

Supplementary Data

This supplementary data is a part of a paper entitled “Anticancer and Antimalarial Assays of Xanthone-Fatty Acid Hybrids: Integrative *In Vitro* and *In Silico* Evaluation”.

Table S1. The possible targets of **XO** as revealed from the Swiss target prediction database

No.	Receptor	Protein code	Uniprot ID	Class
1	Anandamide amidohydrolase	FAAH	O00519	Enzyme
2	Matrix metalloproteinase 13	MMP13	P45452	Protease
3	Epoxide hydratase	EPHX2	P34913	Protease
4	Acetyl-CoA carboxylase 2	ACACB	O00763	Ligase
5	Protein-glutamine gamma-glutamyltransferase	TGM2	P21980	Enzyme
6	Cannabinoid receptor 1	CNR1	P21554	Family A G protein-coupled receptor
7	Matrix metalloproteinase 25	MMP25	Q9NPA2	Enzyme
8	Matrix metalloproteinase 3	MMP3	P08254	Protease
9	Matrix metalloproteinase 9	MMP9	P14780	Protease
10	Matrix metalloproteinase 1	MMP1	P03956	Protease
11	Matrix metalloproteinase 2	MMP2	P08253	Protease
12	Human epidermal growth factor receptor 2	HER2	Q90464	Kinase
13	Matrix metalloproteinase 8	MMP8	P22894	Protease
14	Carbonic anhydrase XIII	CA13	Q8N1Q1	Lyase
15	DNA polymerase kappa	POLK	Q9UBT6	Enzyme
16	DNA polymerase eta	POLH	Q9Y253	Enzyme
17	Bradykinin B2 receptor	BDKRB2	P30411	Family A G protein-coupled receptor
18	P2X purinoceptor 7	P2RX7	Q99572	Ligand-gated ion channel
19	Proteinase-activated receptor 1	F2R	P25116	Family A G protein-coupled receptor
20	Tyrosine-protein kinase SYK	SYK	P43405	Kinase
21	TNF-alpha	TNF	P01375	Secreted protein
22	Cholecystokinin A receptor	CCKAR	P32238	Family A G protein-coupled receptor
23	Tyrosine-protein kinase BTK	BTK	Q06187	Kinase
24	Ribosomal protein S6 kinase alpha 3	RPS6KA3	P51812	Kinase
25	Vascular endothelial growth factor receptor 2	VEGFR	P35968	Kinase
26	Butyrylcholinesterase	BCHE	P06276	Hydrolase
27	Acetylcholinesterase	ACHE	P22303	Hydrolase
28	Vanilloid receptor (by homology)	TRPV1	Q8NER1	Voltage-gated ion channel
29	Receptor protein-tyrosine kinase erbB-2	EGFR	P04626	Kinase
30	Tyrosine-protein kinase ABL	ABL1	P00519	Kinase
31	Platelet-derived growth factor receptor beta	PDGFRB	P09619	Kinase
32	Insulin receptor	INSR	P06213	Kinase
33	Cyclin-dependent kinase 2	CDK2	P24941	Kinase
34	c-Jun N-terminal kinase 3	MAPK10	P53779	Kinase
35	Phospholipase A2 group IIA	PLA2G2A	P14555	Enzyme
36	Cytosolic phospholipase A2	PLA2G4A	P47712	Enzyme
37	Proto-oncogene c-JUN	JUN	P05412	Transcription factor
38	2-acylglycerol O-acyltransferase 2	MOGAT2	Q3SYC2	Transferase
39	Smoothed homolog	SMO	Q99835	Frizzled family G protein-coupled receptor

No.	Receptor	Protein code	Uniprot ID	Class
40	Melanin-concentrating hormone receptor 1	MCHR1	Q99705	Family A G protein-coupled receptor
41	c-Jun N-terminal kinase 1	MAPK8	P45983	Kinase
42	Calcitonin gene-related peptide type 1 receptor	CALCRL	Q16602	Family B G protein-coupled receptor
43	Serine/threonine-protein kinase AKT	AKT1	P31749	Kinase
44	Probable protein-cysteine N-palmitoyltransferase porcupine (by homology)	PORCN	Q9H237	Enzyme
45	Niemann-Pick C1-like protein 1	NPC1L1	Q9UHC9	Other membrane protein
46	6-Phosphofructo-2-kinase/fructose-2,6-bisphosphatase 3	PFKFB3	Q16875	Enzyme
47	Cannabinoid receptor 2 (by homology)	CNR2	P34972	Family A G protein-coupled receptor
48	Glucocorticoid receptor	NR3C1	P04150	Nuclear receptor
49	Rho-associated protein kinase 2	ROCK2	O75116	Kinase
50	Rho-associated protein kinase 1	ROCK1	Q13464	Kinase
51	LIM domain kinase 1	LIMK1	P53667	Kinase
52	Sodium/calcium exchanger 1	SLC8A1	P32418	Electrochemical transporter
53	Histone deacetylase 3	HDAC3	O15379	Eraser
54	Histone deacetylase 2	HDAC2	Q92769	Eraser
55	Adenosine A1 receptor (by homology)	ADORA1	P30542	Family A G protein-coupled receptor
56	Type-1 angiotensin II receptor	AGTR1	P30556	Family A G protein-coupled receptor
57	Adenosine A2a receptor	ADORA2A	P29274	Family A G protein-coupled receptor
58	Histone deacetylase 5	HDAC5	Q9UQL6	Eraser
59	Adenosine A3 receptor	ADORA3	P0DMS8	Family A G protein-coupled receptor
60	MAP kinase p38 alpha	MAPK14	Q16539	Kinase
61	Histone deacetylase 7	HDAC7	Q8WUI4	Eraser
62	Tyrosine-protein kinase HCK	HCK	P08631	Kinase
63	Histone deacetylase 11	HDAC11	Q96DB2	Eraser
64	Histone deacetylase 4	HDAC4	P56524	Eraser
65	Histone deacetylase 9	HDAC9	Q9UKV0	Eraser
66	Angiotensin II receptor	AGTR2	P50052	Family A G protein-coupled receptor
67	Histone deacetylase 10	HDAC10	Q969S8	Eraser
68	Insulin-like growth factor I receptor	IGF1R	P08069	Kinase
69	Peroxisome proliferator-activated receptor gamma	PPARG	P37231	Nuclear receptor
70	Nuclear receptor ROR-gamma	RORC	P51449	Nuclear receptor
71	Vasopressin V2 receptor (by homology)	AVPR2	P30518	Family A G protein-coupled receptor
72	Oxytocin receptor (by homology)	OXTR	P30559	Family A G protein-coupled receptor
73	Muscarinic acetylcholine receptor M2	CHRM2	P08172	Family A G protein-coupled receptor
74	Protein tyrosine kinase 2 beta	PTK2B	Q14289	Kinase
75	Macrophage colony stimulating factor receptor	CSF1R	P07333	Kinase
76	Acetyl-CoA carboxylase 1	ACACA	Q13085	Enzyme
77	Tyrosine-protein kinase JAK3	JAK3	P52333	Kinase
78	Tyrosine-protein kinase JAK1	JAK1	P23458	Kinase
79	Neuropeptide Y receptor type 5	NPY5R	Q15761	Family A G protein-coupled receptor
80	Calcitonin gene-related peptide 1	CALCA	P06881	Unclassified protein
81	Dihydrofolate reductase	DHFR	P00374	Oxidoreductase
82	LDL-associated phospholipase A2	PLA2G7	Q13093	Enzyme
83	Histamine H2 receptor	HRH2	P25021	Family A G protein-coupled receptor
84	Histamine H1 receptor	HRH1	P35367	Family A G protein-coupled receptor

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85	Diacylglycerol O-acyltransferase 1	DGAT1	O75907	Enzyme
86	Cathepsin K	CTSK	P43235	Protease
87	Cyclin T1	CCNT1	O60563	Kinase
88	Glutaminase kidney isoform, mitochondrial	GLS	O94925	Enzyme
89	Liver glycogen phosphorylase	PYGL	P06737	Enzyme
90	Tyrosine-protein kinase ITK/TSK	ITK	Q08881	Kinase
91	Cyclin-dependent kinase 1/cyclin B1	CDK1	P06493	Kinase
92	Cyclin-dependent kinase 1/cyclin B1	CCNB1	P14635	Kinase
93	Cyclin-dependent kinase 2/cyclin A	CDK2	P24941	Kinase
94	Cyclin-dependent kinase 2/cyclin A	CCNA1	P78396	Kinase
95	Cyclin-dependent kinase 2/cyclin A	CCNA2	P20248	Kinase
96	Cyclin-dependent kinase 7/cyclin H	CDK7	P50613	Kinase
97	Cyclin-dependent kinase 7/cyclin H	CCNH	P51946	Kinase
98	CDK9/cyclin T1	CDK9	P50750	Kinase
99	CDK9/cyclin T1	CCNT1	O60563	Kinase
100	Acyl coenzyme A:cholesterol acyltransferase	CES1	P23141	Enzyme
101	Choline kinase alpha	CHKA	P35790	Enzyme
102	Serine/threonine-protein kinase Aurora-A	AURKA	O14965	Kinase
103	Kinesin-1 heavy chain/ Tyrosine-protein kinase receptor RET	RET	P07949	Kinase