

Table S2. Mutations in *p53* treated with benzo[a]pyrene-7,8-dione (BPQ) in OGG1 KO (*ogg1*) yeast

Colony	Treatment	Codon	Base	Wild type	Mutant	Change	Wild AA	Mut AA
OGG1 1A	BPQ	180	540	CAC-CAT-GAG	CAC-CAT-T*AG	G>T	E	D
OGG1 1B	BPQ	181	541	CAT-GAG-CGC	CAT-GAG-T*CG	C>T	R	C
OGG1 2A	BPQ	131	393	GCC-CTC-AAC	GCC-CTC-AAA*	C>A	N	K
OGG1 2B	BPQ	161	482	ATG-GCC-ATC	ATG-GA*C-ATC	C>A	A	D
OGG1 3	BPQ	135	404	TTT-TGC-CAA	TTT-TT*C-CAA	G>T	C	F
OGG1 4	BPQ	161	482	ATG-GCC-ATC	ATG-GA*C-ATC	C>A	A	D
OGG1 5	BPQ	283	848	CGG-CGC-ACA	CGG-CA*C-ACA	G>A	R	H
OGG1 6	BPQ	130	389	GCC-CTC-AAC	GCC-CC*C-AAC	T>C	L	P
OGG1 8	BPQ	176	527	CGC-TGC-CCC	CGC-TA*C-CCC	G>A	C	Y
OGG1 10	BPQ	242	726	TCC-TGC-ATG	TCC-TGA*-ATG	C>A	C	Stop
OGG1 12	BPQ	287	859	GAA-GAG-AAT	GAA-T*AG-AAT	G>T	E	Stop
OGG1 13	BPQ	287	859	GAA-GAG-AAT	GAA-T*AG-AAT	G>T	E	Stop
OGG1 16	BPQ	165	493	AAG-CAG-TCA	AAG-T*AG-TCA	C>T	Q	Stop
OGG1 19	BPQ	242	726	TCC-TGC-ATG	TCC-TGA*-ATG	C>A	C	Stop
OGG1 20	BPQ	242	726	TCC-TGC-ATG	TCC-TGA*-ATG	C>A	C	Stop
OGG1 23	BPQ	287	859	GAA-GAG-AAT	GAA-T*AG-AAT	G>T	E	Stop
OGG1 25	BPQ	280	839	GGG-AGA-GAC	GGG-AT*A-GAC	G>T	R	I
OGG1 27	BPQ	242	726	TCC-TGC-ATG	TCC-TGA*-ATG	C>A	C	Stop
OGG1 28	BPQ	294	880	GGG-GAG-CCT	GGG-T*AG-CCT	G>T	E	Stop
OGG1 29A	BPQ	241	722	TCC-TGC-ATG	TA*C-TCG-ATG	C>A	S	Y
OGG1 29B	BPQ	162	486	GCC-ATC-TAC	GCC-ATA*-TAC	C>A	I	I
OGG1 30	BPQ	161	482	ATG-GCC-ATC	ATG-GA*C-ATC	C>A	A	D
OGG1 31	BPQ	246	736	GGC-ATG-AAC	GGC-G*TG-AAC	A>G	M	V
OGG1 25Z	BPQ	250	749	AGG-CCC-ATC	AGG-CT*C-ATC	C>T	P	L
OGG1 26Z	BPQ	250	749	AGG-CCC-ATC	AGG-CT*C-ATC	C>T	P	L
OGG1 27Z	BPQ	250	749	AGG-CCC-ATC	AGG-CT*C-ATC	C>T	P	L
OGG1 30Z	BPQ	250	749	AGG-CCC-ATC	AGG-CT*C-ATC	C>T	P	L
OGG1 33ZA	BPQ	272	816	GAG-GTG-CGT	GAG-A*TG-CGT	G>A	V	V
OGG1 33ZB	BPQ	273	818	GAG-GTG-CGT	GAG-GTA*-CGT	G>A	R	H
OGG1 35Z	BPQ	306	916	AAG-CGA-GCA	AAG-A*GA-GCA	C>A	R	R
OGG1 36Z	BPQ	183	548	TGC-TCA-GAT	TGC-TA*A-GAT	C>A	S	Stop
OGG1 37Z	BPQ	177	529	TGC-CCC-CAC	TGC-A*CC-CAC	C>A	P	T
OGG1 38ZA	BPQ	154	460	CCC-GGC-ACC	CCC-T*GC-ACC	G>T	G	C
OGG1 38ZB	BPQ	162	484	GCC-ATC-TAC	GCC-T*TC-TAC	A>T	I	F
OGG1 39Z	BPQ	276	826	TGT-GCC-TGT	TGT-A*CC-TGT	G>A	A	T
OGG1 40Z	BPQ	179	535	CAC-CAT-GAG	CAC-A*AT-GAG	C>A	H	N
OGG1 41Z	BPQ	250	749	AGG-CCC-ATC	AGG-CT*C-ATC	C>T	P	L
OGG1 44Z	BPQ	298	892	CAC-GAG-CTG	CAC-T*AG-CTG	G>T	E	stop
OGG1 45Z	BPQ	279	835	CCT-GGG-AGA	CCT-T*GG-AGA	G>T	G	W
OGG1 46Z	BPQ	250	749	AGG-CCC-ATC	AGG-CT*C-ATC	C>T	P	L
OGG1 48Z	BPQ	222	664	GAG-CCG-CCT	GAG-T*CG-CCT	C>T	P	S
OGG1 51Z	BPQ	250	749	AGG-CCC-ATC	AGG-CT*C-ATC	C>T	P	L
OGG1 53Z	BPQ	266	797	CTG-GGA-CGG	CTG-GA*A-CGG	G>A	G	E
OGG1 54Z	BPQ	250	749	AGG-CCC-ATC	AGG-CT*C-ATC	C>T	P	L
OGG1 55Z	BPQ	336	1006	CGT-GAG-CGC	CGT-T*AG-CGC	G>T	E	Stop
OGG1 56Z	BPQ	282	844	GAC-CGG-CGC	GAC-A*GG-CGC	C>A	R	R
OGG1 57Z	BPQ	111	333	CGT-GGC-GGC	CGT-GGA*-GGC	C>A	L	M
OGG1 59Z	BPQ	250	749	AGG-CCC-ATC	AGG-CT*C-ATC	C>T	P	L
OGG1 60Z	BPQ	245	733	GGC-GGC-ATG	GGC-T*GC-ATG	G>T	G	C
OGG1 63ZA	BPQ	241	722	AGT-TCC-TGC	AGT-TA*C-TGC	C>A	S	Y
OGG1 63ZB	BPQ	244	732	ATG-GGC-GGC	ATG-GGA*-GGC	C>A	G	G

Colony	Treatment	Codon	Base	Wild type	Mutant	Change	Wild AA	Mut AA
OGG1 64Z	BPQ	135	404	TTT-TGC-CAA	TTT-TT*C-CAA	G>T	C	F
OGG1 65Z	BPQ	250	749	AGG-CCC-ATC	AGG-CT*C-ATC	C>T	P	L
OGG1 67ZA	BPQ	224	672	CCT-GAG-GTT	CCT-GAT*-GTT	G>T	E	D
OGG1 67ZB	BPQ	285	855	ACA-GAG-GAA	ACA-GAT*-GAA	G>T	E	D
OGG1 67ZC	BPQ	251	751	CCC-ATC-CTC	CCC-T*TC-CTC	A>T	I	F
OGG1 68Z	BPQ	194	580	CAT-CTT-ATC	CAT-A*TT-ATC	C>A	L	I
OGG1 69Z	BPQ	154	460	CCC-GGC-ACC	CCC-T*GC-ACC	G>T	G	C
OGG1 71Z	BPQ	273	817	GTG-CGT-GTT	GTG-A*GT-GTT	C>A	R	S
OGG1 73ZA	BPQ	158	473	GTC-CGC-GCC	GTC-CT*C-GCC	G>T	R	L
OGG1 74ZA	BPQ	282	845	GAC-CGG-CGC	GAC-CT*G-CGC	G>T	R	L
OGG1 74ZB	BPQ	293	877	AAA-GGG-GAG	AAA-T*GG-GAG	G>T	G	W
OGG1 75Z	BPQ	177	529	TGC-CCC-CAC	TGC-A*CC-CAC	C>A	P	T
OGG1 76Z	BPQ	250	749	AGG-CCC-ATC	AGG-CT*C-ATC	C>T	P	L
OGG1 78ZA	BPQ	195	585	CTT-ATC-CGA	CTT-ATA*-CGA	C>A	I	I
OGG1 78ZB	BPQ	324	972	CTG-GAT-GGA	CTG-GAA*-GGA	T>A	D	E
OGG1 79Z	BPQ	177	530	TGC-CCC-CAC	TGC-CA*C-CAC	C>A	P	H