

Additional file 2

Gene expression profiling, for genes involved in regulating apoptosis, in MDA-MB-231 cells transfected or not with HIF-1 α siRNA (siRNA) or RISC-free control siRNA (RF) (50nM, 24h), incubated with or without paclitaxel (tax) under normoxic (N) or hypoxic (H) conditions. TaqMan Human Apoptosis Array (Applied Biosystems) was used to perform real time PCR for 93 human genes implicated in apoptosis in addition to three endogenous controls. 18S was used as the house-keeping gene for data normalization. Results obtained for the 77 genes detected after real time PCR reactions are expressed in induction level by comparison with the reference condition, normoxia (RQ) and cycle threshold (Ct) are given.

APAF1	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	28.2	27.6	27.9	27.7	27.3	27.2	27.6	28.0
RQ	1.00	1.04	0.74	1.13	1.34	1.27	0.82	0.68

BAD	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	28.3	28.7	28.9	29.1	28.3	28.4	27.8	28.8
RQ	1.00	0.53	0.42	0.47	0.76	0.63	0.63	0.41

BAK1	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	27.4	28.0	26.7	27.6	26.9	27.2	26.7	27.0
RQ	1.00	0.47	1.01	0.69	1.10	0.73	0.74	0.81

BAX	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	25.5	25.9	25.2	26.0	25.0	25.4	25.1	25.4
RQ	1.00	0.54	0.78	0.58	1.05	0.67	0.59	0.62

BBC3	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	29.9	29.1	28.6	27.9	29.3	28.3	27.9	27.8
RQ	1.00	1.21	1.58	3.37	1.18	2.06	1.86	2.58

BCAP31	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	24.1	23.9	23.8	24.2	23.5	24.0	23.6	24.1
RQ	1.00	0.81	0.74	0.77	1.09	0.70	0.62	0.60

BCL10	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	26.5	25.7	25.9	26.2	26.4	26.7	25.5	26.0
RQ	1.00	1.22	0.98	1.04	0.83	0.59	0.93	0.84

BCL2	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	31.0	33.1	31.2	32.6	30.6	31.0	31.5	32.3
RQ	1.00	0.16	0.52	0.25	0.97	0.64	0.30	0.24

BCL2L11	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	29.0	29.0	28.1	28.6	28.3	29.2	28.1	27.9
RQ	1.00	0.66	1.11	1.07	1.16	0.56	0.80	1.18

BCL2L13	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	29.4	30.0	28.4	29.1	29.1	28.9	28.7	28.9
RQ	1.00	0.45	1.24	1.03	0.96	0.95	0.72	0.82

BCL2L1	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	24.7	25.8	25.2	26.0	25.7	26.4	25.5	26.6
RQ	1.00	0.32	0.42	0.33	0.38	0.20	0.24	0.15

BCL2L2	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	27.4	28.1	26.1	27.1	27.1	27.5	26.0	27.0
RQ	1.00	0.42	1.59	1.03	0.93	0.63	1.20	0.79

BCL3	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	26.3	26.8	27.3	28.0	25.7	25.4	26.9	26.8
RQ	1.00	0.49	0.29	0.24	1.10	1.14	0.29	0.40

BID	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	27.9	27.7	28.9	29.5	27.8	28.0	28.8	28.9
RQ	1.00	0.83	0.32	0.27	0.81	0.64	0.24	0.29

BIK	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	32.8	32.9	31.0	30.9	31.6	31.3	30.9	30.5
RQ	1.00	0.66	2.12	2.94	1.76	1.85	1.67	2.81

BIRC1	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	31.9	30.8	30.6	32.0	30.8	31.5	30.7	31.9
RQ	1.00	1.45	1.45	0.73	1.54	0.84	1.01	0.57

BIRC2	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	27.1	26.4	25.4	26.3	26.6	26.4	26.0	26.1
RQ	1.00	1.11	1.97	1.41	1.04	1.05	0.94	1.20

BIRC3	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	30.6	30.6	29.3	29.8	28.6	28.8	28.5	29.0
RQ	1.00	0.74	1.58	1.47	2.98	2.29	1.99	1.85

BIRC4	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	27.9	28.3	27.1	27.9	27.9	27.9	28.0	28.1
RQ	1.00	0.53	1.06	0.84	0.72	0.65	0.41	0.50

DEDD2	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	28.6	28.2	27.5	27.6	28.5	28.5	27.0	27.2
RQ	1.00	0.98	1.38	1.63	0.82	0.74	1.33	1.55

DEDD	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	26.6	26.9	26.2	26.9	26.9	27.4	26.9	27.3
RQ	1.00	0.55	0.82	0.64	0.59	0.38	0.37	0.35

DIABLO	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	25.6	25.3	25.4	25.4	25.0	25.0	24.7	25.3
RQ	1.00	0.84	0.69	0.88	1.10	0.98	0.79	0.70

ESRRB1	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	28.1	28.7	28.2	29.2	27.8	27.8	28.5	28.9
RQ	1.00	0.47	0.59	0.39	0.95	0.80	0.33	0.33

FADD	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	28.0	28.8	28.3	28.9	28.0	28.3	27.6	28.4
RQ	1.00	0.41	0.53	0.43	0.76	0.54	0.58	0.47

FAS	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	28.9	28.8	27.2	28.1	27.7	28.3	27.1	27.7
RQ	1.00	0.76	1.98	1.42	1.68	0.98	1.54	1.37

GAPDH	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	20.0	18.1	19.5	19.0	19.4	19.7	19.1	19.6
RQ	1.00	2.47	0.87	1.60	1.12	0.79	0.81	0.74

HIP1	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	28.6	29.2	29.2	30.0	29.4	28.9	30.2	30.1
RQ	1.00	0.44	0.40	0.31	0.42	0.53	0.14	0.20

HTRA2	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	28.0	29.1	27.5	28.4	27.8	28.2	27.8	28.4
RQ	1.00	0.31	0.86	0.61	0.87	0.55	0.51	0.44

IKKB	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	27.2	27.8	26.4	27.6	27.3	27.3	27.3	27.4
RQ	1.00	0.47	1.06	0.62	0.72	0.61	0.42	0.52

IKBKE	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	28.8	29.1	28.6	29.1	28.5	29.1	28.8	28.9
RQ	1.00	0.56	0.69	0.64	0.91	0.52	0.45	0.56

IKBKG	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	27.1	27.1	26.4	27.1	26.8	26.9	26.1	26.6
RQ	1.00	0.68	0.96	0.81	0.93	0.73	0.88	0.83

LRDD	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	29.7	30.5	30.0	30.9	29.3	30.0	29.8	30.2
RQ	1.00	0.40	0.51	0.35	0.97	0.52	0.42	0.41

MCL1	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	25.0	24.1	23.6	23.6	24.8	24.8	24.2	24.4
RQ	1.00	1.24	1.54	2.09	0.86	0.70	0.74	0.88

NALP1	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	30.6	30.0	29.2	30.2	30.8	30.8	29.1	29.9
RQ	1.00	1.09	1.65	1.07	0.66	0.57	1.23	0.98

NFKB1

BIRC5	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	25,0	25,6	24,6	25,3	24,6	25,2	24,8	24,9
RQ	1,00	0,44	0,82	0,66	1,01	0,55	0,51	0,62

NFKBIE	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	29,7	29,7	28,4	28,5	28,9	29,0	28,4	28,5
RQ	1,00	0,67	1,47	1,79	1,26	1,04	1,05	1,32

BIRC6	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	27,4	27,8	27,1	28,1	27,2	27,5	27,0	27,9
RQ	1,00	0,50	0,73	0,49	0,85	0,59	0,57	0,40

NFKBIZ	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	28,0	29,5	28,0	28,6	27,0	27,7	28,4	28,6
RQ	1,00	0,25	0,62	0,53	1,48	0,78	0,32	0,38

BIRC8	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	32,0	33,1	31,3	32,3	31,7	31,9	31,3	31,6
RQ	1,00	0,33	0,99	0,66	0,94	0,70	0,68	0,76

PEA15	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	23,4	23,9	22,3	23,1	23,3	23,5	23,1	23,3
RQ	1,00	0,49	1,29	0,97	0,79	0,59	0,53	0,61

BNIP3	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	26,2	22,4	25,2	22,6	25,9	26,0	25,6	26,0
RQ	1,00	9,70	1,22	9,64	0,91	0,74	0,68	0,66

PMAIP1	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	28,4	29,0	25,8	26,9	27,1	27,2	26,3	26,2
RQ	1,00	0,46	3,68	2,18	1,81	1,52	1,85	2,59

BNIP3L	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	25,9	24,0	25,7	24,8	26,2	25,6	26,1	26,2
RQ	1,00	2,57	0,73	1,75	0,61	0,82	0,38	0,47

PYCARD	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	29,0	29,2	30,5	31,3	29,3	29,7	31,0	30,6
RQ	1,00	0,63	0,21	0,16	0,59	0,41	0,11	0,19

BOK	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	28,0	28,1	27,6	28,5	27,8	27,9	27,3	28,4
RQ	1,00	0,65	0,78	0,58	0,85	0,69	0,72	0,43

RELA	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	25,0	25,0	24,4	24,4	24,6	25,0	24,4	24,9
RQ	1,00	0,73	0,92	1,23	0,99	0,64	0,66	0,65

CARD4	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	30,7	32,0	30,2	31,7	29,8	30,6	30,0	30,9
RQ	1,00	0,28	0,90	0,40	1,38	0,68	0,74	0,51

RELB	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	30,3	29,5	27,7	28,0	28,7	28,1	26,8	27,2
RQ	1,00	1,21	3,73	4,05	2,21	2,91	4,92	4,99

CARD6	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	28,7	31,5	29,6	30,4	28,8	30,6	27,9	30,1
RQ	1,00	0,10	0,33	0,25	0,69	0,18	0,77	0,22

REL	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	30,9	30,8	31,0	31,5	30,8	30,5	30,6	31,4
RQ	1,00	0,78	0,61	0,56	0,84	0,91	0,56	0,43

CASP10	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	30,6	31,1	29,2	30,6	29,7	30,4	29,5	30,0
RQ	1,00	0,48	1,59	0,80	1,36	0,75	0,93	0,92

RIPK1	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	27,8	27,9	26,8	27,7	27,6	27,7	26,9	27,5
RQ	1,00	0,65	1,19	0,86	0,83	0,67	0,78	0,74

CASP2	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	25,9	26,9	26,3	27,4	25,6	26,0	26,1	26,6
RQ	1,00	0,35	0,49	0,29	0,95	0,63	0,39	0,36

RIPK2	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	28,1	28,0	26,9	27,8	27,6	27,9	27,2	27,6
RQ	1,00	0,75	1,47	1,00	1,07	0,77	0,83	0,85

CASP3	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	26,7	27,6	28,2	27,0	26,0	26,2	25,8	26,4
RQ	1,00	0,39	0,91	0,67	1,24	0,95	0,83	0,73

TA-NFKBH	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	31,9	32,1	30,4	32,1	31,1	31,6	30,5	31,0
RQ	1,00	0,64	1,75	0,75	1,32	0,82	1,23	1,14

CASP4	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	29,2	29,9	27,1	28,4	29,2	29,8	27,7	28,5
RQ	1,00	0,43	2,60	1,37	0,72	0,43	1,23	0,97

TBK1	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	28,0	28,6	27,8	28,4	27,6	27,9	28,0	28,3
RQ	1,00	0,44	0,70	0,59	0,95	0,67	0,43	0,47

CASP6	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	27,0	27,8	26,9	28,4	26,4	26,9	26,8	27,5
RQ	1,00	0,39	0,62	0,29	1,11	0,68	0,50	0,39

TNFRSF10A	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	27,5	28,0	26,5	27,9	26,8	27,2	26,4	27,0
RQ	1,00	0,50	1,26	0,61	1,27	0,81	0,96	0,85

CASP7	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	28,0	28,4	27,4	28,4	28,3	28,6	28,1	28,6
RQ	1,00	0,50	0,93	0,58	0,57	0,43	0,40	0,39

TNFRSF10B	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	25,9	25,9	25,0	25,6	25,4	25,5	24,8	25,3
RQ	1,00	0,72	1,18	1,01	1,08	0,85	0,96	0,90

CASP8AP2	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	29,4	30,1	29,7	30,7	29,4	29,9	30,3	30,8
RQ	1,00	0,41	0,49	0,32	0,72	0,44	0,24	0,21

TNFRSF1A	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	24,3	23,6	23,8	24,9	23,7	24,0	23,6	24,2
RQ	1,00	1,09	0,89	0,54	1,15	0,80	0,69	0,65

CASP8	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	27,9	28,4	27,6	28,7	27,7	27,8	27,8	27,9
RQ	1,00	0,47	0,76	0,47	0,86	0,67	0,46	0,59

TNFRSF1B	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	30,5	31,3	32,5	33,8	30,0	29,9	32,9	32,6
RQ	1,00	0,40	0,16	0,08	1,05	0,94	0,08	0,14

CASP9	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	25,5	26,0	25,6	25,6	25,0	25,8	25,5	25,7
RQ	1,00	0,49	0,55	0,76	1,01	0,52	0,44	0,51

TNFRSF21	siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax
Ct	23,7	25,6	25,5	26,9	23,1	23,1	25,3	25,4
RQ	1,00	0,20	0,18	0,09	1,15	1,03	0,15	0,18

CFLAR					siRNA				RF			
	N	H	N tax	H tax	N	H	N tax	H tax	N	H	N tax	H tax
Ct	28,4	29,0	27,8	28,5	28,3	28,9	28,5	29,0	27,8	28,2	28,3	27,9
RQ	1,00	0,46	0,97	0,77	0,78	0,46	0,42	0,38	1,08	0,77	0,67	0,82