Supplementary Table 1.

Genes with similar expression patterns in primary tumors of mice treated with individual (genistein or daidzein) or a combination (genistein, daidzein and glycitein) of soy isoflavones

GENE DESCRIPTION	Symbol	GENISTEIN	DAIDZEIN	COMBINATION
		Fold Up- or Down-Regulation Test Sample /Control Sample		
Genes downregulated in genisten and combo				
V-akt murine thymoma viral oncogene homolog 1	*AKT1*	-1.32*	1.35	-1.14
V-akt murine thymoma viral oncogene homolog 2	*AKT2*	-1.60	1.75	-1.15
Cyclin D1	*CCND1*	-1.23	1.31†	-1.14
Eukaryotic translation initiation factor 4B	*EIF4B*	-1.89	1.19	-1.05
Forkhead box O1	*FOXO1*	-1.72	1.09	-1.34
FK506 binding protein 12-rapamycin associated protein 1	*FRAP1*	-1.68	1.25	-1.08
Integrin, beta 1 (fibronectin receptor, beta polypeptide, antigen CD29 includes MDF2, MSK12)	*ITGB1*	-1.58	1.19	-1.28
P21 protein (Cdc42/Rac)-activated kinase 1	*PAK1*	-2.01*	1.10	-1.07
Pyruvate dehydrogenase kinase, isozyme 1	*PDK1*	-1.16	1.76	-1.30
Phosphoinositide-3-kinase, regulatory subunit 2 (beta)	*PIK3R2*	-1.04	1.56	-2.25
Phosphatase and tensin homolog	*PTEN*	-1.16	1.13	-1.09
SHC (Src homology 2 domain containing) transforming protein 1	*SHC1*	-1.04	2.11	-1.08
Son of sevenless homolog 1 (Drosophila)	*SOS1*	-1.62	1.15	-1.05
Serum response factor (c-fos serum response element-binding transcription factor)	*SRF*	-1.03	1.20	-1.08
Toll-interleukin 1 receptor (TIR) domain containing adaptor protein	*TIRAP*	-1.21	1.51	-3.11‡
Toll-like receptor 4	*TLR4*	-1.45	1.14	-1.36
Toll interacting protein	*TOLLIP*	-1.21	1.86	-1.15
Genes upregulated in genisten and combo				
Fas ligand (TNF superfamily, member 6)	*FASLG*	1.67	-1.40	2.35
Platelet-derived growth factor receptor, alpha polypeptide	*PDGFRA*	1.17	-1.04	2.05
Genes downregulated in daidzein and combo				
Insulin-like growth factor 1 (somatomedin C)	*IGF1*	1.13	-1.38	-1.29
Genes upregulated in daidzein and combo				
Caspase 9, apoptosis-related cysteine peptidase	*CASP9*	-1.54	1.44	1.65
Cell division cycle 42 (GTP binding protein, 25kDa)	*CDC42*	-1.54*	1.13	1.29
Conserved helix-loop-helix ubiquitous kinase	*CHUK*	-1.82	1.12	1.05
Eukaryotic translation initiation factor 2-alpha kinase 2	*EIF2AK2*	-1.54	1.16	1.22
Eukaryotic translation initiation factor 4E binding protein 1	*EIF4EBP1*	-1.98	1.02	1.57
Forkhead box O3	*FOXO3*	-1.12	1.37	1.09
Gap junction protein, alpha 1, 43kDa	*GJA1*	-1.15	1.21	1.76
Growth factor receptor-bound protein 2	*GRB2*	-1.64*	1.50†	1.02
Glycogen synthase kinase 3 beta	*GSK3B*	-1.07	1.63†	1.57
V-Ha-ras Harvey rat sarcoma viral oncogene homolog	*HRAS*	-1.18	1.64	1.87

Integrin-linked kinase	*ILK*	-1.18	1.13	1.25
Jun oncogene	*JUN*	-1.22	1.54†	1.15
Mitogen-activated protein kinase 1	*MAPK1*	-1.39	1.31†	1.12
Mitogen-activated protein kinase 14	*MAPK14*	-1.18	1.45	1.45
Mitogen-activated protein kinase 3	*MAPK3*	-1.46	1.22	1.03
Mitogen-activated protein kinase 8	*MAPK8*	-1.39	1.36	8.16
Nuclear factor of kappa light polypeptide gene enhancer in B-cells 1	*NFKB1*	-1.38	1.24	1.48
Nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, alpha	*NFKBIA*	-1.59	1.62	1.13
Pyruvate dehydrogenase kinase, isozyme 2	*PDK2*	-1.17	1.49	1.06
3-phosphoinositide dependent protein kinase-1	*PDPK1*	-1.00	1.59	1.14
Phosphoinositide-3-kinase, catalytic, alpha polypeptide	*PIK3CA*	-1.23	1.35	1.17
Phosphoinositide-3-kinase, regulatory subunit 1 (alpha)	*PIK3R1*	-1.12	1.28	1.38
Protein kinase C, zeta	*PRKCZ*	-1.14	1.46	1.09
PTK2 protein tyrosine kinase 2	*PTK2*	-1.54	1.46	1.07
Protein tyrosine phosphatase, non-receptor type 11	*PTPN11*	-1.48	1.08	1.10
Ras-related C3 botulinum toxin substrate 1 (rho family, small GTP binding protein Rac1)	*RAC1*	-1.73*	1.04	1.01
V-raf-1 murine leukemia viral oncogene homolog 1	*RAF1*	-1.41	1.50	1.06
RAS p21 protein activator (GTPase activating protein) 1	*RASA1*	-1.88*	1.08	1.22
Ras homolog enriched in brain	*RHEB*	-1.30	1.14	1.12
Ras homolog gene family, member A	*RHOA*	-1.78*	1.38	1.34
Ribosomal protein S6 kinase, 70kDa, polypeptide 1	*RPS6KB1*	-2.71	1.24	1.08
Tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, eta polypeptide	*YWHAH*	-1.47	1.34	1.48

This table does not include all genes that were statistically significant when analyzed compared to vehicle controls. For significantly different genes see Table 1. Genes in this table that are significantly different are denoted by the symbols below:

* Genistein is significantly different $P < 0.05$ compared to vehicle controls

† Daidzein is significantly different $P < 0.05$ compared to vehicle controls

‡ Soy combination is significantly different $P < 0.05$ compared to vehicle controls