

Table S2 Bioactive component-target-gene in dandelion

Component	Target	Gene
Furol	Alcohol dehydrogenase 1B; Alcohol dehydrogenase 1C; Alcohol dehydrogenase 1A.....	ADH1B; ADH2; ADH3; ADH1C; ADH1A; ADH1; LYZL1; LYZD1; LYZD2; LYZL2; hCG_1783499; cobT; b1991; JW1969
Vanillin	Amine oxidase [flavin-containing] B; Amine oxidase [flavin-containing] A; Prostaglandin G/H synthase 2.....	MAOB; MAOA; PTGS2; COX2; COX-2; GABRA1; MMP9; CLG4B; MAPK1; ERK2; PRKM2; FOS; G0S7; JUNB; hCG_172481; JUND; JUN
Tyranton	Prostaglandin G/H synthase 1;4-aminobutyrate aminotransferase, mitochondrial; Gamma-aminobutyric-acid receptor alpha-2 subunit.....	PTGS1; COX1; ABAT; GABAT; GABRA2; hCG_15318; GLRA1; SLC6A2; NAT1; NET1; SLC6A5; GABRA3; GOT1; BCAT2; BCAT1.....
BOX	Group IIE secretory phospholipase A2; D-amino-acid oxidase; 2-hydroxy-6-oxo-7-methylocta-2,4-dienoate hydrolase.....	PLA2G2E; DAO; DAMOX; CHRM3; RXRA; NR2B1; NCOA2; BHLHE75; SRC2; TIF2
Sobatum	Progesterone receptor	PGR; NR3C3; PR
Caffeic acid	Beta-1 adrenergic receptor; Alpha-2A adrenergic receptor; Alpha-2C adrenergic receptor.....	ADRB1; ADRB1R; B1AR; ADRA2A; ADRA2R; ADRAR; ADRA2C; ADRA2L2; ADRA2RL2; ADRB2; ADRB2R; B2AR; CTBR1; CTBR.....
Esculetin	Apoptosis regulator Bcl-2; Cyclin-dependent kinase inhibitor 1; Retinoblastoma-associated protein; Cell division protein kinase 4.....	CG_34092; BCL2; hCG_34092; bcl-2; CDKN1A; CAP20; CDKN1; CIP1; MDA6; PIC1; SDI1; WAF1; RB1; CASP3; CPP32; MMP1; CLG; MMP3; STMY1; E2F1; RBBP3
Luteolin-7-o-glucoside	Trypsin-1; Nitric oxide synthase, inducible	PRSS1; NOS2; NOS2A
Methyl caffeate	Leukotriene A-4 hydrolase	LTA4; LTA4H
Methyl 5-hydroxyphenylacetate	Thrombin	thrombin receptor; HTR; F2
Methyl 6-hydroxyphenylacetate	Muscarinic acetylcholine receptor M1	CHRM1
Methyl 9-hydroxyphenylacetate	Carbonic anhydrase I	CA1
Methyl 12-hydroxyphenylacetate	Acetylcholinesterase	ACHE
Methyl 15-hydroxyphenylacetate	Muscarinic acetylcholine receptor M2	CHRM2
Methyl 16-hydroxyphenylacetate	Alpha-1B adrenergic receptor	ADRA1B

Methyl 19-hydroxyphenylacetate	Dipeptidyl peptidase IV	dpp4; DPP4
Palmitic acid	Rhodopsin; Ig gamma-1 chain C region; Interleukin-10.....	RHO; OPN2; rhodopsin; IL10; COL1A1; PTEN; MMAC1; TEP1; GUSBP1; SMA3; SLC22A5; OCTN2; PCYT1A; CTPCT; PCYT1
MHP	Dopamine D1 receptor; Nitric-oxide synthase, brain; Alpha-2B adrenergic receptor; Thermolysin	DRD1; NOS1; ADRA2B; ADRA2L1; ADRA2RL1
Protocatechualdehyde	Neuronal acetylcholine receptor protein, alpha-7 chain; Ornithine decarboxylase	CHRNA7; NACHRA7; ODC1
Quercetin	Androgen receptor; Peroxisome proliferator activated receptor gamma; Heat shock protein HSP 90.....	DHTR; NR3C4; AR; PPARG; NR1C3; ppar gamma2; PPARG5; PPAR gamma; hCG_26772; NR1C3; PPARG1D5.....
Beta-Sitosterol	Glucocorticoid receptor	NR3C1; GRL; GCR; GR; hCG_37601 Cat; CAT; HMGCR; hCG_1757337;
Rutin	Catalase; 3-hydroxy-3-methylglutaryl-coenzyme A reductase; C5a anaphylatoxin chemotactic receptor.....	C5AR1; C5AR; C5R1; C5AR2; C5L2; GPR77; INS; hCG_15480; FCER2; CD23A; CLEC4J; FCE2; IGEBF; ITGB2; CD18; MFI7; TBXA2R
Scopoletol	NRH dehydrogenase [quinone] 2; Glutamate receptor 2; Queuine tRNA-ribosyltransferase	NQO2; NMOR2; GRIA2; GLUR2; QTRT1; TGT; TGUT; QTRT2; QTRTD1; hCG_2033722
Stearic acid	Transcription factor Sp1; Ectonucleotide pyrophosphatase/phosphodiesterase family member 7	SP1; TSFP1; UNQ3077/PRO9912; ENPP7
(+)-Syringaresinol	Calmodulin	CALM1

Note: "....." indicates that additional targets or genes are associated with the corresponding component but are not displayed in full due to space limitations. Full target information was obtained from network pharmacology analysis.