

Supplementary Table 1. Yeast strains used in this assay

Representative name of strain	Relevant genotype	Source
wild-type (CG379)	MAT α ade5 his7-2 leu2-3 leu2-112 trp1-289 ura3-52	1)
<i>pol1L868F</i>	CG379 with <i>pol1L868F</i>	1)
<i>pol3-5DV</i>	CG379 with <i>pol3-5DV</i>	2)
<i>pol30K164R</i>	CG379 with <i>pol30K164R::LEU2</i>	this study
<i>pol1L868F pol30K164R</i>	CG379 with <i>pol1L868F pol30K164R::LEU2</i>	this study
<i>rev3Δ</i>	CG379 with <i>rev3Δ::TRP1</i>	this study
<i>pol1L868F rev3Δ</i>	CG379 with <i>pol1L868F rev3Δ::TRP1</i>	this study
<i>rad30Δ</i>	CG379 with <i>rad30Δ::URA3</i>	this study
<i>pol1L868F rad30Δ</i>	CG379 with <i>pol1L868F rad30Δ::URA3</i>	this study
<i>rad18Δ</i>	CG379 with <i>rad18Δ::URA3</i>	this study
<i>pol1L868F rad18Δ</i>	CG379 with <i>pol1L868F rad18Δ::URA3</i>	this study

- 1) Niimi, A., Limsirichaikul, S., Yoshida, S., Iwai, S., Masutani, C., Hanaoka, F., Kool, E. T., Nishiyama, Y., and Suzuki, M. (2004) *Mol. Cell. Biol.* **24**, 2734-2746
- 2) Jin, Y. H., Obert, R., Burgers, P. M., Kunkel, T. A., Resnick, M. A., and Gordenin, D. A. (2001) *Proc. Natl. Acad. Sci. USA* **98**, 5122-5127

Supplementary Table 2. Types of base substitutions found in *can1* gene ¹⁾

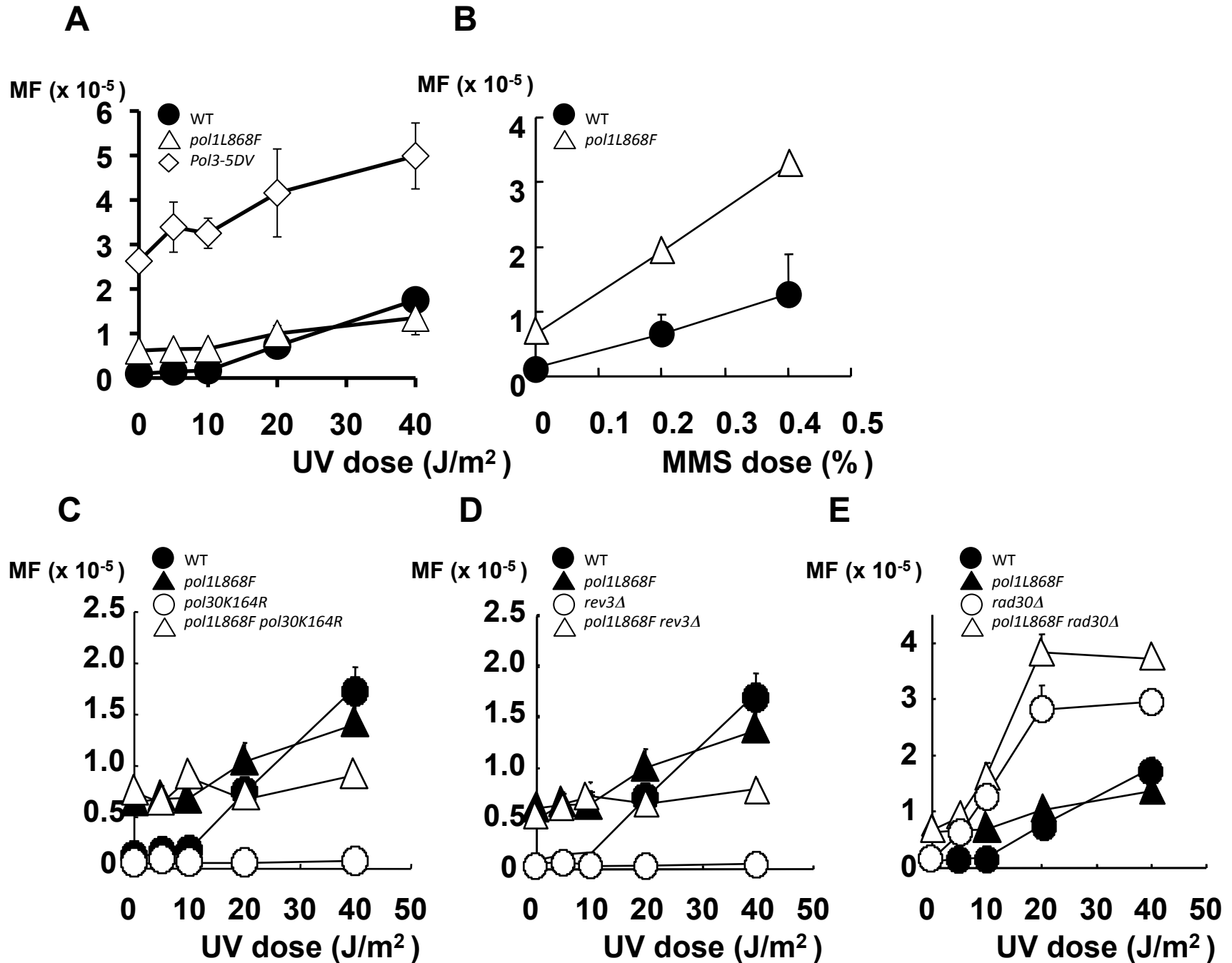
base substitutions	WT	<i>rev3Δ</i>	<i>pol11L868F</i>	<i>pol11L868F</i> <i>rev3Δ</i>	<i>pol11L868F</i> <i>pol30K164R</i>
total	28	19	24	32	26
transitions	9	15	10	13	4
T->C	1	5	2	2	0
C->T	3	5	4	8	3
A->G	1	4	1	0	0
G->A	4	1	3	3	1
transversions	19	4	14	19	22
T->A	0	0	0	2	0
T->G	0	0	0	0	0
A->T	1	0	5	4	2
A->C	2	0	0	0	2
G->T	3	1	6	7	12
G->C	5	0	1	4	4
C->A	4	3	1	2	1
C->G	4	0	1	0	1

1) Mutations are shown as the non-coding sequence for *can1*.

Supplementary Table 3. The +1 frameshift mutations found in the *can1* gene.

Wild-type	$\Delta REV3$	<i>pol1L868F</i>	<i>pol1L868F:</i> $\Delta REV3$	<i>pol1L868F:</i> <i>pol30K164R</i>
T->2T	2C->3C	3T->4T 3T->4T 2G->3G 4A->5A 6A->7A TGcAAAA CAtGGG		

1) Mutations are shown as the non-coding sequence for *can1*. At non-run sequences, inserted nucleotides are shown in small letters.



Suzuki et al, Supplementary Figure 1