

Table S3. Mutations in *p53* treated with benzo[a]pyrene-7,8-dione (BPQ) in *APN1* KO (*apn1*) yeast

Colony	Treatment	Codon	Base	Wild type	Mutant	Change	Wild AA	Mut AA
APN1 1	BPQ	177	530	GCC-CCC-CAC	GCC-CT*C-CAC	C>T	P	L
APN1 2	BPQ	158	473	GTC-CGC-GCC	GTC-CT*C-GCC	G>T	R	L
APN1 3	BPQ	145	434	CAG-CTG-TGG	CAG-CC*G-TGG	T>C	L	P
APN1 4	BPQ	160	479	GCC-ATG-GCC	GCC-AG*G-GCC	T>G	M	R
APN1 6	BPQ	280	839	GGG-AGA-GAC	GGG-AC*A-GAC	G>C	R	T
APN1 7	BPQ	250	748	AGG-CCC-ATC	AGG-A*CC-ATC	C>A	P	T
APN1 9	BPQ	242	725	TCC-TGC-ATG	TCC-TA*C-ATG	G>A	C	Y
APN1 10	BPQ	251	751	CCC-ATC-CTC	CCC-G*TC-CTC	A>G	I	V
APN1 11	BPQ	111	331	CGT-CTG-GGC	CGT-A*TG-GGC	C>A	L	M
APN1 12	BPQ	176	527	CGC-TGC-CCC	CGC-TT*C-CCC	G>T	C	L
APN1 14	BPQ	247	739	ATG-AAC-CGG	ATG-G*AC-CGG	A>G	N	D
APN1 15	BPQ	291	871	CGG-AAG-AAA	CGG-G*AG-AAA	A>G	K	E
APN1 16	BPQ	242	725	TCC-TGC-ATG	TCC-TA*C-ATG	G>A	C	Y
APN1 17	BPQ	175	524	AGG-CGC-TGC	AGG-CA*C-TGC	G>A	R	H
APN1 18A	BPQ	145	435	CAG-CTG-TGG	CAG-CTC*-TGG	G>C	L	L
APN1 18B	BPQ	178	534	CCC-CAC-CAT	CCC-CAG*-CAT	C>G	H	Q
APN1 19	BPQ	176	527	CGC-TGC-CCC	CGC-TT*C-CCC	G>T	C	F
APN1 20	BPQ	176	526	CGC-TGC-CCC	CGC-G*GC-CCC	T>G	C	G
APN1 22	BPQ	156	467	ACC-CGC-GTC	ACC-CT*C-GTC	G>T	R	L
APN1 23A	BPQ	240	720	AAC-AGT-TCC	AAC-AGA*-TCC	T>A	S	R
APN1 23B	BPQ	273	818	GTG-CGT-GTT	GTG-CT*T-GTT	G>T	R	L
APN1 24	BPQ	236	708	AAC-TAC-ATG	AAC-TAA*-ATG	C>A	Y	Stop
APN1 25A	BPQ	170	509	ATG-ACG-GAG	ATG-AT*G-GAG	C>T	T	M
APN1 25B	BPQ	218	653	GTC-GTG-CCC	GTG-GC*G-CCC	T>C	V	A
APN1 26	BPQ	262	785	AGT-GAT-AAT	AGT-GA*T-AAT	G>A	G	D
APN1 27	BPQ	186	556	AGC-GAT-GGT	AGC-T*AT-GGT	G>T	D	Y
APN1 28	BPQ	262	785	AGT-GGT-AAT	AGT-GA*T-AAT	G>A	G	D
APN1 30A	BPQ	170	509	ATG-ACG-GAG	ATG-AT*G-GAG	C>T	T	M
APN1 30B	BPQ	218	653	TGG-TGC-CCT	TGG-C*GC-CCT	T>C	V	A
APN1 31	BPQ	243	729	TGC-ATG-GGC	TGC-ATT*-GGC	G>T	M	I
APN1 34	BPQ	317	949	CCC-CAG-CCA	CCC-T*AG-CCA	C>T	Q	Stop
APN1 39	BPQ	298	892	CAC-GAG-CTG	CAC-T*AG-CTG	G>T	E	Stop
APN1 41	BPQ	389	1167	GAA-GGG-CCT	GAA-GGC*-CCT	G>C	P	L
APN1 42	BPQ	250	748	AGG-CCC-ATC	AGG-T*CC-ATC	C>T	P	S
APN1 43	BPQ	277	830	GCC-TGT-CCT	GCC-TA*T-CCT	G>A	C	Y
APN1 45	BPQ	151	452	ACA-CCC-CCG	ACA-CG*C-CCG	C>G	P	R
APN1 49	BPQ	250	748	AGG-CCC-ATC	AGG-T*CC-ATC	C>T	P	S
APN1 50	BPQ	389	1165	GAA-GGG-CCT	GAA-T*GG-CCT	G>T	G	W
APN1 52	BPQ	277	830	GCC-TGT-CCT	GCC-TA*T-CCT	G>A	C	Y