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Supplementary figure and table

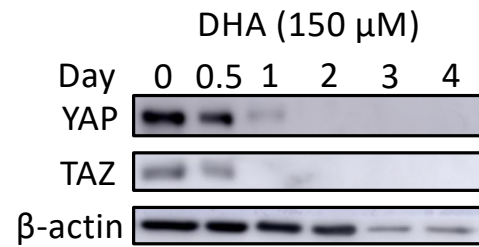


Figure S1. Degradation of endogenous YAP/TAZ after DHA treatment. The WT MDA-MB-231 cells were treated with 150 μ M of DHA for a total of 4 days. The protein lysates were obtained after 0, 0.5, 1, 2, 3, and 4 days. The WB was performed with 10 μ g of each lysate for detecting YAP and TAZ expression levels. The β -actin was included as an internal loading control.

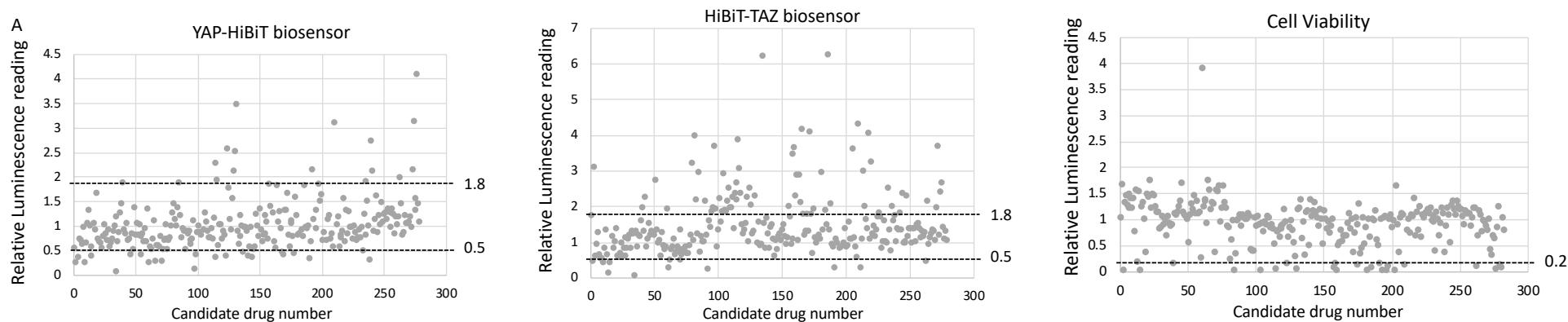


Figure S2. Small-scale screening of YAP/TAZ SMIs with a bioactive lipid library and custom compound library. Two libraries composed of 279 candidates were used in this screening. MDA-MB231 cells that were transfected with HiBiT-tagged YAP/TAZ plasmids were seeded in 96-well plates after 5 hours post-transfection. The next day, the cells were treated with the candidate SMs at a concentration of 100 μ M for 48 hours. After that, the luminescence from YAP-HiBiT (**a**) and HiBiT-TAZ (**b**) was measured, recorded and compared to the control groups. The relative luminescence was calculated by measuring how much the bioluminescence changed in drug-treated cells, compared to 1% DMSO-treated cells. The dotted lines denote the 50% luminescent suppression or 180% increase in bioluminescence, respectively, and those drugs below or above the lines were considered primary positive hits. (**c**) A similar luciferase assay measuring cell viability was performed in parallel during the drug screen. To calculate the relative fold change, the bioluminescence signal from drug-treated cells was compared with the DMSO-treated sample. Any drugs that were toxic to the cells (fold change < 0.2) were excluded from the list. Each dot in the figures represents a single measurement.

Table S1. List of primers for cloning.

Primer Name	Sequence (5' to 3')
Bg2-YAP-1F	GAAGATCTACCATGGATCCCGGGCAGCAGCCG
B1-TAZ-1F	CGGGATCCACCATGAATCCGGCCTCGGCG
B1-LgBiT-1F	GCAGGATCCATGGTCTTCACACTCGAAGATTCGTTGGG
N1-HiBiT-YAP-1R	ATAGTTTAGCGGCCGCATTCTTATCTAGCTAATCTTCTTGAA CAGCCGCCAGCCGCTCACTAACCATGTAAGAAAGCT
N1-HiBiT-TAZ-1R	ATAGTTTAGCGGCCGCATTCTTATTTAGCTAATCTTCTTGAA CAGCCGCCAGCCGCTCACCCACCGGTGGCAGCCAGGTTA GAAAGGG
N1-LgBiT-R	ATGAAACTGCGGCCGCTTAACTGTTGATGGTTACTCGGAA CAG
N1-Stop-HiBiT-LgBiT-R	ATGAAACTGCGGCCGCTTAGCTAATCTTCTTGAACAGCCG CCAGCCGCTCACGCTGTTGATGGTTACTCGGAACAG

Table S2. List of bioactive lipid library for small-scale screen.

ID.	Compound name	ID.	Compound name	ID.	Compound name
T2282	RPI1	T0002	Ethamsylate	T0516	Sodium dehydrocholate
T2233	GW 4064	T0045	Heptaminol hydrochloride	T0570	3,5-Dihydroxybenzoic acid
T0125	Epirubicin hydrochloride	T0070	Pentoxifylline	T2741	Glycyrrhizin
T1783	LXR623	T0022	Taurine	T0584	Maltose
T0685	Retinyl acetate	T0051	Urethane	T1083L	Theophylline monohydrate
T0307	Tyloxapol	T0067	Nicotinic acid N-oxide	T0096	Vardenafil
T0300	Pargyline	T0160	Anagrelide	T0584L	D-(+)-Maltose monohydrate
T0857	Fenipentol	T0155	Argatroban	T2900	Paeonol
T1112	2-(Hydroxymethyl)pyridine	T0175	Amiloride hydrochloride	T0966	Sennoside A
T1288	TTNPB	T0188	Fluticasone propionate	T0973	Pyridoxine
T0408	Dehydrocholic acid	T0235	Modaline sulfate	T0994	Ketotifen fumarate
T0369	Ethaverine hydrochloride	T0254	Probucol	T0988	Trimetazidine dihydrochloride
T0448	Dexibuprofen	T0257	Mepiroxol	T1002	Etodolac
T0438	Proflavine Hemisulfate	T0264	Zomepirac Sodium	T1025	Tranlycypromine (2-PCPA) hydrochloride
T0458	Indometacin	T0343	Nimodipine	T1046	Mexiletine hydrochloride
T0449	Menadione	T0467	Sildenafil citrate	T1051	Tretinoin
T0389	Dabigatran etexilate	T0469	Octopamine hydrochloride	T1056	Isoprenaline hydrochloride
T0383	Fenspiride hydrochloride	T0477	Zileuton	T1083	Theophylline
T0462	Cilostazol	T0480	Doxofylline	T1086	Vitamin D2
T0017	Phenolphthalein	T0504	Cyclandelate	T1093	Adapalene

Table S2 continued

ID.	Compound name	ID.	Compound name	ID.	Compound name
T1096	Milrinone	T0705	Triflusal	T0846	L(-)-Carnitine
T1117	Clorgyline hydrochloride	T0687	Simvastatin	T0847	Chenodeoxycholic acid
T1119	Rasagiline	T0690	Quinine	T2563	O-Acetyl-L-carnitine hydrochloride
T1149	Fenofibrate	T0693	Niflumic acid	T0942	Quinacrine dihydrochloride
T2201	6-Mercaptopurine monohydrate	T0679	Ketoconazole	T0944	Levamisole hydrochloride
T2202	Lithocholic acid	T0683	Mevastatin	T0949	Amstat
T2205	Theophylline-7-acetic acid	T0686	Orlistat	T1394	Ibuprofen
T1184	Rivaroxaban	T0672	Pravastatin sodium	T1398	Tadalafil
T1296	Aminopar	T0775	Coumarin	T1401	Meclofenoxate hydrochloride
T1264	Ciprofibrate	T0751	Furazolidone	T1402	Fenofibric acid
T2907	Tanshinone I	T0745	Disodium monofluorophosphate	T1415	Gemfibrozil
T2938	Polydatin	T0879	Nicotinic acid	T1420	Diethylcarbamazine citrate
T2857	Gentisic acid	T0881	6-Aminocaproic acid	T1426	Pyrazinamide
T2963	Cholic Acid	T0892	Diprophylline	T1519	Rimonabant hydrochloride
T0167	Vinpocetine	T2968	Hyodeoxycholic acid	T1537	Rapamycin
T0642	2-Methoxyphenothiazine	T2729	Scoparone	T1555	Diclofenac sodium
T0646	Mesalamine	T2869	Emodin	T1558	Resveratrol
T0664	Nicotinic acid hydrazide	T2888	Pterostilbene	T1676	Rosuvastatin
T2565	Hesperetin	T0919	Benfluorex hydrochloride	T1330	Acitretin
T1027	Luteolin	T0821	Iproniazid Phosphate	T2448	CH 223191

Table S2 continued

ID.	Compound name	ID.	Compound name	ID.	Compound name
T1611	Isotretinoin	T2334	Avanafil	T1846	Y320
T1626	Alprostadil	T2338	JZL195	T1915	AM251
T1618	Dipyridamole	T2984	Scopoletin	T1789	Obeticholic Acid
T1633	Beta-Carotene	T2855	Icariin	T1487	Fluvastatin sodium salt
T1681	Aminophylline	T2966	Beta-Sitosterol	T1510	Rosuvastatin calcium
T2368	Edoxaban Tosylate Monohydrate	T3121	Betulin	T2923	Apremilast
T1801	SR9243	T3116	Atorvastatin Calcium	T2030	Tiplaxtinin
T2368L	Edoxaban	T6450	Clinofibrate	T2015	Fexaramine
T2264	AM281	T6644	Rolipram	T2000	AM095
T1928	Anacetrapib	T3044	Teriflunomide	T1745	TAK063
T1964	UM729	T1713	IBMX	T1747	Torezolid
T2538	Bimatoprost	T0084	Moclobemide	T2438	HMN214
T2554	Etofibrate	T2137	Ibudilast	T2700	FTI 277 hydrochloride
T2534	Pitavastatin calcium	T1265	Amrinone	T2468	A 769662
T1708	Pimobendan	T0077	Dantrolene sodium salt	T2753	Avasimibe
T2499	Torcetrapib	T0080	Trapidil	T2701	GSK1292263
T2271	SBE 13 hydrochloride	T1024	Roflumilast	T1736	Apixaban
T2249	XEN445	T1711	Harmine	T1872	Fenretinide
T1738	Taxifolin	T1796	Otenabant hydrochloride	T2635	Org 27569
T2646	HA130	T1831	StemRegenin 1	T2044	Varespladib

Table S2 continued

ID.	Compound name	ID.	Compound name
T1519L	Rimonabant	T3591	URB602
T1960	YL109	T6529	Halobetasol Propionate
T1771	Ro 48-8071 fumarate	T6267	Lomitapide
T1866	AT56	T4097	Vardenafil hydrochloride trihydrate
T1875	Atglistatin	T4192	hnps-PLA Inhibitor
T6042	PF-2545920	T4041	GLPG1690
T3616	Carbazochrome	T3987	Lotamilast
T3606	Gamma-Oryzanol	T6554	JZL184
T3417	Amentoflavone	T4052	KML29
T3631	PF8380	T3580	FIPI
T3647	HTHQ	T4179	Probucol disuccinate
T3666	Atractylodin	T4347	ML355
T6151	GW501516	T5074	Cholesteryl palmitate
T6109	Darapladib		
T3698	alpha-Asarone		
T6053	Turofexorate Isopropyl		
T6485	Embelin		
T6690	T0901317		
T3941	Choline Fenofibrate		
T6048	Dalcetrapib		

Table S3. List of custom compound library for small-scale screen.

ID.	Compound name	ID.	Compound name	ID.	Compound name
T0478	Progesterone	T1429	Hydroxyprogesterone	T4776	Glycerol
T0948L	Corticosterone	T1688	5Beta-Pregnane-3Alpha,20alpha-Diol	T4766	3-Methylglutaric acid
T0856L	Dehydroepiandrosterone	T1571	Estriol	T4943	1-Oleoyl-rac-glycerol
T2908	Palmitic acid	T1614	Hydrocortisone	T4740	Elaidic acid
T0301	Ethisterone	T2532	Tauroursodeoxycholic Acid	T4867	Erucic acid
T1009	Aquacrine	T2967	Stigmasterol	T4717	25-Hydroxycholesterol
T1048	Estradiol	T2220	2-Methoxyestradiol	T4855	Tricosanoic acid
T1138	Taurocholic acid sodium salt hydrate	T3220	Euphorbiasteroid	T4950	1,2-Dipalmitoyl-sn-glycerol
T2195	Epiandrosterone	T3237	Lecithin	T4872	Palmitoleic acid
T2831	Glycocholic acid	T3357	17 alpha-propionate	T4923	7-Dehydrocholesterol
T2965	Deoxycholic acid	T3378	17 α -Estradiol	T4868	gamma-Linolenic acid
T2748	Cortodoxone	T2P2810	Methyl Linoleate	T4775	Arachidic acid
T2884	Cortisone	T2O2668	Oleic acid	T4944	Nervonic acid
T0700	Ursodeoxycholic acid	T3S0640	Glycerol trioleate	T4852	Glyceryl trimyristate
T0760	Cholesterol	T3P2904	Linolenic acid	T4859	rac-Glycerol 1-myristate
T0744	Zinc undecylenate	T3949	Myristic acid	T4870	Petroselinic acid
T2207	Adrenosterone	T2P2923	Stearic acid	T4970	LANOSTEROL
T0851	Pregnenolone	T4439	Choline glycerophosphate	T5077	Sodium Desoxycholate
T1393	Sodium butanoate	TWO2727	Tripalmitin	T5014	Prostaglandin E2 (PGE2)
T1424	Ethynyl estradiol	T4749	Squalene	T7064	Valproic Acid

Table S3 continued

ID.	Compound name
T5369	Docosahexaenoic Acid
T4129	Arachidonic acid
T5264	Androsterone
T5256	All trans-Retinal
T5212	Glycerol trilinoleate
T5266	Glycerol Tri-n-octanoate

Table S4. Quantitation of YAP and TAZ protein levels in TNBC cells treated with either of the initial hits by densitometric analysis.

Compound	YAP (relative to controls)	TAZ (relative to controls)	Compound	YAP (relative to controls)	TAZ (relative to controls)
1	0.82	0.86	21	1.09	0.73
2	0.72	0.77	22	0.58	0.46
3	0.83	0.55	23	2.72	0.75
4	0.64	0.57	24	2.32	1.08
5	0.84	0.53	25	3.81	1.10
6	0.56	0.42	26	4.44	1.00
7	0.60	0.44	27	5.62	0.84
8	0.66	0.49	28	1.64	0.47
9	0.09	0.14	29	0.85	0.37
10	0.03	0.05	30	2.76	0.99
11	0.31	0.35	31	4.62	1.01
12	1.39	1.17	32	3.56	0.91
13	1.69	1.27	33	0.91	0.36
14	1.04	0.97	34	0.87	0.51
15	0.95	0.78	35	0.36	0.15
16	0.91	0.70	36	0.24	0.08
17	1.05	0.80	37	1.55	0.48
18	0.91	0.59	38	0.59	0.15
19	0.74	0.76	39	0.30	0.14
20	0.44	0.31	40	0.52	0.22

Table S4 continued

Compound	YAP (relative to controls)	TAZ (relative to controls)	Compound	YAP (relative to controls)	TAZ (relative to controls)
41	0.87	0.28	61	0.73	0.41
42	0.52	0.31	62	0.30	0.08
43	0.35	0.14	63	1.39	0.61
44	0.18	0.17	64	0.38	0.13
45	0.28	0.35	65	1.04	0.54
46	0.19	0.27	66	0.57	0.43
47	0.23	0.20	67	0.58	0.54
48	0.15	0.16			
49	0.21	0.23			
50	0.21	0.22			
51	0.25	0.26			
52	0.13	0.14			
53	0.31	0.35			
54	0.97	0.83			
55	0.25	0.19			
56	0.26	0.18			
57	0.91	0.72			
58	0.70	0.30			
59	0.79	0.48			
60	0.30	0.20			