

**Supplemental Table 2. Effect of the *cdc73Δ* mutation on dGCR rates.**

<i>Genotype</i>	Wild-type <i>CDC73</i>		<i>cdc73Δ</i> Mutation	
	<i>RDKY</i>	<i>Can<sup>R</sup> 5FOA<sup>R</sup> Rate<sup>†</sup></i>	<i>RDKY</i>	<i>Can<sup>R</sup> 5FOA<sup>R</sup> Rate<sup>†</sup></i>
Wild-type	7635	8.1 [6.4-15] x 10 <sup>-8</sup> (1)	7986	7.54 [3.5-22] x 10 <sup>-7</sup> (9.3)
<i>yku70Δ</i>	8420	3.82 [2.6-9.0] x 10 <sup>-7</sup> (4.7)	8427	1.62 x 10 <sup>-5</sup> (200)
<i>yku80Δ</i>	8339	3.29 [1.5-10] x 10 <sup>-7</sup> (4.1)	8323	1.31 [0.7-3.4] x 10 <sup>-5</sup> (162)
<i>tel1Δ</i>	8340	3.38 [2.0-4.9] x 10 <sup>-7</sup> (4.2)	8324	1.91 [0.7-3.3] x 10 <sup>-5</sup> (236)
<i>exo1Δ</i>	8419	2.21 [1.6-2.7] x 10 <sup>-7</sup> (2.7)	8428	1.02 [0.8-3.5] x 10 <sup>-5</sup> (126)
<i>chl4Δ</i>	8421	8.14 [5.5-18] x 10 <sup>-8</sup> (1.0)	8429	2.50 [0.5-5.7] x 10 <sup>-5</sup> (309)
<i>thp1Δ</i>	8422	2.15 [0.8-12] x 10 <sup>-7</sup> (2.6)	8430	6.05 [4.9-6.8] x 10 <sup>-6</sup> (75)
<i>mid1Δ</i>	8423	7.66 [1.2-22] x 10 <sup>-8</sup> (1.0)	8431	5.12 [2.9-12] x 10 <sup>-6</sup> (63)
<i>sir2Δ</i>	8172	5.26 [3.0-7.7] x 10 <sup>-7</sup> (6.5)	8432	6.38 [5.2-12] x 10 <sup>-6</sup> (79)
<i>sir3Δ</i>	8173	5.40 [3.1-14] x 10 <sup>-7</sup> (6.7)	8433	1.63 [0.7-7.6] x 10 <sup>-5</sup> (201)
<i>sir4Δ</i>	8424	6.49 [3.1-8.9] x 10 <sup>-7</sup> (8.0)	8434	3.50 [1.0-5.0] x 10 <sup>-6</sup> (43)
<i>rad52Δ</i>	8425	7.00 [2.9-31] x 10 <sup>-9</sup> (0.09)	8435	3.44 [1.6-5.5] x 10 <sup>-7</sup> (4.3)
<i>dnl4Δ</i>	8426	1.87 [1.2-2.4] x 10 <sup>-7</sup> (2.3)	8436	6.96 [4.6-33] x 10 <sup>-7</sup> (8.6)
<i>exo1Δ, yku80Δ</i>	8463	1.44 [1.2-2.2] x 10 <sup>-7</sup> (1.8)	8465	6.28 [2.7-9.4] x 10 <sup>-5</sup> (775)
<i>exo1Δ, tel1Δ</i>	8464	6.13 [3.2-12] x 10 <sup>-7</sup> (7.6)	8466	2.05 [0.9-6.1] x 10 <sup>-6</sup> (25)
<i>yku80Δ, tel1Δ</i>	8467	2.27 [1.3-3.0] x 10 <sup>-6</sup> (28)	8468	1.64 [0.2-3.7] x 10 <sup>-4</sup> (2024)
<i>yku80Δ, rad52Δ</i>		ND	8437	5.12 [2.3-9.5] x 10 <sup>-7</sup> (6.3)
<i>yku80Δ, dnl4Δ</i>		ND	8438	5.19 [2.0-51] x 10 <sup>-5</sup> (641)
<i>tel1Δ, rad52Δ</i>		ND	8439	4.24 [1.7-5.8] x 10 <sup>-7</sup> (5.2)
<i>tel1Δ, dnl4Δ</i>		ND	8440	2.05 [1.9-3.8] x 10 <sup>-5</sup> (253)

<sup>†</sup>Rate of accumulating *Can<sup>R</sup> 5FOA<sup>R</sup>* progeny. The numbers in square brackets [ ] are the 95% confidence interval limits. The number in parenthesis ( ) is the fold increase relative to the wild-type dGCR assay.  
n.d., not determined.