Supporting Information - S8 Fig

Table A:
Concentrations of pharmaceutical agents used for combination treatment

	T265 cells	S462 cells	NSF1 cells
U0126	2.5 µM	2.5 µM	10 µM
PD0325901	10 nM	10 nM	100 nM
ATRA	25 µM	10 µM	50 µM

Table B:
Primer sequences for RT-PCR

F - forward, R - reverse, P – probe; PCR primer and conditions were optimized in order to guarantee one single PCR product for each PCR reaction. Amplicon size was verified by resolving on agarose gels for conventional PCR*. Single amplicons were verified by melting curve analysis after quantitative PCR#. PCR via manufactured TaqMan probes did not require amplicon verification°.

Gene		Sequence (5`→ 3`)	Amplicon length (bp)
GAPDH#	F	acccactcctccacctttgac	76
	R	cataccaggaaatgagcttgacaa	
	P	ctggcattgccctcaacgacca	
CRABP2°		Gene Expression Assay Applied Biosystems: Hs00275636_m1	not specified
FABP5°		Gene Expression Assay Applied Biosystems: Hs02339439_g1	not specified
ZNF423°		Gene Expression Assay Applied Biosystems: Hs00323880_m1	not specified
CYP26A1#	F	ctggacatgcaggcactaaa	100
	R	gccccaggtaagtgatcaga	
PDK1#	F	ggttacgggacagatgcagt	109
	R	cgtggttggtgttgtaatgc	
RARA*	F	ggcatgtccaaggagtctgtg	90
	R	cgtcagcgtgtagctctcag	
RARB#	F	ttctcagtgccatctgcttaatct	130
	R	ggcttgctgggtcgtcttttt	
RARG*	F	aacaaggtgaccaggaatcg	133
	R	tgtcaggtgacccttcttcc	
RXRA*	F	caaggactgcctgattgaca	150
	R	ctggtcgactccacctcatt	
RXRB*	F	tcagcagcccccagattaac	151
	R	attgcacatagccgtttgcc	
RXRG*	F	cgggattggaaacatgaact	103
	R	taccccgtagtgctttcctg	

Table C:
Primer sequences used for bisulfite-sequencing

Sequence (relative to TSS)	Sequence (5`→ 3`) methylated	Sequence (5`→ 3`) un-methylated
-450 to -416	tcctgcttaacccttcaatgtc	ttttgtttaatttttaatgtt
-38 to +1	acacgagccctgagcatctg	atatgagttttgagtatttg
+277 to +299	tcttggttccagaacctg	ttttggttttagaatttg
+344 to +365	gtgctccagcctaggagtcta	gtgttttagtttaggagttta

Table D:
Primer sequences used for amplification of bisulfite converted DNA
(F – forward, R – reverse)

Sequence (relative to TSS)		Sequence (5`→ 3`) methylated	Sequence (5`→ 3`) un-methylated
-450 to -416	F	aataaagauuttgcgtcaagtgattg	aataaagattttgtgtcaagtgattg
	R	actcacgtaatacctaaagactctaaaaa	tttttagagtctttaggtattacgtgagt
-38 to +1	F	gaattcgggtgggggatagttatata	gaatttgggtgggggatagttatata
	R	ccaccaacctctaaatctaaccc	gggttagatttagaggttggtgg
+277 to +365	F	gggagtttaggttagttttgggg	gggagtttaggttagttttgggg
	R	cccaacactttaaacaattcctc	gaggaattgutuaaagtgutggg

Table E:
Specifications of antibodies used for western blot analysis

Antibody	Specification	Species	Dilution	Manufacturer
α-CRABP2	polyclonal	rabbit	1:250	Abcam (ab74365)
α-β-actin	monoclonal	mouse	1:200000	Cell Signaling (#3700)
α-GAPDH	polyclonal	rabbit	1:10000	Sigma (G9545)
α-ERK	monoclonal	rabbit	1:2000	Cell Signaling (#4696)
α-p-ERK	monoclonal	rabbit	1:4000	Cell Signaling (#4370)
α-Rabbit	monoclonal, hrp-coupled	mouse	1:10000	Sigma (A 2074)
α-Mouse	polyclonal, hrp-coupled	goat	1:10000	Sigma (A3682)