

**Table 2. Description of mutational events detected *Vrs1* in mutants.**

Mutant #	Original cv.	Mutagen	DNA	Protein
hex-v.03	Bonus	Neutrons	1-2147 deletion	Null
hex-v.04	Bonus	X-rays	701 C > deletion	N11 > frame shift
hex-v.07	Bonus	Neutrons	no change	
hex-v.08	Bonus	Ethylene imine	no change	
hex-v.10	Bonus	X-rayed pollen	1-2147 deletion	Null
hex-v.11	Bonus	X-rayed pollen	1-2147 deletion	Null
hex-v.12	Bonus	Neutrons	1018 T > A	F75 > I
hex-v.13	Foma	X-rays	1018 T > A	F75 > I
hex-v.14	Foma	Glycidol	1018 T > A	F75 > I
hex-v.15	Foma	Gamma-rays	616-823 deletion with 26pb dupl. and inv.	
hex-v.16	Foma	Gamma-rays	no change	
hex-v.17	Foma	Ethyl methanesulfonate	865 C > T	Q24 > stop
hex-v.18	Bonus	X-rays	1-2147 deletion	Null
hex-v.19	Foma	Methyl methanesulfonate	1213 G > T	E140 > stop
hex-v.21	Foma	Ethyl methanesulfonate	1195 A > T	K134 > stop
hex-v.22	Foma	Neutrons + Ethyl methanesulfonate	1135 A > T	K114 > stop
hex-v.23	Foma	Ethylene imine	1135 A > T	K114 > stop
hex-v.24	Foma	Propanedisulfonic acid diethyl ester	1135 A > T	K114 > stop
hex-v.25	Foma	Ethylene imine	1073 T > A	L93 > H
hex-v.26	Foma	Ethyl methanesulfonate	1073 T > A	L93 > H
hex-v.27	Foma	N-ethyl-N-nitrosourea	1504-1514 deletion	A203 > frame shift
hex-v.28	Foma	Ethylene imine	1079 T > A	L95 > Q
hex-v.29	Foma	Ethylene imine	1102 T > A	W103 > R
hex-v.30	Foma	Gamma-rays	1504-1514 deletion	A203 > frame shift
hex-v.31	Foma	Ethylene imine	1504-1514 deletion	A203 > frame shift
hex-v.33	Kristina	Neutrons	no change	
hex-v.35	Foma	Gamma-rays	1-2147 deletion	Null
hex-v.36	Kristina	Ethyl methanesulfonate	1064 C > T	A90 > V
hex-v.38	Kristina	iso-Propyl methanesulfonate	855 A > C	Splicing site
hex-v.39	Kristina	iso-Propyl methanesulfonate	1061 T > A	L89 > Q
hex-v.41	Kristina	Neutrons	1-2147 deletion	Null
hex-v.42	Kristina	Neutrons	1115 G > T	R107 > L
hex-v.43	Kristina	Ethyl methanesulfonate	1115 G > T	R107 > L
hex-v.44	Bonus	iso-Propyl methanesulfonate	958 G > T	G55 > stop
hex-v.45	Bonus	iso-Propyl methanesulfonate	958 G > T	G55 > stop
hex-v.46	Bonus	Neutrons	no change	
hex-v.47	Bonus	Ethyl methanesulfonate	no change	
hex-v.48	Bonus	X-rays	no change	
hex-v.49	Bonus	Sodium azide	733 G > A	Splicing site
Int-d.11	Foma	Ethylene imine	1476 T > A	C194 > S
Int-d.12	Foma	Ethylene imine	1049 G > A	R85 > H
Int-d.22	Foma	Methyl methanesulfonate	1124 G > A	R110 > H
Int-d.24	Foma	Buthyl methanesulfonate	1124 G > A	R110 > H
Int-d.28	Foma	iso-Propyl methanesulfonate	1049 G > A	R85 > H
Int-d.36	Foma	Ethyl methanesulfonate	1482 C > T	Q196 > stop
Int-d.40	Kristina	Ethyl methanesulfonate	1485 C > T	Q197 > stop
Int-d.41	Kristina	Ethyl hydroxy ethanesulfonate	1111 A > T	N106 > Y
Int-d.50	Kristina	Gamma-rays	1061 T > A	L89 > Q
Int-d.57	Kristina	iso-Propyl methanesulfonate	1193 A > C	H133 > P
Int-d.67	Kristina	Ethyl methanesulfonate	1108 C > T	Q105 > stop
Int-d.68	Kristina	Ethyl methanesulfonate	1079 T > A	L95 > Q
Int-d.69	Kristina	Ethyl methanesulfonate	1335 A > T	R147 > stop
Int-d.73	Bonus	Ethyl methanesulfonate	1193 A > C	H133 > P
Int-d.80	Bonus	X-rays	no change	
Int-d.82	Bonus	Ethyl methanesulfonate	1311 G > A	Intron
MGM	Misato Golden	Gamma-rays	1-2147 deletion	Null
NGM13	New Golden	Gamma-rays	no change	