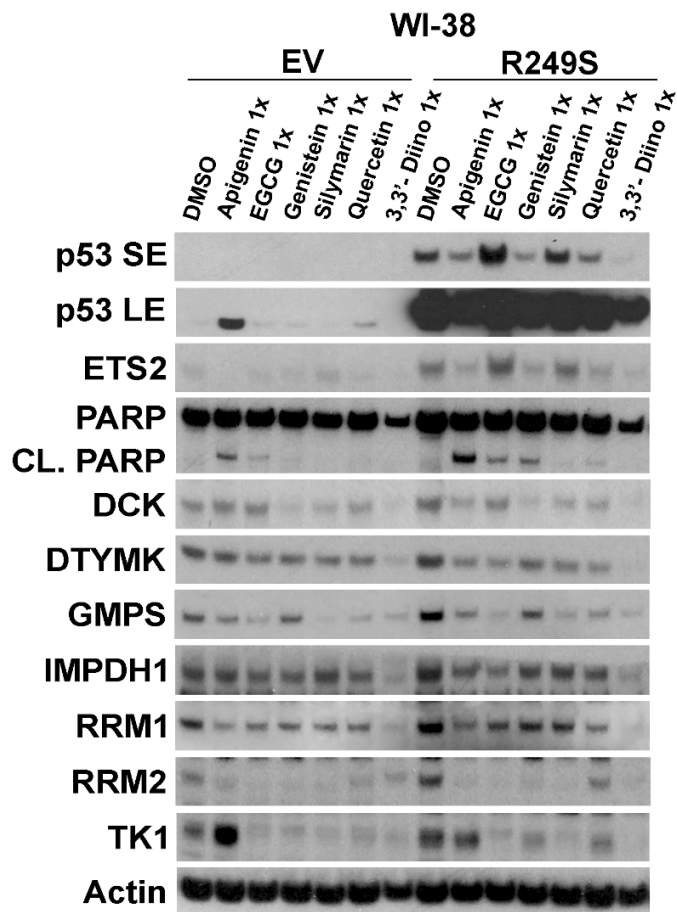
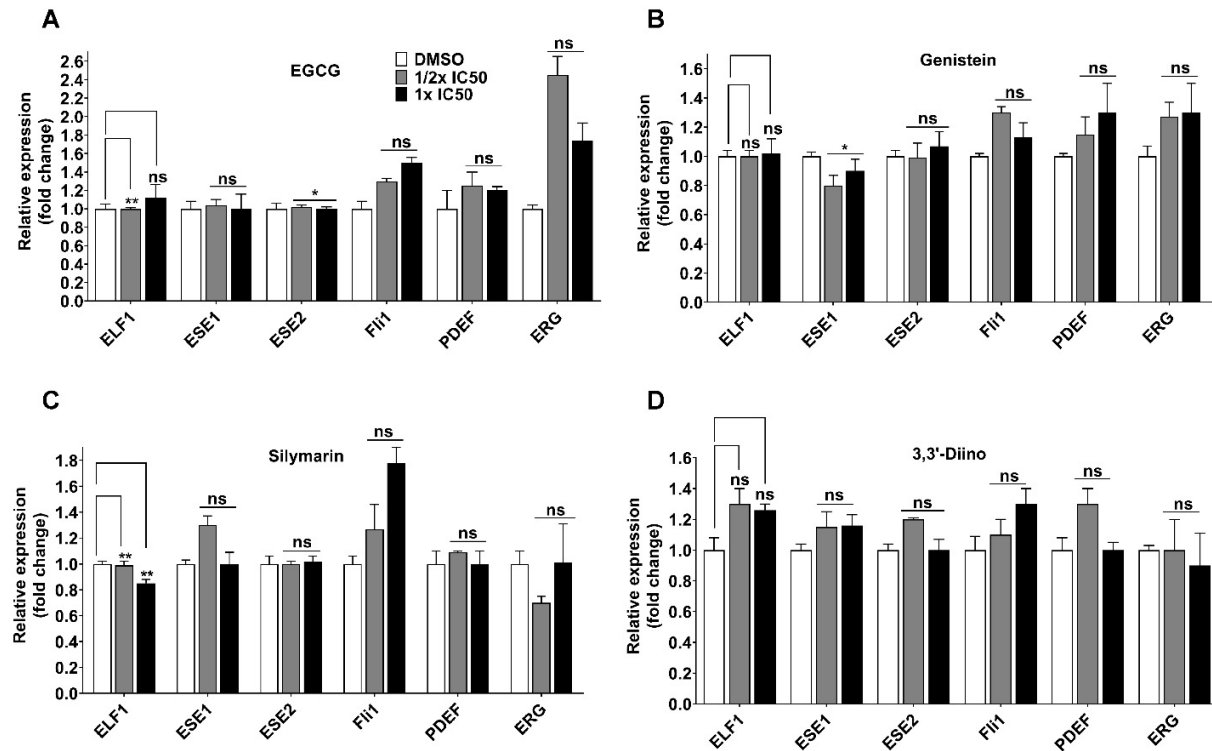


Supplementary Figure 1 (related to Figure 2)



Supplementary Figure 1. Effect of plant derived compounds in the presence of wildtype or mutant p53. WI38 cells were treated with 1x IC50 (concentration as used for mutant p53 cell line, BT-549) concentration for 24 hours. Cells were lysed and processed for western blot analysis. R249S mutant was stably expressed using a lentiviral system. SE: Shorter exposure, LE: Longer exposure. CL. PARP: Cleaved PARP.

Supplementary Figure 2 (related to Figure 4)



Supplementary Figure 2. Modulation of other ETS members in response to plant derived compounds. BT-549 cells were treated with 1/2x and 1x IC₅₀ values for 24 hours. RNA was extracted to prepare cDNA. qRT-PCR was performed for several other ETS family members. After the treatment with EGCG (A), Genistein (B), Silymarin (C), and 3,3'-Diino (D) modulation of other ETS members can be seen. Errors bars represent mean $\pm$ SD derived from three independent replicates. *, **, and *** denote $p < 0.05$, $p < 0.01$, and $p < 0.001$, respectively. "NS" means not significant.

Supplementary Table 1: IC₅₀ values (μM) of natural compounds derived from three independent replicates (n=3).

IC ₅₀ (μM)	BT-549	HCC38	MDA-MB-231
Apigenin	26 (±3.20)	33 (±5.20)	45 (±6.10)
EGCG	163 (±14.00)	150 (±19.3)	>500 (NA)
Genistein	25 (±2.89)	88 (±9.91)	>100 (NA)
Silymarin	88 (±8.80)	>100 (NA)	>100 (NA)
Quercetin	27 (±3.97)	29 (±2.23)	82 (±5.53)
3,3'-Diino	29 (±1.99)	>100 (NA)	45 (±4.33)

*Values in parentheses represent standard deviation calculated from three independent experiments.

Supplementary Table 2: Real-Time qRT-PCR primer sequences

Gene	Primer sequence
ADSS rt f	TAC TGT TGG AGG TGT TTG TA
ADSS rt r	CCC CTT GTT TGT AAT AAT TC
DCK rt f	GCCAGATGGTGCAATGTTC
DCK rt r	GCATCTTTGAGCTTGCCATT
DCTD rt f	AAC ATG AGT GAA GTT TCC TG
DCTD rt r	TTC TCT GTG CTG ATA AGA AG
DHFR rt f	TCC CAG ACA GAA CCT ACT AT
DHFR rt r	CGA TTC TTC CAG TCT ACG
DTYMK rt f	CTA CTT GCA AAA GAA AAG TG
DTYMK rt r	GCT GTT TAC ACC AAT CTA GG
GMPS rt f	GGTGGAGTAGACTCAACAGT
GMPS rt r	CATTGTAGAAAGAATGAGCA
IMPDH1 rt f	CTAGATTGGACCTCGCTACA
IMPDH1 rt r	GATCCATCTGGACACCAAC
IMPDH2 rt f	CTCACCTACAATGACTTTCTC
IMPDH2 rt r	GGGTCTTAAGAGTGATTTTC
RRM1 rt f	AGA AGA TTG CAA AGT ATG GT
RRM1 rt r	GTA AGG TTC AAT GGA CTC AT
RRM2 rt f	TAG AGG TGG TTC CTA CAA GT
RRM2 rt r	GGG TGA CTG AAG TAT GAA CT
RRM2B rt f	CTGGGTGCTGTCGTAGTT
RRM2B rt r	TGGCTCTTCATTTGACTTTA
TK1 rt f	CAATGAGCTGCATTAACCT
TK1 rt r	GTGTCTTTGGCATACTTGAT
TYMS rt f	CTA CAG CCT GAG AGA TGA AT
TYMS rt r	GAA GAC AGC TCT TTA GCA TT
P53 rt f	TGCTTTCCACGACGGTGACA
P53 rt r	ATCTGACTGCGGCTCCTCCA

ETS1 rt f	TGAGACACGACCTAAGTTGAAGAGTT
ETS1 rt r	TTCCAAAGACAGCCAAGTCACATT
ETS2 rt f	GGAGCCATTTCATTCGGAGAAAA
ETS2 rt r	CCTGTCGGACTTTGAAACCAACTT
ETV1 rt f	GCCGTTCACTCCGCTATTAC
ETV1 rt r	CTGTGTCCTCCTCGTTGATG
ETV4 rt f	AGGAGACGTGGCTCGCTGA
ETV4 rt r	GGGGCTGTGGAAAGCTAGGTT
ETV5 rt f	ACCAATGGGAATCAAGCAGGA
ETV5 rt r	GGATGACTGGCAGTTAGGCA
HPRT rt f	CAGACTTTGCTTTCCTTGGTCAG
HPRT rt r	CACTTCGTGGGGTCCTTTTCAC

Supplementary Table 3. Definitions of genes

Gene symbol	Definition
<i>ADSS</i>	Adenylosuccinate synthase
<i>DCK</i>	Deoxycytidine kinase
<i>DHFR</i>	Dihydrofolate reductase
<i>DTYMK</i>	Deoxythymidylate kinase
<i>GMPS</i>	Guanosine monophosphate synthase
<i>IMPDH1</i>	Inosine monophosphate dehydrogenase 1
<i>IMPDH2</i>	Inosine monophosphate dehydrogenase 2
<i>RRM1</i>	Ribonucleotide reductase M1
<i>RRM2</i>	Ribonucleotide reductase M2
<i>RRM2b</i>	Ribonucleotide reductase M2 B
<i>TK1</i>	Thymidine kinase 1
<i>TYMS</i>	Thymidylate synthetase
<i>ETS1</i>	v-ets avian erythroblastosis virus E26 oncogene homolog 1
<i>ETS2</i>	v-ets avian erythroblastosis virus E26 oncogene homolog 2
<i>ELF1</i>	E74-like factor 1 (ets domain transcription factor)
<i>ESE1</i>	Epithelium-specific Ets transcription factor 1
<i>ESE2</i>	Epithelium-specific Ets transcription factor 2
<i>ETV1</i>	ets variant 1
<i>ETV4</i>	ets variant 4
<i>ETV5</i>	ets variant 5
<i>Fli1</i>	Fli-1 proto-oncogene, ETS transcription factor
<i>PDEF</i>	Prostate-derived Ets factor
<i>ERG</i>	v-ets avian erythroblastosis virus E26 oncogene homolog