

*Supplemental material*

# Identification of Interleukin 8-Reducing Lead Compounds Based on SAR Studies on Dihydrochalcone Related Compounds in Human Gingival Fibroblasts

Katharina Schueller <sup>1</sup>, Joachim Hans <sup>2</sup>, Stefanie Pfeiffer <sup>1</sup>, Jessica Walker <sup>1,3,\*</sup>, Jakob P. Ley <sup>2</sup> and Veronika Somoza <sup>1,4</sup>

<sup>1</sup> Department of Physiological Chemistry, Faculty of Chemistry, University of Vienna, Althanstraße 14, 1090 Vienna, Austria; Katharina.zakovsek@gmx.at (K.S.); Stefanie.pfeiffer88@gmx.at (S.P.); veronika.somoza@univie.ac.at (V.S.)

<sup>2</sup> Symrise AG, Mühlenfeldstraße, 37603 Holzminden, Germany; joachim.hans@symrise.com (J.H.); jakob.ley@symrise.com (J.P.L.)

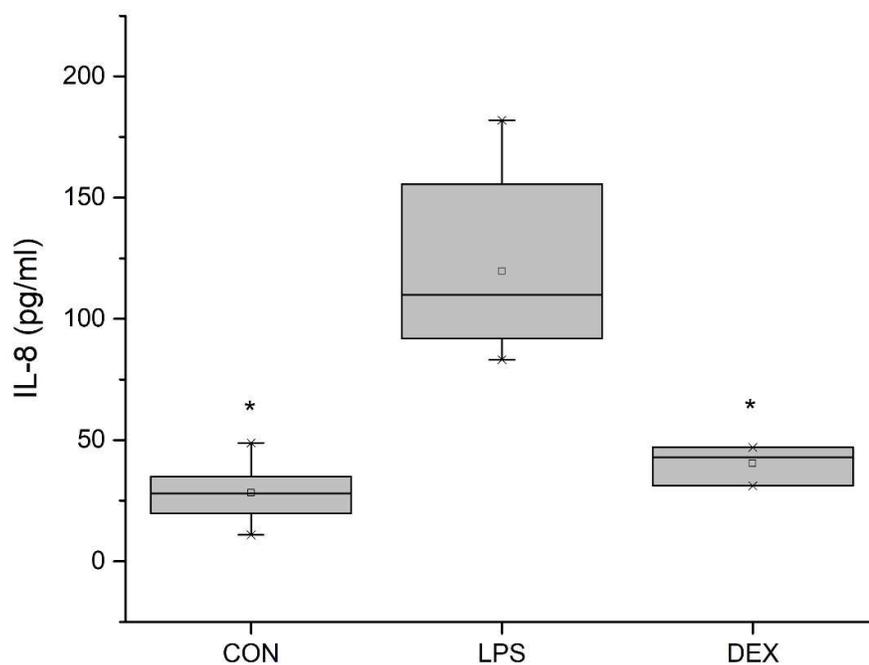
<sup>3</sup> Department of Analytical Chemistry, Faculty of Chemistry, University of Vienna, Währinger Straße 38, 1090 Vienna, Austria

<sup>4</sup> Leibniz Institute for Food Systems Biology at the Technical University of Munich, Lise-Meitner-Straße 34, 85354 Freising, Germany

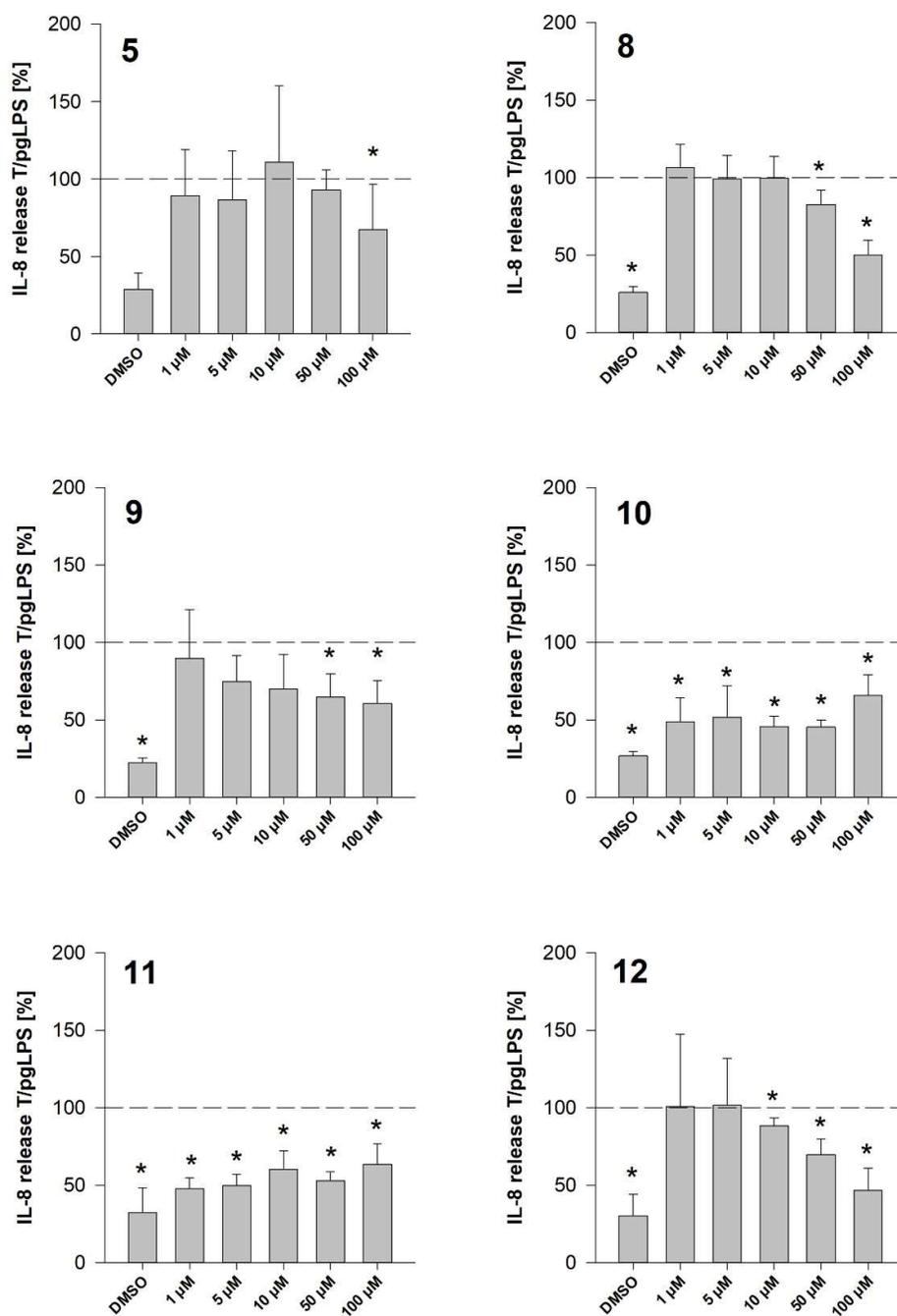
\* Correspondence: jessica.walker@univie.ac.at; Tel.: +43-4277-52337; Fax: +43-1-4277-852337

---

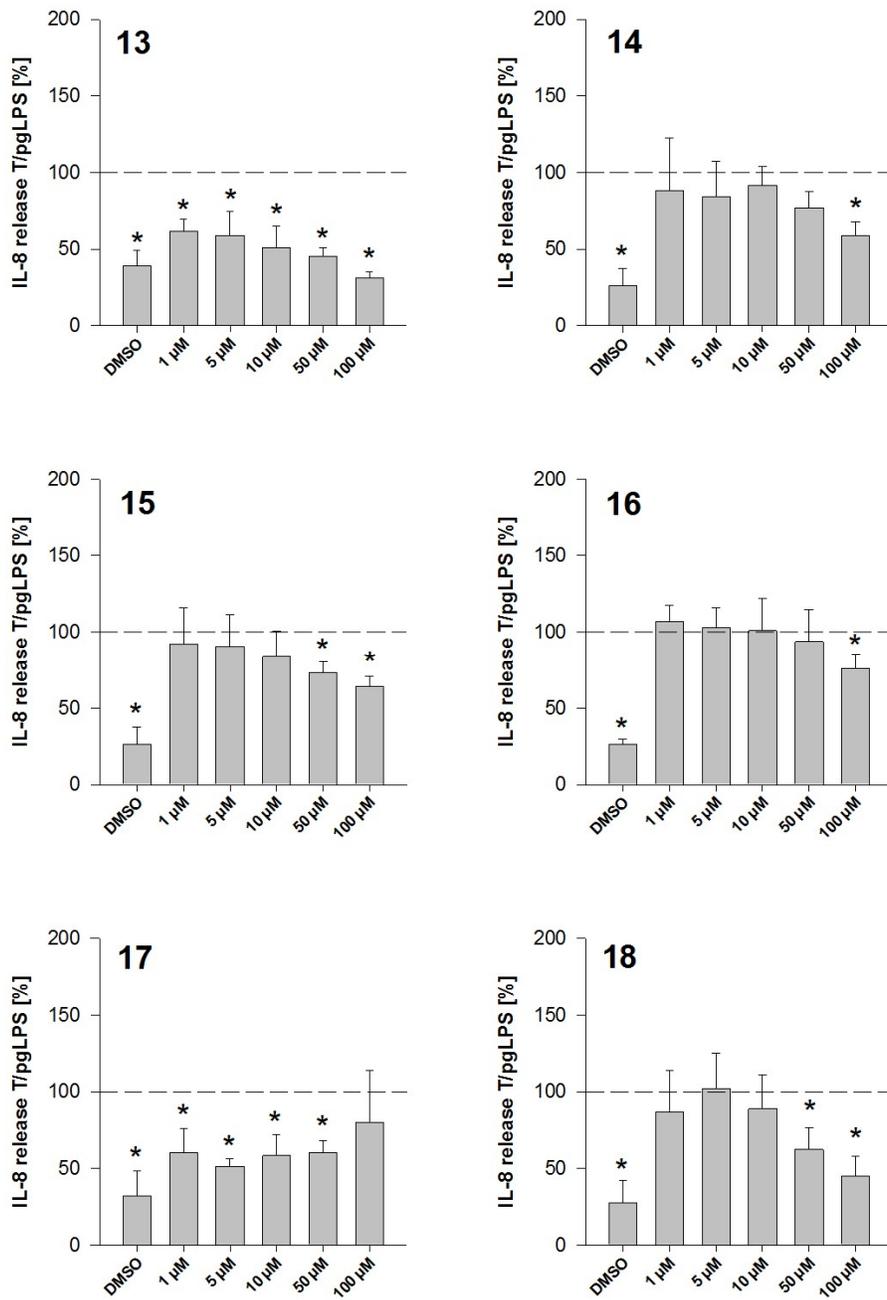
## 1. Measurement of IL-8 in Cell Culture Supernatant



**Figure S1.** IL-8 release from HGF-1 cells upon 6 h treatment with 0.1% DMSO (CON), 10 ng/ml pgLPS (LPS) and 10 ng/ml pgLPS in combination with 1  $\mu$ M dexamethasone (DEX) serving as an anti-inflammatory control. Significant differences ( $p < 0.05$ ) to pgLPS control are marked with \*, as determined by Student's *t*-test.

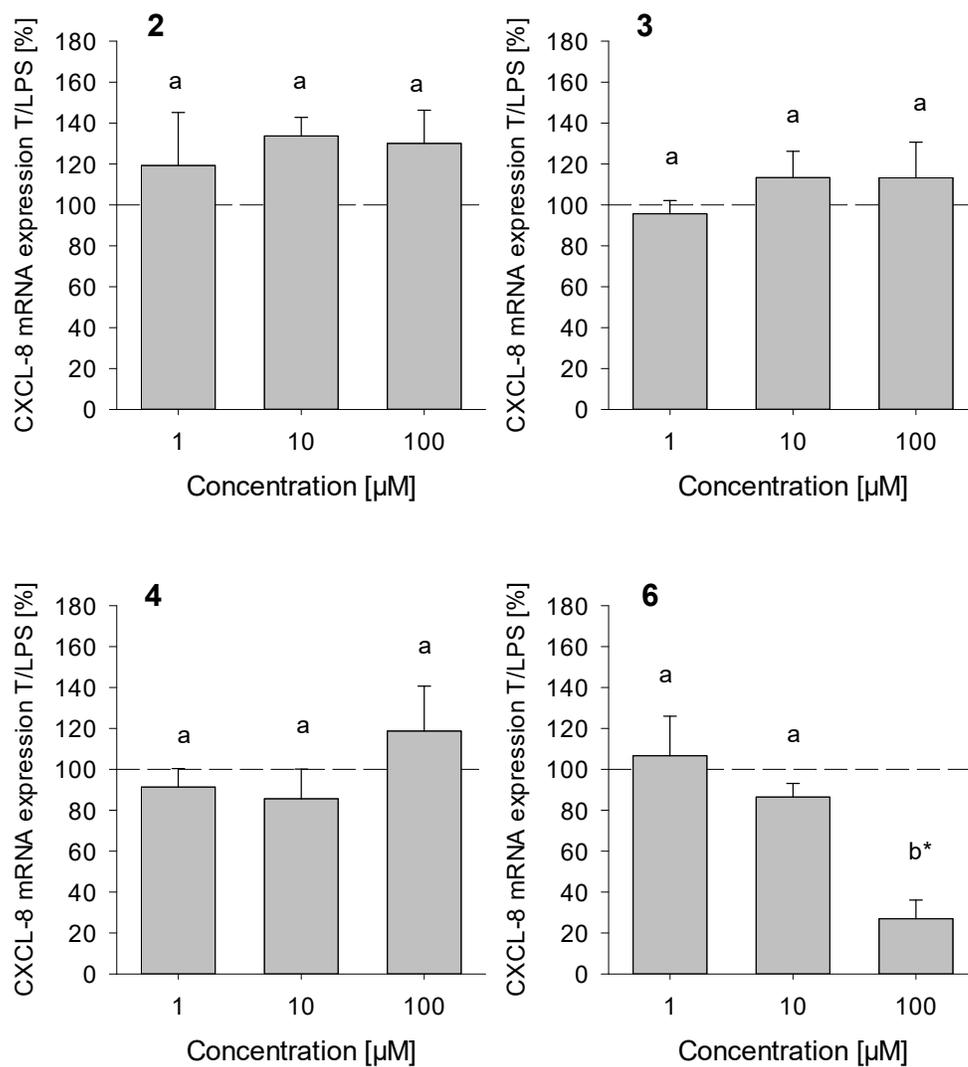


**Figure S2.** Results for incubations with compounds 5, 8–12 at 1, 5, 10, 50 and 100  $\mu\text{M}$  in co-incubation with *pgLPS* (10  $\mu\text{g}/\text{ml}$ ) in HGF-1 cells after 6 h. Data are depicted as average  $\pm$ SD of T/*pgLPS* in %; the dashed line signifies the 100% *pgLPS* control. Significant differences ( $p < 0.05$ ) to *pgLPS* control are marked with \*, as determined by Student's *t*-test.



**Figure S3.** Results for incubations with compounds 13–18 at 1, 5, 10, 50 and 100 μM in co-incubation with pgLPS (10 μg/ml) in HGF-1 cells after 6 h. Data are depicted as average ± SD of T/pgLPS in %; the dashed line signifies the 100% pgLPS control. Significant differences ( $p < 0.05$ ) to pgLPS control are marked with \*, as determined by Student's *t*-test.

## 2. Analysis of IL-8 (CXCL-8) mRNA Expression in *pg*LPS-Stimulated HGF-1 Cells Incubated with Selected Dihydrochalcones



**Figure S4.** Results for mRNA expression upon incubation with compounds 2–4 and 6 at 1, 10 and 100 µM in co-incubation with *pg*LPS (10 µg/ml) in HGF-1 cells after 3 h. Data are depicted as average ± SD of T/*pg*LPS in %; the dashed line signifies the 100% *pg*LPS control. Significant differences ( $p < 0.05$ ) to *pg*LPS control are marked with \* and <sup>a,b</sup> among treatment as determined by one-way ANOVA with Tukey post-hoc analysis.