p. in a rat model of ischemia. Anti-inflammatory effect in the. edema induced with TPA (58.66% inhibition at 100 mg/kg) by decreasing levels of TNF- α , NF- κ B, & COX-2. Reduction of mechanical hyperalgesia in chronic inflammatory and neuropathic pain conditions in mouse models. Reduction of proinflammatory cytokines (IL-8, IL-1 β and NF- κ B) in human THP-1 macrophages induced with LPS. Anti-inflammatory effect in sepsis model in Sprague-Dawley rats by reducing TNF- α (BALF: 64%, serum: 59%; IL-1 β (BALF: 63%, serum: 66%)); IL-6 (BALF: 54 %, serum: 59%), as well as 56-76% reduction in induced edema in murine models.	Ethanol extract (EE), polyphenolic fraction (PF), essential oil (AE), aqueous-ethanol extract 75%.	Hajhashemi et al., 2003; Zhao et al., 2015; Giovannini et al., 2016; Georgiev et al., 2017; Cardia et al., 2018; Sourì et al., 2019; Chen et al., 2020; Donatello et al., 2020; Slighoua et al., 2022; Pandur et al., 2021; Xie et al., 2022.
<i>Lavandula bipinnata</i> (L.) O. Ktze.	Aerial parts	50% inhibition of COX-2 in human cell lines.	Ethanol extract	Shaikh et al., 2014.
<i>Lavandula coronopifolia</i> Poir.	Aerial parts	Significant inhibition (p<0.05) and powerful inhibition in COX-2 (100% at 50, 100, & 200 μ g/mL)	Essential oil	Abeer et al., 2020; Nassef et al., 2022.
<i>Lavandula dentata</i> L.	Aerial parts	Griess assay and ELISA to analyze different inflammatory markers.	Methanolic extract	Algieri et al., 2016; Contreras et al., 2018; Abdelhakim et al., 2023.

Species	Plant part(s)	Pharmacology activity	Extract(s)	Reference
<i>Lavandula latifolia</i> Medik.	Aerial parts	Anti-inflammatory effects in the carrageenin-induced edema test.	Essential oils from commercial sources.	Shimizu et al., 1990; Carrasco et al., 2015; Vairinhos and Miguel, 2020; Lucca et al., 2022; Karaka et al., 2023.
<i>Lavandula multifida</i> L.	Aerial parts	A dose-dependent anti-inflammatory effect, where the ethanol extract was the most active. Aqueous extract exerted a significant activity only at 300 and 1000 mg cm ² (24% and 33% edema reduction, respectively).	Aqueous & ethanol extracts.	Sosa et al., 2005.
<i>Lavandula pubescens</i> Decne.	Aerial parts	It exhibited strong antioxidant (IC ₅₀ 0.16–0.18 µL/mL), antiacetylcholinesterase (IC ₅₀ 0.9 µL/mL), antibutyrylcholinesterase (IC ₅₀ 6.82 µL/mL), & antilipase (IC ₅₀ 1.08 µL/mL) effects.	Essential oil (EO)	Ali-Shtayeh et al., 2020; Ahmad et al., 2022; Acero et al., 2022.
<i>Lavandula stoechas</i> L.	Aerial parts & flowers.	Anti-inflammatory activity in the edema induced with carrageenan (38% inhibition at 200 mg/kg p.o.). Anti-inflammatory effect on LPS-stimulated macrophages. EE= 74±7 % inhibition at 5-10% b.w. & FP= 85.1 ± 6.2 inhibition at 5-10% b.w. Inhibition of iNOS/NO signaling and gene expression for IL-1β and COX-2 in LPS-induced RAW264.7macrophages.	Methanol extract, essential oil.	Amira et al., 2012; Zuzarte et al., 2013; Zoubi et al., 2016; Kulabas et al., 2018.
<i>Lavandula viridis</i> L'Her.	Aerial parts	A potent effect on ROS inhibition, as well as a strong anti-inflammatory potential due to the modulation of the proinflammatory signaling cascade NF-κB	Essential oil	Skala et al., 2020; Zuzarte et al., 2022.
<i>Lavandula x intermedia</i>	Aerial parts	A dose-dependent anti-inflammatory activity with strong inhibition of NO production even at low concentration (0.03% v/v).	Essential oil	Carbone et al., 2018; Karakas & Matpan 2022.
<i>Lepechinia meyenii</i> (Walp.) Epling	Leaves	Flavonoids showed the best immunomodulating effect. This fraction diminished the superoxide anion production in a concentration dependent manner. A diminution in the expression of TNFα, IL8, & IL17 in mononuclear leukocytes.	Methanol extract 70%.	Arenas-Chávez et al., 2018.
<i>Lycopus lucidus</i> Turcz. ex Benth.	Aerial parts & leaves	The extract decreased the local allergic reaction, passive cutaneous anaphylaxis, histamine release, secretion of TNF-α and IL-6 in mice ICR model. <i>In vitro</i> models gathered suggest that the extract could suppress high glucose-induced vascular inflammatory processes.	Aqueous extract	Shin et al., 2005; Lee et al., 2008; Kim et al., 2021; Min et al., 2021.

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		Protection in cultured rat cortical neurons from H ₂ O ₂ -induced neuronal injury by significantly inhibiting NLRP3 inflammasome activation (10, 25, and 50 µg/mL). Reduced levels of pro-inflammatory cytokines in a mice model of atopic dermatitis.		
<i>Marsypianthes chamaedrys</i> (Vahl) Kuntze	Aerial parts & leaves	Phospholipase A ₂ inhibition at 35 to 70 mg/mL. Anti-inflammatory activity at 2 g/kg) by inhibition of <i>Evans Blue</i> diffusion into peritoneal cavities. Inhibition of migration of inflammatory cells.	Aqueous extract	Ruppelt et al., 1991; Magalhães et al., 2011
<i>Melissa officinalis</i> L.	Leaves	Antinociceptive effects in the writhing test (IC ₅₀ = 241.9 mg/kg, p.o.) & formalin test (inhibition of 33.75 in the 1 st phase and 48% 2 nd phase at 100 mg/kg) in Swiss mice. Anti-inflammatory effects in the carrageenan-induced pleurisy (60% inhibition of leukocytes and 52% of polymorphonuclear cells 56%) at 200 mg/kg, p.o. in Wistar rats. Anti-inflammatory effects (61.67% inhibition) at 200 mg/kg p.o. EE 63.89% inhibition at 200 mg/kg, p.o. & AC 76.67% inhibition at 100 mg/kg, p.o. in the carrageenan-induced edema test.	Ethanol (EE) & aqueous extracts (AE), essential oil.	Guginski et al., 2009; Müzell et al., 2013; Bohunihi et al., 2013; Zam et al., 2002; Draginic et al., 2022.
<i>Mentha aquatica</i> L.	Aerial parts	Chemopreventive effects against vemurafenib-induced cutaneous side-effects in a carcinogenesis mouse model.	Essential oil	Chang et al., 2019.
<i>Mentha arvensis</i> L.	Whole plant & aerial parts	Inhibition of NO, PGE ₂ , IL-1β, IL-6 in RAW 264.7 macrophages & HaCaT cells induced with LPS. Attenuation of atopic dermatitis in a mouse model. Anti-inflammatory effect in murine induced edema model: leaf= 68.30% inhibition, root= 48.80% inhibition, & stem=10.70% inhibition.	Essential oil & ethanol extract.	Feng et al., 2015; Thawkar et al., 2016; Demirci et al., 2021; Kim et al., 2021b.
<i>Mentha cordifolia</i> Opiz ex Fresen.	Leaves	Menthol: Inhibition of lymphocyte proliferation (88.7% at 50 µg/mL) & IFN-γ inhibition (80% at 800 µg/mL) in PBMCs.	Ethanol extract	Bayat et al., 2019; Villaseñor et al., 2002.
<i>Mentha longifolia</i> (L.) Huds.	Whole plant	Reduces IL-1β, IL-6, TNF-α in mouse models of Alzheimer's. Decreased NO, mRNA for iNOS, & TNF-α in J774.1A macrophages at 0.20 mg/mL. Decreased MPO, PGE ₂ , AST, ALT, & increased GSH and FRAP in a murine model of liver injury. Longifolin A significantly decreased NO levels in RAW 264.7 macrophages. Eucalyptol at 400 mg/kg, p.o. reduced MPO, MDA, TNF-α, & IL-6 levels with an increase in GSH in plasma of rats with acetic acid-induced colitis.	Ethanol extract 70%, hexane extract & essential oil.	Karimian et al., 2013; Ibrahim et al., 2016; Murad et al., 2016; Dadkhah et al. 2018; Moshrefi-Araghi et al., 2021; Wang et al., 2022.

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<i>Menta piperita</i> L.	Leaves & aerial parts	Decreased levels of PLA2, IgE, IL-4, & total protein using 5 µg/mL in Wistar rats pretreated with ovalbumin. Anti-inflammatory effect (40-120 mg/kg, p.o.). Inhibition of TNF- α , IL-6, NO, & PGE2 in RAW 264.7 macrophages induced with LPS.	Aqueous extract-Au-Nps, ethanol extract, & essential oil.	Abdolmaleki et al., 2013; Sun et al., 2014; Li et al., 2017; Yi et al., 2022.
<i>Mentha pulegium</i> L.	Aerial parts & leaves	Protein denaturation, inhibition IC ₅₀ = 88.31 \pm 1.37% v/v. Anti-inflammatory effects in the carrageenan-induced edema (28% reduction at 300 µg/cm ²). Decreased IL-6, MCP-1, & TNF- α in RAW 264.7 macrophages induced with LPS. Anti-inflammatory effect (22.16% inhibition at 12.5 mg/kg, p.o.). in the edema induced by carrageenan in mice.	Essential oil, ethanol & aqueous extracts.	Moussaid et al., 2011; Brahmi et al., 2018; Luis & Domingues, 2021; Messaoudi et al., 2022; Rocha et al., 2019.
<i>Mentha spicata</i> L.	Whole plant & leaves	Decreased jejunal tissue and attenuation of IL-1 β and β -glucuronidase in feces. Greater inhibition with the administration of ethyl acetate extract than methanol in granuloma induced in murine models. Where irinotecan-induced mucositis in murine models.	Hexane, ethyl acetate, methanol, chloroform, & aqueous extracts.	el Menyiy et al., 2022.
<i>Mentha suaveolens</i> Ehrh.	No identified	Anti-inflammatory activity in the carrageenan-induced rat paw oedema test (51% of inhibition at 100 mg/kg as compared to the control).	Essential oil & methanol extract.	Moreno et al., 2002; El-Kashoury et al. 2012; Mogosan et al., 2017; Lee et al., 2021.
<i>Mentha x villosa</i>	Leaves	Essential oil and piperitone oxide possess antinociceptive activity probably by an indirect anti-inflammatory effect, which does not involve the central nervous system.	Essential oil	Souza et al., 2009.
<i>Micromeria biflora</i> (Buch. Ham. ex D.Don) Benth.	Aerial parts	Antinociceptive & anti-inflammatory effects in BALB/c mice. Thermal stimulation (delay in reaction time at 2.5-20 mg/kg, p.o.) & edema induced with carrageenan (80.98% inhibition at 15 mg/kg, p.o.).	Chloroform extract & Salicilalazina	Alhojani et al., 2022.
<i>Micromeria croatica</i> (Pers.)	Aerial parts	Reduces expression of TGF- β 1 & α -SMA at 400 mg/kg, p.o. in murine models of liver injury.	Ethanol extract 70%.	Vladimir-Knežević et al., 2015.
<i>Minthostachys verticillata</i> (Griseb.) Epling	Aerial parts, leaves, & steams	Significant reduction in the colon weight/length ratio, oxidative stress, & expression levels of IL-1 β , iNOS, & COX-2 at 250-500 mg/kg in colitis rat model. Inhibition of β -h release in basophils and lymphocytes from allergic patients. Modulator of the innate immune	Aqueous extract &	Gonzalez-Pereira et al., 2005; Cariddi et al., 2006; Montironi et al., 2019;

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		response in mammary glands of female Balb/c mice challenged with <i>E. faecium</i> decreasing the infiltration of polymorphonuclear neutrophils and IL-1 β & TNF- α mRNA expression. EO increased the expression of IL-10 in the last hours of infection. Anti-inflammatory activity and potential for managing bovine mastitis.	essential oil (EO).	Rodriguez-Basso et al., 2021; Sharun et al., 2021.
<i>Monarda didyma</i> L.	Aerial parts	Essential oil decreased expression of pro-inflammatory cytokine IL-6 and the increased expression of miR-146a suggesting the involvement of the Toll-like receptor-4 signaling pathway. Where possible bioactive compounds are mainly aromatic monoterpenes & phenolic monoterpenes.	Essential oil	Cotê et al., 2021; Fraternale et al., 2022.
<i>Monarda fistulosa</i> L.	No identified	Anti-inflammatory activity at 100 and 200 mg/kg dosage in the carrageenan-induced rat paw oedema test.	Hydroalcoholic extract	Murata et al., 2013; Shanaida et al., 2021a; Shanaida et al., 2021b.
<i>Mosla chinensis</i> Maxim.	Stem & leaf	In the recipe “Shenshusan”, one of its components is <i>M. chinensis</i> that showed significant anti-inflammatory activity at 340 mg/kg in mice. <i>M. chinensis</i> extract ameliorated inflammation by a 'significant reduction in the production of ROS, increasing the activity of antioxidative enzymes, suppressed the secretion of inflammatory mediators (NO, PGE2), & cytokines (TNF- α , IL-6, IL-1 β). The extract also restrained the activation of mitogen-activated protein kinases (MAPKs) signaling pathway.	Essential oil & methanol extract 80%.	Wang et al., 2021; Zhong et al., 2022.
<i>Mosla scabra</i> (Thunb.) C.Y.Wu & H.W.Li	Aerial parts	Anti-inflammatory effects (10, 30 and 90 mg/kg, p.o.) by inhibition of proinflammatory cytokines through the inhibition of MAPK & NF- κ B in LPS and ALI (acute lung injury) in mice.	Flavonoid fraction	Chen et al., 2013.
<i>Nepeta bracteata</i> Benth.	Aerial parts	Abietane-type diterpenoids, norabietane-type & ursane-type triterpenoids produced anti-inflammatory effects on the LPS-stimulated RAW 264.7 cells. All compounds significantly down-regulated the TNF- α inflammatory factor, except for nepetabrate J. Amide alkaloid & diterpenoids were elucidated by HR-ESI-MS, NMR, and CD analyses. The anti-inflammatory activity of all compounds was explored using LPS-stimulated RAW 264.7 cells. It is worth noting that all were able to inhibit NO production with IC ₅₀ values < 50 μ M and little effect on RAW 264.7 macrophage viability. Remarkable inhibition with IC ₅₀ values of 19.2 & 18.8 μ M, respectively. Meanwhile, screening on HCT-8 cells demonstrated that nepetabrates B and D also had moderate cytotoxic activities with	Ethanol extract 95%.	Zhang et al., 2021; Yang et al., 2022.

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		IC ₅₀ values of 36.3 & 41.4 µM, respectively, which is related to their anti-inflammatory effects.		
<i>Nepeta cataria</i> Benth.	Aerial parts	Verbascoside produced inhibition of calcineurin activity in an <i>in vitro</i> assay with a IC ₅₀ = 4.5 µM. Ant-inflammatory effects were explored in tail immersion test and acetic acid-induced nociception in mice.	Essential oil	Modnicki et al. 2007; Prescott et al., 2011; Pargaian et al., 2020; Acimovic et al., 2022.
<i>Nepeta crispa</i> Willd.	Aerial parts	Antinociceptive effects explored in the tail-flick test (54.7% inhibition at 200 mg/kg, i.p.), formalin test (30-200 mg/kg significantly reduced nociceptive behavior in the neurogenic and inflammatory phases).	Essential oil	Ali et al., 2012.
<i>Nepeta deflersiana</i> Schweinf. ex Hedge	Aerial parts	Ethyl acetate & n-butanol extracts showed a decrease in oxidative stress and inhibition of both NF-κB and iNOS activities with no cytotoxic effects on four human cancer cell lines (SK-OV-3, SK-MEL, KB, and BT-549). In contrast, there is moderate cytotoxic action against one of the two tested noncancerous kidney cell lines (LLC-PK1) with an IC ₅₀ of 16 and 55 µg/ml for ethyl acetate and chloroform extracts, respectively. The oral administration of ethanolic extract (50 & 100 mg/kg, b.w) downregulated the expression of pro-inflammatory cytokines (TNFα, IL-6, & IL-10) and apoptotic markers (caspase-3 and Bax). It upregulated the anti-apoptotic protein Bcl2. Furthermore, NDEE pretreatment significantly downregulated cardiac NF-κB (p65) expression, NF-κB-DNA binding activity, and MPO activity. Histological data showed that pretreatment reduced myonecrosis, edema, and infiltration of inflammatory cells and restored the architecture of cardiomyocytes.	Petroleum ether, chloroform, ethyl acetate, n-butanol, ethanol extracts.	Al Taweel et al., 2017; Orfali et al., 2018; Ahmad et al., 2022.
<i>Nepeta dschuparensis</i> Bornm	Leaves	Reduction on the infarct volume and a significant decrease in the level of IL-β in a model of cerebral artery occlusion and on motor coordination disorder induced by cerebral ischemia in Sprague-Dawley rats.	Ethanol extract	Mousavi et al., 2017.
<i>Nepeta laxiflora</i> Benth.	Aerial parts	Decreased NO in PC12 cells treated with H ₂ O ₂ (50% inhibition at 50-200 µg/mL).	Methanol extract	Khankandi et al., 2019.
<i>Nepeta menthoides</i> Boiss. & Buhse	Aerial parts	It was explored in the formalin test, xylene test, & hot water tail-immersion test at doses of 70, 350, 700, 1400, & 2800 mg/kg. It was observed to have anti-inflammatory effects at all doses, particularly at a dosage of 2800 mg/kg. As well as in the anti-nociceptive effect in chronic phases. Pretreatment with this ethanolic extract attenuated the development of chronic morphine dependence.	Hydroalcoholic & ethanol extracts.	Memariani et al., 2018; Süntar et al., 2018.

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<i>Nepeta meyeri</i> Benth.	Aerial parts	Acetone extract exhibited a significant concentration-dependent inhibition of DPPH and NO radical. Furthermore, <i>N. meyeri</i> showed very high reducing power. In DPPH radical and NO• scavenging assays the IC ₅₀ value of extract was 672.2 µg/ml and 165.32 µg/ml, respectively. The data obtained from these <i>in vitro</i> models clearly demonstrated antioxidant potential of acetone extract of <i>N. meyeri</i> .	Acetone extract & essential oil.	Cigremis et al. ,2010; Süntar et al., 2018.
<i>Nepeta pogonosperma</i> Jamzad & Assadi	Aerial parts	Essential oil reduced the pain sensation in tail flick and formalin test in both phases (200 mg/kg). In paw edema test significantly reduced the inflammation at 100 and 200 mg/kg.	Essential oil	Ali et al., 2012; Khalighi-Sigaroodi et al., 2013.
<i>Nepeta tenuifolia</i> Benth.	No identified	Inhibition of MAPK activation. Anti-inflammatory activity via TLR4 inhibition, which led to MAPK and NF-κB-mediated signaling in LPS-stimulated macrophages. LPS/IFN-γ in RAW264.7 macrophage cells. could reduce the expression of the NLRP3, iNOS, p65, IL-1β mRNA and P2X7R proteins and significantly reduce NO level.	Essential oil	Shan et al., 2021.
<i>Ocimum basilicum</i> L.	Roots	Root extract decreased levels of proinflammatory cytokines in mouse models with induced asthma. Linalool decreased the levels of proinflammatory cytokines in RAW 264.7 macrophages induced with LPS.	Organic & aqueous extracts.	Aminian et al., 2022.
<i>Ocimum kilimandscharicum</i> Baker ex Gürke	Aerial parts	Immunostimulatory effect in fish <i>Clarias batrachus</i> . Inhibited the carrageenan-induced edema (100 and 300 mg/kg), mechanical and cold hyperalgesia. Inhibited the carrageenan induced pleurisy reducing the migration of total leukocytes in mice by 82% at a 30 mg/kg. Camphor inhibited all articular parameters induced by zymosan in mice (knee edema, leukocyte infiltration, mechanical hyperalgesia, and NO) at 30 mg/kg. Inhibited the carrageenan induced pleurisy reducing the migration of total leukocytes in mice by 83% at a dosage of 15 mg/kg. A mixture of 1,8 cineole/limonene 1:1: inhibited the carrageenan induced pleurisy reducing the migration of total leukocytes in mice by 80% at 6 mg/kg.	Essential oil & aqueous extract.	de Lima et al., 2014; Nahak & Kanta, 2014; dos Santos et al., 2021.
<i>Ocimum labiatum</i> (N.E. Br.) A.J. Paton	Leaves	<i>O. labiatum</i> extract at a 25 µg/mL non-cytotoxic concentration of extract significantly inhibited the production of pro-inflammatory cytokines, such as IL-2, IL-4, IL-6, and IL-17A. Except for the dual acting pro- or anti-inflammatory cytokine, IL-6, which was upregulated, a non-cytotoxic 50 µM concentration of the isolated labdane diterpenoid compound significantly decreased the production of all the pro-inflammatory cytokines. In the anti-inflammatory pathway studies, the compound also inhibited AP-1 significantly at 50 µM. The extract demonstrated strong dose dependent antioxidant activity with IC ₅₀	Ethanol extract	Kapewangolo et al., 2015; Lambrechts & Lall, 2019.

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		values ranging from 13 ± 0.8 to 54.86 ± 1.28 $\mu\text{g/mL}$, while the terpene had no antioxidant property. The extract and diterpenoid decreased the production of the inflammatory mediator NO, at non-cytotoxic concentrations. The CE_{50} of the extract in TZM-bl and PBMCs was 62.6 ± 0.6 and 30.1 ± 0.4 $\mu\text{g/mL}$, while that of the compound was 112.6 ± 0.2 and 70 ± 0.4 μM , respectively.		
<i>Ocimum sanctum</i> L.	Aerial parts	Aqueous and ethanol extracts decrease epithelialization period in lesion models in rats. Decreases the percentage of inflammation in rat models of edema induced with carrageenan and croton oil at doses of 500 mg/kg, p.o. Apigenin, rosmarinic acid, isotimusin, isothymonin, cirsimaritin, cirsilineol, eugenol show COX-1 inhibition in <i>in vitro</i> models with different percentages of inhibition at a concentration range of 10-1000 μM .	Organic & aqueous extracts.	Pattanayak et al., 2010; Singh et al., 2018.
<i>Ocimum selloi</i> Benth.	Leaves	inhibited the carrageenan-induced pleurisy in female Swiss mice at 30, 100, and 300 mg/kg.	Aqueous extract, essential oil.	Moraes et al., 2002; Piva et al., 2021.
<i>Origanum spp.</i>	Aerial parts	Essential oil lowering TNF- α levels in bronchoalveolar fluid of LPS-induced mice. Decreased mRNA of TNF- α , IL-1B, IL-6, MCP-1, & IFN- γ in the jejunum of pigs fed for 28 days with essential oil and induced with endotoxins. Essential oil-NPs decreased NO levels in RAW 264.7 macrophages induced with LPS. Decreased levels of IL-8, IL-1B, & TNF- α in <i>in vivo</i> and <i>in vitro</i> models of inflammation induced by <i>Propionibacterium acnes</i> . Ethanol-water extract protected against hepatotoxic damage in rat models. Ethanol extract at doses of 100-5000 mg/kg, p.o. improved the symptoms of colitis in rats. <i>O. syriacum</i> methanol extract at concentration of 10-100 $\mu\text{g/mL}$ decreases IL-6 & IL-10 levels in peripheral mononuclear cells. <i>O. tyttanthum</i> essential oil shows inhibition of pro-inflammatory enzymes in <i>in vitro</i> models. Carvacrol and thymol exhibited anti-inflammatory effects in <i>in vivo</i> , <i>in vitro</i> , and clinical studies. <i>O. microphyllum</i> infusion produced cell growth inhibition associated with decrease in IL-8 levels in the HT29 colon and in PC3 prostate cancer cells lines. Even though the anti-inflammatoxy activity was not correlated with total phenolic contents, but the antioxidant activity was positively correlated with total phenolics in all herbal infusions. <i>O. sipyleum</i> can be considered as a good source of phenolic compounds such as rosmarinic acid and phlorizin. These compounds are considered as pro-oxidant/pro-inflammatory	Organic (essential oil, ethyl acetate, ethanol, or methanol) & aqueous extracts.	Kogiannou et al., 2013; Zengin et al., 2019; El kharraf et al., 2020; Hamamouchi et al., 2021; Sharifi-Rad et al., 2021; Al-Mijalli et. al., 2022.

Species	Plant part(s)	Pharmacology activity	Extract(s)	Reference
		<p>biomarkers induced by the extracts, in rat colon challenged with LPS, together with the inhibition of selected bacterial and fungi strains involved in ulcerative colitis and the antiproliferative effect exerted only by ethyl Acetate extract, further support protective effects in inflamed colon as well.</p> <p><i>O. compactum</i> Benth. produced anti-inflammatory activity in Wistar rats in tail-Flick test and in the writhing test in OF1 mice at 100 mg/kg.</p> <p>Anti-inflammatory effect using 5-lipoxygenase inhibition test (IC₅₀= 0.68 ± 0.02 µg/mL) and carrageenan-induced paw edema model (56.53% inhibition of edema at 100 mg/kg, p.o.).</p>		
<i>Orthosiphon aristatus</i> (Blume) Miq.	Aerial parts & leaves	Anti-inflammatory effect in <i>in vitro</i> model. Inhibition of 3,5-U-hyaluronase (19.38% at 10 µg/mL). Inhibition of NO, PGE ₂ , & ROS in RAW 264.7 macrophages induced with LPS.	Ethanol extract	Hsu et al., 2010; Vijayan et al., 2017.
<i>Orthosiphon stamineus</i> Benth.	No identified	Anti-inflammatory effect of EM in mouse models at 250-1000 mg/kg, p.o. Anti-inflammatory effects at 500-1000 mg/kg, p.o., in the edema induced with carrageenan. Orthosifol A and B produced strong anti-inflammatory activity against tumors induced in murine models. Antipyretic effect of EE at 50-1000 mg/kg, p.o., in murine models induced with yeast.	Ethanol extract (EM), chloroform extract (EC), ethanol extract (EE).	Singh et al., 2015.
<i>Perilla frutescens</i> (L.) Britton	Leaves & seeds	Reduction of the mRNA expression of IL-6, IL-8, TNF-α, COX-2, & iNOS in RAW 264.7 macrophages induced with LPS. 12-Tetradecanoylphorbol 13-acetate (TPA)-induced edema (50% inhibition at ID ₅₀ =0.09-0.3 mg/per ear). Ursolic acid, corosolic acid, 3-epicorosolic, pomolic acid, stormy acid, hyptadienic acid, oleanolic acid, augustic acid, & 3-epimaslinic acid produced anti-inflammatory effects. Reduction of body weight loss, diarrhea, and bleeding at 20-200 mg/kg, p.o., in mouse models of colitis. Involvement of luteolin by inhibition of edema induced with TPA. Monogalactosyldiacylglycerols inhibited NO, TNF-α, & IL-6 in RAW 264.7 macrophages induced with LPS. Rosmarinic acid (RA) reduced inflammation and oxidative stress and reduced tumor size in skin cancers induced with 7,12-dimethylbenz[a]anthracene (DMBA). The anti-inflammatory targets of RA in tumor therapy are cyclooxygenase-2 (COX-2) and NF-κB. RA inhibited COX-2 activity and downregulated ERK1/2 to exert anti-inflammatory effects in lung, breast, and liver cancer cells. Inflammatory factors, including TNF-α, IL-1β, IL-6, &	Ethanol, methanol, & aqueous extracts. Essential oil.	Banno et al., 2004; Huang et al., 2014; Ueda et al., 2002; Zuo et al., 2002; Liu et al., 2022b; Kangwan et al., 2021; Zhao et al., 2022.

Species	Plant part(s)	Pharmacology activity	Extract(s)	Reference
		transforming growth factor- β (TGF- β), were reduced after anti-tumor therapy with RA. The anti-inflammatory effect of RA in tumorigenesis has been related to the inhibition of TLR4/NF- κ B & STAT3. RA was shown to suppress CRC inflammation by impairing the IL-6/STAT3 and NF- κ B pathways. In hepatocellular carcinoma (HCC), H22 tumor-bearing mice were treated with intraperitoneal injection of RA 75, 150, and 300 mg/kg. Inhibition of inflammatory cytokines (IL-1 β , IL-6, TNF- α , TGF- β), angiogenic factors (VEGF), & phosphorylation of p65.		
<i>Platostoma africanum</i> P. Beauv.	Aerial parts	Anti-inflammatory effects of EH produced 45.19% inhibition at 400 mg/kg and ED= 76.10% inhibition at 400 mg/kg in the ovalbumin-induced edema in rats.	Hexane extract (EH) & dichloromethane extract.	Aladedunye et al., 2008.
<i>Plectranthus amboinicus</i> (Lour.) Spreng	Leaves	At 500 mg/kg b.w. increased concentrations of the cytokine TGF- β 1 and GPx in Wistar rats.	Ethanol extract 90%.	Solfaine et al., 2021.
<i>Plectranthus barbatus</i> Andrews	Leaves	Attenuation in the production of IL-2, IL-6, IL-10, TNF, & IL-17A at 25 μ g/mL in mononuclear cells infected with HIV-1.	Ethanol extract	Kapewangolo et al., 2013.
<i>Plectranthus caninus</i> Vatke	Aerial parts	Anti-inflammatory effects in the edema induced with carrageenan ($38.96 \pm 16.59\%$ inhibition at 300 mg/mL) in Swiss mice.	Essential oil	Tadesse et al., 2011.
<i>Plectranthus ecklonii</i> Benth.	Aerial parts	NO inhibition in RAW 264.7 macrophages induced by LPS at 100 μ M. Parvifloron D, a mixture of β -sitosterol & stigmasterol (1:1) were involved in the anti-inflammatory effect.	Parvifloron D, β -sitosterol, & stigmasterol	Andrade et al., 2018.
<i>Plectranthus ornatus</i> Codd.	Aerial parts	Molecular docking shows potential anti-inflammatory effect for 1,6-di-O-acetyl-9-deoxyforskolin docked to IL-6 (−12.16 kcal/mol), TNF- α (−15.18 kcal/mol) and GM-CSF (−13.84 kcal/mol) and for 1,6-di-O-acetylforskolin docked at IL-8 (−16.26 kcal/mol). <i>In vivo</i> studies demonstrated that oral administration of forskolin (10 mg/kg) exerts a strong anti-inflammatory effect by reducing paw swelling (87.79%), comparable to the standard drug indomethacin (10 mg/kg, 93.89%). The labdane diterpene inhibited NO production by LPS in RAW 264.7 cells with an IC ₅₀ value of 40.1 μ M. (11R*,13E)-11-acetoxyhalima-5,13-dien-15-oic acid, 1 α ,6 β -diacetoxy-8 α ,13R*-epoxy-14-labden-11-one and 1,6-di-O-acetylforskolin		Sitarek et al., 2022.

Species	Plant part(s)	Pharmacology activity	Extract(s)	Reference
		& 1,6-di-O-acetyl-9-deoxyforskolin possess anti-inflammatory effect in LPS-induced ARPE-19 cells by reducing the level of expression of IL-6, IL-8, TNF- α and GM-CSF genes.		
<i>Plectranthus zeylanicus</i> Benth.	Whole plant	5-lipoxygenase (5-LO) activity was potently suppressed (inhibition >85%), in A23187-stimulated human neutrophils (IC ₅₀ = 6.6 & 12 μ g/mL, respectively), & inhibited isolated human recombinant 5-LO (IC ₅₀ = 0.7 & 1.2 μ g/mL, respectively). Inhibition of 5-LO activity with IC ₅₀ values of 1.3 μ g/mL in cell-free assay using isolated human recombinant 5-LO; and 5.1 μ g/mL in cell-based assays (human neutrophils challenged with A23187 plus exogenous arachidonic acid).	Hexane & dichloromethane extracts.	Napagoda et al., 2014. Napagoda et al., 2022.
<i>Prunella laciniata</i> L.	Aerial parts	<i>In vitro</i> NO production by LPS-stimulated murine peritoneal macrophages of 6 weeks old mice with two aqueous extracts at a concentration of 400 μ g/mL was significantly inhibited (1.501 and 0.347 μ g/mL, respectively) without affecting cell viability.	Aqueous extract	Sebnem-Harput et al., 2006.
<i>Prunella vulgaris</i> L.	Aerial parts; leaves and stem; whole plant; fruit spikes	Anti-inflammatory effect in the model of inflammation induced with TNF- α in HASMCs and in the model of ovalbumin-induced conjunctivitis in rats. Inhibition of IL-1 β , caspase-1, & NLRP3 in corneal tissue. Participation of 2 α ,3 α ,23-trihydroxyursal-12,20(30)-dien-28-oic acid, β -amyrin & eusapic acid at 46.7, 57.9, & 54.2% suppression of histamine in <i>in vitro</i> models, respectively. Inhibition of NO, IL-6 and PEG2, iNOS, COX-2, TNF- α mRNA in RAW 264.7 macrophages induced with LPS. Anti-inflammatory effect in rats. Dimethylbenzene-induced oedema (25 % inhibition). 2 α , 3 α -dihydroxyursolic acid. Anti-inflammatory effect. Decreased β -hexosaminidase in RBL-2H3 cells (IC ₅₀ =57 μ M). Prunelanato A y Pruneladiterpenol A: Decrease of NO in RAW 264.7 macrophages induced with LPS. (IC ₅₀ =6.77 y 8.61 μ M). Significant enhancement of procollagen type I mRNA, TNF- α and IL-6 levels in UVB-activated MMPs.	Methanol, ethanol 50% & aqueous extracts. Hexane fraction from ethanol extract, & essential oil.	Park et al., 2013 Li et al., 2020 Choia et al., 2016 Hwang et al., 2013 Yan, 2016 Tang et al., 2022 Ryu et al., 2000 Zheng et al., 2022 Zhang et al., 2018b.
<i>Pycnostachys reticulata</i> (E. Mey.) Benth.	Roots	A 68.7% inhibition of the COX-2 at 0.25 μ g/ μ L in an <i>in vitro</i> test.	Methanol extract 50%.	Fawole et al., 2010.

Species	Plant part(s)	Pharmacology activity	Extract(s)	Reference
<i>Salvia aegyptiaca</i> L.	Whole plant	Decreased temperature in a model of hyperthermia induced in mice at 0.25-2 g/kg.	Acetone extract.	Al-Yousuf et al., 2002.
<i>Salvia aethiophis</i> (Kunth) Lint. & Epling	Roots	Inhibition of 5-lipoxygenase activity in an <i>in vitro</i> assay with human neutrophils. Reduction in the leukocyte accumulation & inhibition of cytokines. Participation of luteolin & apigenin.	Acetone extract.	Hernández-Pérez et al., 1995; Benrezzouk et al., 2001; Nworu and Akah, 2015; Vulganová et al., 2019.
<i>Salvia africana-caerulea</i> L.	Aerial parts	Ability in scavenging NO. Activator of the human peroxisome, proliferator-activated receptor gamma, inhibitor of the 5-lipoxygenase enzyme.	Aqueous, methanol, & chloroform extracts.	Komatou et al., 2006; Kamatou et al., 2010; Bonito et al., 2011; Afonso et al., 2019.
<i>Salvia albicaulis</i> Benth.	Aerial parts	5-lipoxygenase (5-LO) activity was inhibited by 50% (IC ₅₀) when adding the 5-LO enzyme and the absorbance arising from the modification. It may be attributed to the high percentage of sesquiterpenes, such as the linoleic acid (diene 1–4 converted into diene 1–3). IC ₅₀ 39±4 & 65±6 µg/ml, respectively.	Essential oil .	Kamatou et al., 2007.
<i>Salvia apiana</i> Jeps.	Aerial parts	The potency to counteract NO production was evaluated in an LPS-activated RAW 264.7 macrophage model and its potency corresponded to about one-third of the drug dexamethasone (EC ₅₀ = 49.9 ± 2.5 µg/mL & 16.0 ± 1.0 µg/mL, respectively).	Aqueous extract	Afonso et al., 2019.
<i>Salvia ceratophylla</i> L.	Aerial parts	Inhibition of NO production and NF-κB activation, as well as in the edema induced using an <i>in vivo</i> assay.	Hexane, ethyl acetate, & methanol extracts.	Shehadeh et al., 2014; Bonesi et al., 2017; Abu-Darwish et al., 2020.
<i>Salvia chamelaeagnea</i> Bergius	Aerial parts	5-lipoxygenase assay was used as an indication of the anti-inflammatory activity. The extract displayed poor inhibition of the 5-lipoxygenase enzyme, with IC ₅₀ greater than 100 µg/mL. Essential oil exhibited promising anti-inflammatory activity by inhibiting the 5-lipoxygenase enzyme with IC ₅₀ values from 43.4 ± 3.5 to 77.3 ± 5.2 µg/mL. Compounds such as 1,8-cineole displayed anti-inflammatory activity and monoterpenes such as α-pinene and sesquiterpenes & β-caryophyllene inhibited the <i>in vitro</i> 5-lipoxygenase activity.	Methanol-chloroform extract, essential oil.	Kamatou et al., 2006; Kamatou et al., 2010.
<i>Salvia chudei</i> Batt. & Trab.	Aerial parts	Anti-inflammatory activity in the edema induced with carrageenan showing a 58% inhibition at 250-1000 mg/kg, b.w.	Aqueous extract	Semaoui et al., 2021.

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<i>Salvia desoleana</i> Atzei & P. Picci	Aerial parts & leaves	Inhibition of carrageena n- and histamine- induced oedema in rats.	Essential oil	Peana & Satta, 1993; Peana et al., 1999; Ceschel et al., 2000; Peana & moretti, 2002.
<i>Salvia digitaloides</i> Diels	Roots	Inhibitory effects against the release of both O ₂ and elastase by human neutrophils, with IC ₅₀ values of 48.98 ± 1.60 & 25.22 ± 4.41 µM, respectively. These results suggested that Salviatalin A may represent a good candidate as a new anti-inflammatory agent.	Methanol extract	Shwu-Jen et al., 2010.
<i>Salvia dolomitica</i> Codd.	Aerial parts	Inhibition of 5-lipoxygenase in an <i>in vitro</i> assay with a IC ₅₀ : 65±6 µg/mL.	Essential oil	Kamatou et al., 2007.
<i>Salvia dominica</i> L.	Leaves & roots	The anti-inflammatory activity of sesterterpenes was observed.	Acetone extract	Dal Piaz et al., 2010.
<i>Salvia frigida</i> L.	leaves	Reduction of proinflammatory cytokine levels and improvement of induced dermatitis in mice after topical administration.	Phenolic fraction	Hassan et al., 2022.
<i>Salvia fruticosa</i> Mill.	Root & aerial parts	Anti-inflammatory effect in the carrageenan-induced edema (44% inhibition at 200 mg/kg, i.p. in rats.	Methanol extract	Boukhary et al., 2016.
<i>Salvia glutinosa</i> L.	Aerial parts	Reduced NO production in LPS-treated RAW 264.7 cells with an IC ₅₀ = 304.93±11.19 µg/mL.	Ethanol extract 70%.	Nicolescu et al., 2022.
<i>Salvia hierosolymitana</i> Boiss.	Aerial parts	The topical anti-inflammatory activity was evaluated as inhibition of the Croton oil-induced ear oedema in mice. Inflammatory response was induced on the inner surface of the right ear (surface: about 1 cm ²) by application of 80 µg of Croton oil dissolved in vehicle. At a dose of 300 µg/cm ² . The extracts reduced oedema by involving 3b,23-dihydroxyurs-12-en- 28-oic acid, 2a,3b-dihydroxyolean-12-en-28-oic & maslinic acid, 2a,3b,23-trihydroxyolean-12-en-28-oic or arjunolic acid were the most active with 54%, 51%, & 60%, respectively.	Petroleum ether, chloroform, chloroform:met hanol (9:1), & methanol extracts.	De Felice et al., 2006; de Souza et al., 2021.
<i>Salvia hypoleuca</i> DC. ex Benth.	Leaves & fruits	Inhibition of the carrageenan induced paw edema. Prevented NO production in the aqueous humor and the expression of the iNOS enzyme in a dose-dependent manner. Inhibited the development of EIU and suppressed LPS-induced iNOS expression. Inhibited the release of NF-κB-dependent cytokines including TNF-α and IL-6. Opioid system and inhibition of proinflammatory mediators.	Ethanol extract	Estakhr & Javdan, 2011; Estakhr & Javdan, 2011a; Javdan & Estakhr, 2011b; Parsaei et al., 2016.

Species	Plant part(s)	Pharmacology activity	Extract(s)	Reference
<i>Salvia japonica</i> Thunb.	Aerial parts	The anti-inflammatory activities were measured via the mice ear edema induced by TPA. Ibuprofen was used as a positive control, EO was diluted with peanut oil in BALB/c mice. The optimum dose of EO was 100 mg/kg, which produced $31.15 \pm 1.38\%$ of swelling-inhibition. The EO was like ibuprofen in the degree of reduction of COX-2, NF- κ B (p65), & IL-6, and better than ibuprofen in the degree of reduction of TNF- α . Exhibited promising anti-inflammatory activity by inhibiting the expression of IL-1, IL-6, TNF- α , and COX-2 in rats with adjuvant arthritis. At a concentration of 100 mg/kg exhibited inhibitory effects on arthritis similar to ibuprofen.	Essential oil (EO)	Li et al., 2021.; Sun et al., 2022.
<i>Salvia lachnostachys</i> Benth.	Leaves	The anti-inflammatory effects of the EE & fruticulin A were evaluated in mice using experimental models of inflammation (paw oedema & pleurisy induced by carrageenan injection). Oral administration of 30, 100, and 300 mg/kg and fruticulin A (0.3 and 3.0 mg/kg) decreased the total leucocytes number in pleural lavage, protein extravasation, and paw oedema in a dose-dependent manner. Fruticulin A significantly decreased paw oedema in mice at doses of 1.0 and 3.0 mg/kg, with no significant difference between the doses. In the pleurisy test, the number of total leukocytes decreased significantly in mice treated with 30, 100, or 300 mg/kg compared to the control group, with no significant difference between doses.	Ethanol extract	Piccinelli et al., 2014.
<i>Salvia lanceolata</i> Lam.	Leaves	Exhibited poor anti-inflammatory activity with a $IC_{50} > 100 \mu\text{g/mL}$ against 5-lipoxygenase (5-LO).	Methanol-chloroform (1:1) extract.	Kamatou et al., 2010.
<i>Salvia lanigera</i> Poir.	Leaves	The <i>in vitro</i> anti-inflammatory potential of the extract was evaluated by determining the membrane stabilization of human red blood cells and the percent inhibition of the COX1/2, 5LOX, and sPLA2-V enzymes. The extract showed maximum membrane stabilization ($\leq 91\%$, at $100 \mu\text{g/mL}$) and the reference drug diclofenac sodium (90.75%). Strong inhibition of 5-LOX and COX-1 enzymes at $100 \mu\text{g/mL}$. At the concentration of $100 \mu\text{g/mL}$, the membrane stabilization was $92.10 \pm 1.27\%$, and very close to that of diclofenac sodium ($90.75 \pm 1.06\%$).	Ethanol extract	Alonazi, et al., 2021.

Species	Plant part(s)	Pharmacology activity	Extract(s)	Reference
<i>Salvia leriifolia</i> Benth.	Aerial parts, leaves & seeds	Anti-inflammatory effect in the xylene or acetic acid induced edema in rats using 2.5-5 g/kg. NO inhibition in RAW 264.7 macrophages induced with LPS with an IC ₅₀ = 165 µg/mL.	Aqueous extract & essential oil.	Hosseinzadeh & Yavary, 1999; Loizzo et al., 2009; Hosseinzadeh et al., 2003; Modarres et al., 2014.
<i>Salvia macilenta</i> Boiss.	Aerial parts	Anti-inflammatory effects in murine models induced with beta-amyloid at 50 mg/kg/10 days, p.o.	Methanol extract	Taheri et al., 2021.
<i>Salvia miltiorrhiza</i> Bunge	Roots	Tanshinone IIA: Downregulation of proinflammatory cytokines in <i>in vitro</i> models. It was effective against allergies, asthma, and rhinitis in clinical models. While in murine models an attenuation of proinflammatory cytokines was observed. It presented anticancer properties through reduction of proinflammatory cytokines in murine models and relief against fibrosis in liver, heart, lung, kidneys using high polarity extracts as well as from isolated compounds in <i>in vitro</i> and <i>in vivo</i> models.		Feng et al., 2021; Mahalaksmi et al., 2021; Yang et al., 2022.
<i>Salvia mirzayanii</i> Rech. f. & Esfand.	Aerial parts	A 66.2 ± 8% inhibition of NO at 50 µg/mL in LPS-treated RAW 264.7 cells. The LPS-induced DNA binding activity of NF-κB in THP-1 was significantly decreased by teuclatriol (312 & 390 mM). Teuclatriol reduced the production of TNF-α in a dose-dependent manner.	Methanol extract	Zarshenas et al., 2014; Ziaei et al., 2015; Amirghofran et al., 2011.
<i>Salvia moorcroftiana</i> Wall. ex Benth.	Whole plant	Anti-inflammatory and antipyretic effects at 300 mg/kg, p.o., in murine models.	Methanol extract	Hussain et al., 2017.
<i>Salvia muirii</i> (L.) Bol.	Aerial parts	Exhibited poor anti-inflammatory activity with an IC ₅₀ >100 µg/mL against 5-LO.	Methanol:chloroform (1:1) extract.	Kamatou et al., 2006; Kamatou et al., 2010.
<i>Salvia multicaulis</i> Vahl	Aerial parts	Topical anti-inflammatory activity against Croton oil-induced edema in CD-1 mice (47 – 300 µg/cm ²).	Hexane & ethyl acetate extracts.	Shehadeh et al., 2014; Rowshan & Najafian, 2020.
<i>Salvia nipponica</i> Miq.	Root & leaves	Elastase inhibitory activity in human neutrophils induced with formyl-methionyl-l-leucyl-l-phenylalanine/cytochalasin B.	Methanol extract	Chan et al., 2011.

Species	Plant part(s)	Pharmacology activity	Extract(s)	Reference
<i>Salvia officinalis</i> L.	Leaves	Anti-inflammatory properties in murine models, whose main component involved in the effect was ursolic acid.	Organic and aqueous extracts.	Miraj & Kiani, 2016.
<i>Salvia palaestina</i> Benth.	No identified	An <i>in vitro</i> anti-inflammatory potential at a concentration of 100 µg/mL using the LO enzyme inhibition assay. The highest inhibition rates were observed with an IC ₅₀ values of SP-EtOAc and SP-CH ₂ Cl determined as 93.37 and 83.25 mg/mL, respectively. An IC ₅₀ values of rosmarinic acid (78% LO inhibitory activity) and methyl rosmarinate (96% LO inhibitory activity) were calculated as 0.21 and 0.02 µM, respectively.	Fractionation of the methanol extract, dichloromethane (SP-CH ₂ CL ₂) & ethyl acetate (SP-EtOAc).	Sina-Içen et al., 2021.
<i>Salvia petrophilla</i> G. X. Hu, E. D. Liu & Yan Liu	Whole plant	Inhibición de NO en macrófagos RAW 264.7 inducidos con LPS IC ₅₀ = 29-40 µM.	Acetone extract	Zou et al., 2022.
<i>Salvia plebeia</i> R. Br.	Leaves & aerial parts	Inhibition of TNF-α, IL-5, & NO in RAW 264.7 macrophages induced with LPS. Inhibition of eosinophils, IL-4, IL-13, & mucus production in BAL B/c mouse model of asthma. Decreased NO & iNOS mRNA expression in RAW 264.7 macrophages induced with LPS. 8-epi-eudebeiolide C inhibited NO & mRNA expression for iNOS in RAW 264.7 macrophages induced with LPS with an IC ₅₀ = 17.9 µM. Salviplenoide A inhibited NO, iNOS, COX-2, & NF-κB mRNA expression in LPS-induced RAW 264.7 macrophages. Luteoloside, nepitrin, homoplantagenin, luteolin, nepetin, hispidulin, & eupatorine inhibited NO, PGE ₂ , & iNOS mRNA expression.	Ethanol & methanol extracts.	Jeong et al., 2012; Akram et al., 2015; Jang et al., 2016; Jang et al., 2017; Zou et al., 2018.
<i>Salvia prionitis</i> Hance	Aerial parts	All compounds were evaluated for their inhibitory effects on NO production stimulated by LPS in RAW264.7 mouse peritoneal macrophages cell. L -NMMA (NG-Monomethyl- L -arginine, Monoacetate Salt) was used as a positive control with an IC ₅₀ =32.55 µM. Prionidipene and salvilenone showed potent inhibitory activity with the IC ₅₀ = 14.56 & 15.11 µM, respectively.	Organic extracts	Li et al., 2018.

Species	Plant part(s)	Pharmacology activity	Extract(s)	Reference
<i>Salvia radula</i> Benth.	Aerial parts	Displayed moderate anti-inflammatory activity with an IC ₅₀ = 78.8 ± 5.89 µg/mL against 5-LO.	Methanol-chloroform (1:1) extract.	Kamatou et al., 2010.
<i>Salvia repens</i> Burch. ex Benth.	Aerial parts	Poor anti-inflammatory activity with an IC ₅₀ >100 µg/mL against 5-LO.	Methanol-chloroform (1:1) extract.	Kamatou et al., 2010.
<i>Salvia rosmarinus</i> (L.) J.B. Walker, B.T. Drew & J.G. González (Syn. <i>Rosmarinus officinalis</i> L.)	Aerial parts	Essential oil reduced the paw edema similarly to the indomethacin treated group (positive control, 10 mg/kg, p.o) in a dose-dependent manner with an ED ₅₀ = 300 mg/kg. Granulomatous tissue formation was inhibited by 59% compared to the negative control group (saline solution, 0.5 ml, p.o), and ear edema was inhibited by 77%. A Significant inhibition in the carrageenan-induced edema formation 1–4 h after carrageenan treatment, also, significantly reduced the volume of pleural inflammatory exudate and the number of migrated cells. Inhibition of arachidonic acid cascade enzymes by the presence of 1,8-cineole & inhibition of NF-κB by some monoterpenes. Carnosic acid was a potent NO inhibitor at low concentrations (6.2 µg/mL). A reduced skin lesions in mice with atopic dermatitis and reduced the amounts of immunoglobulin E, neutrophils, and inflammatory cytokines in the blood, as well as reduced NO production in LPS-treated RAW 264.7 cells.	Essential oil	Sousa et al., 2019; Malvezzi et al., 2020.
<i>Salvia runcinata</i> L. f.	Aerial parts	5-LOX and 5 LO inhibitors.	Methanol extract; methanol:chloroform extract. Essential oil.	Komatou et al., 2005; Kamatou et al., 2008; Kamatou & Viljoen, 2010; Komatou et al., 2010a.
<i>Salvia sagittata</i> Ruiz & Pav.	Aerial parts	Treatment of the EE did not affect the cell viability, while it showed a remarkable ability to reduce LPS-induced production of proinflammatory cytokines and increase the expression of HO-1 in the primary cultures of porcine aortic endothelial cells. It is possible to hypothesize that the cinnamic acid derivative gives the main contribution to the anti-inflammatory effects of the extract.	Ethanol extract (EE)	Mahmoud, et al., 2019; Tubon et al., 2019.
<i>Salvia sclarea</i> L.	Aerial parts & leaves.	Inhibition of IL-1β, IL-6, & TNF-α in rat model of periodontal inflammation at 200 mg/kg, p.o., and in the carrageenan-induced edema (73% inhibition at 250 mg/kg, s.c.). Sclareol reduced the expression of markers of myocardial injury at 5 mg/kg/day in C57BL/6 mice.	Essential oil & ethanol extract.	Moretti et al., 1997; Zhong et al., 2015; Kostic et al., 2017; Yang et al., 2022.

Species	Plant part(s)	Pharmacology activity	Extract(s)	Reference
		Diminution in the expression levels of MMPs, iNOS, & COX-2 in isolated rabbit chondrocytes at 10 µg/mL, as well as in the cartilage degradation in rabbit osteoarthritis model.		
<i>Salvia sclareoides</i> Brot.	Aerial parts	Moderate inhibition of COX-1 in an <i>in vitro</i> assay with an IC ₅₀ = 271.0 ± 4.0 µg/mL.	Aqueous extract	Batista et al., 2017.
<i>Salvia splendens</i> Sellow ex Nees	Aerial parts	Anti-inflammatory effects of the aqueous extract (100 mg/kg/day, p.o.) was observed close to the effect of the standard indomethacin.	Methanol extract 70%, aqueous & ethyl acetate extracts.	El Sawi et al., 2021.
<i>Salvia syriaca</i> L.	Aerial parts	Anti-inflammatory activity was observed in the xylene-induced ear edema. The dexamethasone and ethanolic extract at doses of 50 and 100 mg/kg, i.p. significantly reduced the ear edema in a dose-dependent manner. The order of the topical anti-inflammatory effect for the Hex extracts was: <i>S. syriaca</i> > <i>S. palaestina</i> > <i>S. spinosa</i> > <i>S. multicaulis</i> > <i>S. dominica</i> > <i>S. ceratophylla</i> . However, for EtOAc extracts the rank order was: <i>S. multicaulis</i> > <i>S. palaestina</i> > <i>S. ceratophylla</i> > <i>S. spinosa</i> > <i>S. syriaca</i> > <i>S. dominica</i> . Whereas MeOH extracts rank order was: <i>S. spinosa</i> > <i>S. multicaulis</i> > <i>S. dominica</i> > <i>S. palaestina</i> > <i>S. syriaca</i> > <i>S. ceratophylla</i> .	Ethanol, hexane, ethyl acetate & methanol extracts.	Eidi et al., 2011; Shehadeh et al., 2014.
<i>Salvia transsylvanica</i> (Schur ex Griseb. & Schenk) Schur	Aerial parts	Anti-inflammatory effect in the edema induced with carrageenan (75% inhibition at 1000 mg/kg)	Ethanol extract 70%.	Maklad et al., 1999.
<i>Salvia virgata</i> Ortega	Aerial parts	Anti-inflammatory effect in rats in the edema induced with carrageenan at 100 mg/kg, p.o.	Methanol extract	Akkol et al., 2008; Küpeli et al., 2008; Grzegorzczuk-Karolak et al., 2022.
<i>Satureja cuneifolia</i> Ten.	Aerial parts in flowering	Anti-inflammatory effect was observed in the first hour, but it was reduced after 4 h.	Organic extracts	Momtaz & Abdollahi 2010; Taskin et al. 2020.

Species	Plant part(s)	Pharmacology activity	Extract(s)	Reference
<i>Satureja hortensis</i> L.	Leaves & flowers, aerial parts, seeds.	Antinociceptive and anti-inflammatory effects were observed using the writhing test in the presence of EE= 2000 mg/kg, p.o. & AE= 200 mg/kg, p.o. As well as in the formalin test, EE= 500-2000 mg/kg, p.o., PF= 250-1000 mg/kg, p.o., & AE= 50-200 mg/kg, p.o. MP= 1000 mg/kg, p.o. & EO=200 mg/kg reduced edema induced by carrageenan. In the writhing test, EE produced 97% inhibition at 200 mg/kg, i.p., FP=87% inhibition at 200 mg/kg; & AE= 67% inhibition at 200 µL/kg, p.o. Whereas in the carrageenan-induced edema, EE=53% inhibition at 200 mg/kg, i.p.	Ethanol extract (EE), Polyphenolic fraction (PF). Essential oil (EO).	Hajhashemi et al., 2002; Hajhashemi et al., 2012.
<i>Satureja khuzistanica</i> Jamzad	Aerial parts	Decreased IL-1 β at 50-200 mg/kg, i.p., in the carrageenan-induced edema with a potent inhibition at 150 mg/kg, i.p. in Wistar rats.	Essential oil & ethanol extract.	Amanlou et al., 2005; Abbasloo et al., 2016; Darabad et al., 2022.
<i>Satureja montana</i> L.	Aerial parts	A 60.37% inhibition of NO in a model of liver injury in Wistar rats.	Methanol extract 50%.	Miguel et al., 2021; Milijasevic et al., 2022.
<i>Satureja sahendica</i> Bornm.	Aerial parts & seeds.	Topical administration shortened the inflammatory phase, accelerated cellular proliferation, and increased fibroblast distribution per 1 mm ² , collagen deposition, and rapid epithelialization in comparison with control animals. Using an infected wound, it reduces the risk of infection and improves the healing process by promoting the transition from inflammation to proliferation and increasing expression of IGF-1, FGF-2, VEGF, TGF- β , and CXCL-1.	Essential oil	Salehi et al., 2018; Omarizadeh et al., 2021.
<i>Schizonepeta multifida</i> Briq.	No identified	Greater than 50% inhibition of NO in mouse macrophages.	No identified	Fushiya et al., 2000.
<i>Tetradenia riparia</i> (Hochst.) Codd.	Leaves & stem	Anti-inflammatory activity & NO attenuation in an <i>in vitro</i> assay.	Essential oil	Ghuman et al., 2019; Garzoli et al., 2022; Shimira, 2022.
<i>Thymbra capitata</i> (L.) Cav.	Aerial parts	Inhibition of the TNF- α at 20 µg/mL. Inhibition of the 5-LO in an <i>in vitro</i> assay. Anti-inflammatory activity in the carrageenan-induced edema model in Sprague-Dawley rats using 100 mg/kg, p.o.	Essential oil	Albano & Miguel, 2011 Aazza et al., 2016 Taşkın et al., 2018 Aazza et al., 2016; Albano et al., 2011; Carrasco et al., 2016;

Species	Plant part(s)	Pharmacology activity	Extract(s)	Reference
				Llorent-Martínez et al., 2022; Miguel et al., 2021; Saoulajan et al., 2022; Tsioutsiou et al., 2022.
<i>Thymus albicans</i> Hoffmanns. & Link	Flowering parts	Inhibition of nitrites production by LPS-stimulated macrophages in a dose-dependent manner. A significant reduction by 27.16 and 41.32% was observed at the non-cytotoxic concentrations of 0.32 and 0.64 µL/mL, respectively.	Essential oil	Aazza et al., 2016; Roxo et al., 2020.
<i>Thymus armeniacus</i> Klovov & Des.-Shost.	Aerial parts	Anti-inflammatory effect in tail immersion method in mice and acetic acid-induced nociception. Inhibits the activity of ASIC1a and ASIC3 isoforms. Participation of the lamiuside A & verbascoside in <i>in vitro</i> inhibition of calcineurin activity (IC ₅₀ = 4.5 µM, 10.4 µM).	Essential oil	Modnicki et al., 2007; Prescott et al., 2011; Pargaien et al., 2020; Acimovic et al., 2022.
<i>Thymus caespititius</i> Brot.	Flowers, stems & leaves	<i>T. caespititius</i> appears to have anti-inflammatory potential based on its promising inhibitory activity on NO production. Non-phenolic compounds have a major rol in this action. - <i>T. caespititius</i> & <i>T. capitata</i> Eos showed the best capacity for preventing lipid peroxidation & scavenging the free radicals. <i>T. capitata</i> and <i>T. caespititius</i> EOs were also the best samples for inhibiting lipoxigenase.	Essential oil	Aazza et al., 2016; Alonso et al., 2017.
<i>Thymus camphoratus</i> Hoffmanns. & Link	Aerial parts in flowering	The essential oil was more effective since a higher iNOS inhibition was achieved (72% vs 43.56%). Inhibition of COX-2 expression (40.93% vs 7.1%), probably through inhibition of the NFκB.	Essential oil	Albano & Miguel, 2011; Zuzarte et al., 2018.
<i>Thymus carnosus</i> Boiss.	Aerial parts	An immunostimulatory effect was observed in fish <i>Clarias batrachus</i> . Inhibition of the carrageenan-induced edema (100 and 300 mg/kg), and in the mechanical and cold hyperalgesia. Inhibition of the carrageenan induced pleurisy reducing the migration of total leukocytes in mice by 82% at 30 mg/kg. Camphor from the essential oil inhibited all articular parameters induced by zymosan in mice (knee edema, leukocyte infiltration, mechanical hyperalgesia and NO) at 30 mg/kg. Inhibited the carrageenan induced pleurisy reducing the migration of total leukocytes in mice by 83% at 15 mg/kg. Mixture of 1,8 cineole/limonene 1:1: from the essential oil inhibited the carrageenan induced pleurisy reducing the migration of total leukocytes in mice by 80% at 6 mg/kg.	Essential oil & aqueous extract.	Nahak and Kanta, 2014; dos Santos et al., 2021; de Lima et al., 2014.

Species	Plant part(s)	Pharmacology activity	Extract(s)	Reference
<i>Thymus citriodorus</i> (Pers.) Schreb.	Aerial parts	NO inhibition in RAW 264.7 macrophages induced with LPS.	Essential oil	Oliveira et al., 2022.
<i>Thymus daenensis</i> Celak	Aerial parts	The herbal cream experimentally and histopathologically revealed a bum wound healing activity probably due to the antioxidant and anti-inflammatory activity of its phytochemical contents, especially phenolic compounds. <i>Thyme daenensis</i> extracts have antioxidant and anti-inflammatory properties and can improve liver injury in mice by decreasing pro-inflammatory TNF and IL-6 cytokines.	Essential oil & methanol extract.	Akbarinia et al., 2008; Babaeizadeh et al., 2016; Soosani & Sazegar, 2018.
<i>Thymus herbabarona</i> Loisel.	flowers, leaves and stems	<i>T. caespititius</i> has anti-inflammatory potential based on its promising inhibitory activity on NO production. <i>T. herba-barona</i> did not show anti-inflammatory potential since it was not able to inhibit the production of NO at concentrations without cytotoxicity to the cells. All the extracts revealed a high NO scavenging ability.	Crude extracts & phenolic fraction.	Zuzarte et al., 2013; Alfonso et al., 2017.
<i>Thymus kotschyanus</i> Boiss. & Hohen.	Leaves	Inhibition of the carrageenan-induced pleurisy in female Swiss mice at 30, 100, and 300 mg/kg.	Aqueous extract & essential oil.	Moraes et al., 2002; Piva et al., 2021.
<i>Thymus linearis</i> Benth.	Leaves & stems	Extracts were examined for their anti-inflammatory activities against carrageenan induced paw edema. Aqueous, methanol, & n-hexane extracts have produced analgesic, anti-inflammatory, and antipyretic activities. Both oils and extracts also exhibited significant pharmacological activities as an antipyretic, analgesic, and anti-inflammatory compared to the standards paracetamol, indomethacin, and ibuprofen tested on Swiss albino mice.	Hexane, aqueous extract & methanolic extracts. Essential oil.	Chandra et al., 2016; Qadir et al., 2016.
<i>Thymus longicaulis</i> C. Presl.	No identified	Extracts collected from different seasons exhibited a varying COX-2 gene expression inhibition in THP-1 macrophages.	Hydroalcoholic extract	Galasso et al., 2014.
<i>Thymus mastichina</i> L.	Aerial parts	Lipoxygenase inhibition with BE at IC ₅₀ =30.5 µg/mL & EO at IC ₅₀ 0.73 mg/mL. Reduction of the NO production in LPS-stimulated macrophages.	Butanol extract (BE) & essential oil (EO).	Albano & Miguel 2011; Aazza et al., 2016; Oliveira et al., 2023.
<i>Thymus praecox</i> Opiz	Aerial parts	ME demonstrated anti-inflammatory effect with 22.69% in the altered edema size after the first hour of carrageenan injection compared to fraction methanol extract. ME inhibitory	Petroleum ether extract,	Cam et al., 2019; Taskin et al., 2019.

Species	Plant part(s)	Pharmacology activity	Extract(s)	Reference
		effect increased for four hours and reached maximum by 76.44% Antioxidant active compounds play an important role in anti-inflammatory activity. Treatment decreased the levels of proinflammatory cytokines such as TNF- α , IL-1 β and IL-6.	chloroform extract, & methanol extract (ME).	
<i>Thymus quinquecostatus</i> Celak	No identified	The essential oil (20, 40, & 80 mg/kg) showed a dose-dependent analgesic effect. Ear edema was suppressed in a concentration-dependent manner when 60, 120, & 240 μ g/ear of thyme essential oil was administered through the ear edema test in mice.	Essential oil	Oh et al., 2008; Kim et al., 2022.
<i>Thymus pubescens</i> Boiss. & Kotschy ex Čelak.	Aerial parts	Anti-inflammatory effect in the edema induced with carrageenan (66.9% inhibition at 400, i.p.) in Wistar rats.	Methanol extract	Mahmoudi et al., 2008.
<i>Thymus pulegioides</i> L.	Aerial parts	Down-regulated NF-kB & simultaneously enhanced AP-1 activation in HepG2 cells.	Ethanol extract	Stalinska et al., 2005; Pavel et al., 2011.
<i>Thymus serpyllum</i> L.	Aerial parts	Decreases the inflammatory state in a murine model of obesity (50-150 mg/kg, p.o.) and reduces the IL-1 β , IL-6, TNF- γ in mouse models with irritable bowel syndrome induced with deoxycholic acid.	Aqueous extract, & standardized extract at 70%, & 15% arabic gum & 15% maltodextrin.	Raal et al., 2004; Ruiz-Malagón et al., 2022; Ruiz-Malagón et al., 2022b.
<i>Thymus sipyleus</i> Boiss.	No identified	Anti-inflammatory activity by suppressing the overproduction of TNF, NO, & 5-LOX inhibitory effect.	Methanol, ethanol, & hexane extracts.	Günes et al., 2017; Demirci et al., 2018; Ustuner et al., 2019; Llorente-Martínez et al., 2022.
<i>Thymus vulgaris</i> L.	Aerial parts	Increase antioxidant enzymes such as glutathione S-transferase & superoxide dismutase in rabbit models of renal and hepatic dysfunction. A 80% decrease in NO levels in murine models with inflammation. Anti-inflammatory effect in humans with cholestasis, chronic hepatitis, & liver fibrosis.	Essential oil	Bacalbasa et al., 2022; Pandur et al., 2022.

Species	Plant part(s)	Pharmacology activity	Extract(s)	Reference
<i>Zataria multiflora</i> Boiss.	Aerial parts	Improvement of the IL-8 levels and lymphocytes in guinea pig induced COPD models at 0.4-1.6 mg/mL, p.o. Enhanced levels of proinflammatory cytokines in guinea pig model of asthma at 0.2-08 mg/mL. Anti-inflammatory effects at 500-900 mL/kg, i.p. on edema induced in Wistar rats.	Essential oil & ethanol extract.	Khazdair et al., 2018; Ghorani et al., 2022.
<i>Ziziphora clinopodioides</i> lam.	Aerial parts & leaves	Inhibition of proinflammatory cytokines in a mouse model of hemolytic anemia. Anti-inflammatory effect in a murine model of arteriosclerosis in Sprague-Dawley rats. Histamine induced edema. (50.41% inhibition at 500 mg/kg, i.p.). Decrease in the IL-4, IL-5, IL-10, & IFN- α in murine models of hemolytic anemia.	Aqueous extract-Fe-NPs, flavonoid fraction, methanol & aqueous extracts-Sn-NPs.	Chen et al., 2002; Shabbir et al., 2018; Ahmeda et al. 2020; Wu et al., 2020; Zhang et al., 2021; Ulikhanyan et al., 2022.
<i>Ziziphora tenuior</i> L.	Aerial parts	NO inhibition in RAW 264.7 macrophages induced with LPS. Decrease in apoptotic and inflammatory gene expression in the liver and lung. Improvement in functional and endocrine disturbances of estradiol valerate- induced polycystic ovary syndrome in rats and modulate the hormone level by anti-inflammatory effects.	Essential oil & hydroalcoholic extract.	Nabiuni et al., 2015; Abu-Darwish et al., 2016; Kianpour et al., 2021.

ALT: Alanina aminotransferasa	TNF- α : Factor de necrosis celular alfa
AP-1: factor de transcripción	VCAM-1: Molécula de adhesión celular vascular-1
AST: Aspartato aminotransferasa	WBP: Proteína recombinante humana
BALF: Fluido broncoalveolar	α -SMA: Actina de músculo liso α
cAMP: Adenosín monofosfato cíclico	MMPS: Metaloproteinasas de la matriz extracelular:
CD-1 et/et: Mutante alopecica de linea CD-1	MPO: Mieloperoxidasa
COX-2. Ciclooxygenasa 2	NF- κ B p65: Factor nuclear κ B p65
DPPH: 2,2-difenil-1-picrilhidracilo	NF- κ B: Factor nuclear kappa
FRAP: Capacidad de reducción férrica del plasma	NO: Óxido nítrico
GAE: Equivalente de ácido gálico	PANC-1C: Células cancerígenas pancreáticas humanas
GSH: Glutación	PBMCs: Celulas mononucleares de sangre periférica humanas
GSH-Px: Glutación peroxidasa	PCNA: Antígeno nuclear de células en proliferación
HaCaT: Queratinocitos inmortalizados humanos	PGE2: Prostaglandina E2
HASMCs: Células aórticas de musculo liso humanas	PI3K / Akt / mTOR: Ruta de señalización intracelular
HepG2: Línea celular de cáncer de hígado humana	PLA2: Phospholipasa A2
IC ₅₀ = Concentración inhibitoria máxima	PMA: Forbol-12-miristato-13-acetato
ICAM-1: Molécula de adhesión intercelular-1	PPAR: Receptor activado por proliferador de peroxisomas
IFN- γ : Interferon gamma	RBL-2H3: Células de leucemia basófilas
IgE: Inmunoglobulina E	ROS: Especies reactivas de oxigeno
iNOS: Óxido nítrico sintasa	SC ₅₀ = Actividad antioxidante
LPS: Lipopolisacárido	SOD: Super óxido dismutasa
MCP-1: Proteína quimioatrayente de monocitos1	TGF- β 1: factor de crecimiento tumoral- β 1
MDA: Malondialdehído	Thp-1: Línea celular monocitica de leucemia humana

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