

**Table SI.** Sequence of the primers used for reverse transcription-quantitative PCR-based mRNA expression analyses.

<b>Gene</b>	<b>Forward Primer</b>	<b>Reverse Primer</b>
<i>ATP7A</i>	AGGCAGAAGTAAGGTATAATCC	CTCACAACAAGTTCCAAAAC
<i>ATP7B</i>	AAAGAGCAAAACCTCAGAAG	CCCTGATGATTAAATTGTCCTC
<i>BAX</i>	TTTGCTTCAGGGTTTCATC	CTCAGCTTCTTGGTGGAC
<i>BBC3</i>	CTCATCATGGGACTCCTG	GCTACATGGTGCAGAGAA
<i>BCL2</i>	CGACTCCTGATTCAATGG	TCTACTTCTCTGTGATGT
<i>BCRP</i>	AAAGCCACAGAGATCATAGAG	GATCTTCTTCTTCTTCTCACC
<i>BRCA1</i>	AAGACTTCTACAGAGTGAA	CAGTTCCAAGGTTAGAGA
<i>BRCA2</i>	AACAACAATTACGAACCAA	AACATTCCTTCCTAAGTCTA
<i>CCNB1</i>	CCTTCGGAGAGCATCTAA	CATAGTTAGTTCATCAGGTATT
<i>CDKN1A</i>	TACATCTTCTGCCTTAGT	TCTTAGGAACCTCTCATT
<i>CDKN2A</i>	AGGTCCCTCAGACATCC	AATGAAAACACTACGAAAGCGG
<i>CTR1</i>	TGATGCCTATGACCTTCTAC	GAATGCTGACTTGTGACTTAC
<i>CTR2</i>	CTGTACTGTATGAAGGCATC	AAAGTGACACAAATACCACC
<i>CXCL8</i>	GCGCCAACACAGAAATTATTGTA	TGAATTCTCAGCCCTTCAAAAAC
<i>FAS-L</i>	CAATCTTACCAGTGCTGAT	AATCCCAAAGTGCTTCTC
<i>FAS-R</i>	TTATCTGATGTTGACTTGAGTAA	GGCTTCATTGACACCATT
<i>GADD45A</i>	ATCCACATTCATCTCAAT	GTA ACTACAAAGGTATTTCA
<i>GAPDH</i>	CATGAGAAGTATGACAACAG	ATGAGTCCTTCCACGATA
<i>GPX1</i>	GCCAAGAACGAAGAGATT	TCGAAGAGCATGAAGTTG
<i>GSTM1</i>	ACTATCCTTCGTGAACATC	AGACACAACCACTAACAG
<i>HMOX1</i>	CAACAAAGTGCAAGATTC	AGAAAGCTGAGTGTAAGG
<i>MATE1</i>	GAGACATCATTAACTGGTGG	CAACCTTCTGATTTCCACTC
<i>MDR1</i>	AGTCGGAGTATCTTCTTC	TTGAATAGCGAAACATTGA
<i>MRP1</i>	AGCAGAAAAATGTGTTAGGG	TACCCACTGGTAATACTTGG
<i>OCT2</i>	GAAGCCGAAAATATGCAAAG	TGCAGGGATTCTACTTTTG
<i>PCNA</i>	TTACCATAGAGATGAATGAACCA	AGTGTACCGTTGAAGAG
<i>PGC1a</i>	CACCCCATCATCACTGGAGG	CAATGGCCCACGGTCTTCTA
<i>PPARGC1A</i>	GCGAAGAGTATTTGTCAACA	TTGGTTTGGCTTGTAAGTG
<i>RALBP1</i>	AAAAGACAGGAGTGTGAAAC	G TTCAGTCAGGATCTCATTC
<i>RAD51</i>	AATTAGTTCCAATGGGTTT	TGAAGTAGTTTGTCAAGC
<i>SOD1</i>	TCTGTTTCAATGACCTGTATT	GCCTCATAATAAGTGCCATA
<i>TOP2A</i>	ACGGTGTTGGATATTCTAAG	AAGCGAGCCTGATTATTC
<i>TOP2B</i>	ATAACATTCCAACCAGAT	GGCAATTTCTTTCCATTA
<i>TOPBP1</i>	GCTCCAACGAGTTCAGAA	CCTTTATCTTCAATGCCTCTTC
<i>β-ACTIN</i>	TGGCATCCACGAAACTACC	GTGTTGGCGTACAGGTCTT

**Table SII.** Summary of cross-sensitivity of A2780 and A2780ADR cells to selected anticancer drugs and modifiers of the DNA repair and DDR.

Inhibitor	Experiments (n)*	Treatment period	Cell line	IC <sub>50</sub> (μM)	Resistance of A2780ADR	Inhibitor	Experiments (n)*	Treatment period	Cell line	IC <sub>50</sub> (μM)	Resistance of A2780ADR
Doxorubicin	7	24 h	A2780	> 1	0	Doxorubicin	7	72 h	A2780	~ 0.04	++++
		24 h	A2780ADR	> 1				72 h	A2780ADR	~ 0.40	
Etoposide	3	24 h	A2780	>10	0	Etoposide	3	72 h	A2780	~ 0.14	+++
		24 h	A2780ADR	>10				72 h	A2780ADR	~ 0.92	
Cisplatin	3	24 h	A2780	~ 11.5	++	Cisplatin	3	72 h	A2780	~ 0.4	++
		24 h	A2780ADR	~ 31.5				72 h	A2780ADR	~ 1.5	
Dexrazoxane	3	24 h	A2780	>50	0	Dexrazoxane	3	72 h	A2780	5.3	0
		24 h	A2780ADR	>50				72 h	A2780ADR	5.2	
Olaparib	3	24 h	A2780	>100	0	Olaparib	3	72 h	A2780	~ 1.9	++++
		24 h	A2780ADR	>100				72h	A2780ADR	~ 29.0	
Niraparib	3	24 h	A2780	>50	0	Niraparib	3	72 h	A2780	~ 1.2	+++
		24 h	A2780ADR	>50				72 h	A2780ADR	~ 6.8	
Prexasertib (AZD77662)	1	24 h	A2780	~ 0.6	+	Prexasertib (AZD77662)	1	72 h	A2780	~ 0.06	++
		24 h	A2780ADR	~ 1.2				72 h	A2780ADR	~ 0.26	
Rabuseritib (LY2603618)	1	24 h	A2780	>2.5	0	Rabuseritib (LY2603618)	1	72 h	A2780	~ 1.1	+
		24 h	A2780ADR	>2.5				72 h	A2780ADR	~ 2.5	
EHT1864	5	24 h	A2780	>30	0	EHT1864	5	72h	A2780	~ 4.8	0
		24 h	A2780ADR	~26.8				72h	A2780ADR	~ 7.0	
Ehop16	1	24 h	A2780	~ 8.7	0	Ehop16	1	72 h	A2780	~ 4.9	0
		24 h	A2780ADR	~ 6.5				72 h	A2780ADR	~ 5.4	

Entinostat	2	24 h	A2780	>10	0		Entinostat	2	72 h	A2780	~ 0.5	++
		24 h	A2780ADR	>10					72 h	A2780ADR	~ 1.4	
Ricolinostat	1	24 h	A2780	>10	0		Ricolinostat	1	72 h	A2780	~ 4.8	0
		24 h	A2780ADR	>10					72 h	A2780ADR	~ 6.7	
Verapamil	2	24 h	A2780	>100	0		Verapamil	2	72 h	A2780	~ 66.7	0
		24 h	A2780ADR	>100					72 h	A2780ADR	~ 76.3	

\*Number of independent experiments (each performed in biological quadruplicates). 0, considered as not resistant as compared to parental A2780 (difference  $IC_{50} < 1.5$ ); +, weak drug resistance as compared to parental A2780 (difference  $IC_{50} \geq 1.5 < 2.5$ ); ++, intermediate drug resistance as compared with parental A2780 (difference  $IC_{50} \geq 2.5 < 5.0$ ); +++, strong drug resistance as compared to parental A2780 (difference  $IC_{50} \geq 5.0 < 10.0$ ); +++++, very strong resistance as compared to parental A2780 (difference  $IC_{50} \geq 10.0$ ).