

**Table S8. Mutation spectrum in the category "can1 (from can1 ura3 set) - DSB-cen ; UV, 45 J/m<sup>2</sup>"**

Mutant #	Position in CAN1 (coding strand)	Distance between adjacent mutations	WT base	Mutant base	Del/Add (-/+ # of nt)	WT sequence context	Mutant sequence context	Type of mutation	# of mutations in mutant
2	584		G	A		TCAATTGAGACGTACA	TCAATTGAGACGTACA	sub	1
4	687		G	A		GAGTTCTGGTTC	GAGTTCTGGTTC	sub	1
5	1143		A	-	-1	ACGCTTTaTCTTAACA	ACGCTGTT-TCTTAACA	indel	1
8	130		G	T		TAAAAGATGAGAAAAGT	TAAAAGATGAGAAAAGT	sub	1
9	926		A	T		TGCTGGTGAGCTGCAA	TGCTGGTGAGCTGCAA	sub	1
10	612		G	A		GCGGCATGGATTAGTAT	GCGGCATGaATTAGTAT	sub	1
16	1208		G	A		TTTATTGgTCTATCAA	TTTATTGATCTATCAA	sub	1
19	1179		T	A		AATTCAAatTTTACGT	AATTCAAaATTTACGT	sub	1
20	612		G	A		GCGGCATGGATTAGTAT	GCGGCATGaATTAGTAT	sub	1
21	271		A	T		TTAACGAAaGACATATT	TTAACGAAaGACATATT	sub	1
23	673		G	A		ATTACGGTgAATTGAG	ATTACGGTaAATTGAG	sub	1
24	963		A	-	-1	ATCAAAAaGTTGTTTT	ATCAAAA-GTTGTTTT	indel	1
25	1171		A	T		CTGCCGCAaATTCAAAT	CTGCCGCaATTCAAAT	sub	1
27	180		G	-	-1	AGTAATGgCGAGGATA	AGTAATG-CGAGGATA	indel	1
6	299		G	T		CCTTGGTGACTATTG	CCTTGGTGtACTATTG	sub	2
6	1223	924	A	T		AAAGAACAA GTTGGCTC	AAAGAACAT GTTGGCTC	sub	
13	1037		A	G		TCCATACAA TGACCTA	TCCATACAGTGACCTA	sub	2
13	1087	50	A	T		CTCCCTTGTATTGCT	CTCCCTTtTTATTGCT	sub	
17	135		A	T		GATGAGAAaAGTAAAGA	GATGAGAAatAGTAAAGA	sub	2
17	530	395	GG	AA		TTTTCTTGqqCAATCACT	TTTTCTTGaaCAATCACT	compl	
26	362		G	A		CCCAGTGGCGCTCTTA	CCCAGTGGaCGCTCTTA	sub	2
26	1706	1344	A	G		AGACATTGAGCAATTG	AGACATTGggCAATTG	sub	
12	673		G	A		ATTACGGTgAATTGAG	ATTACGGTaAATTGAG	sub	3
12	1208	535	G	T		TTTATTGgTCTATCAA	TTTATTGtTCTATCAA	sub	
12	1698	490	A	G		GATAGAAGGAGACATTGA	GATAGAAGGAGACATTGA	sub	
15	965		-	G	+1	GCCATCAA-AAAAGTTG	GCCATCAAAGAAAGTTG	indel	3
15	1103	138	A	T		TATTGAGAACTCTGGTA	TATTGAGAtCTCTGGTA	sub	
15	1203	100	A	T		CGTATTTTaTTGGTCT	CGTATTTtTTGGTCT	sub	
28	829		ATAAAAA	TTAAAAA-		ATCTAAGGAGAAAGGGA	ATCTAAGGtAAAA-CGAAGGGA	compl	3
28	1115	286	A	G		TGGTACAAAGTTTGC	TGGTACAAgGGTTTGC	sub	
28	1129	14	A	C		TGCCACATaTCTTCAAC	TGCCACATcTCTTCAAC	sub	

See footnotes to Table S4

The *CAN1* coding strand is complementary to unresected strand in the DSB-*cen* construct