

Table S11. Radiation/desiccation response motif identified in <i>D. deserti</i>			
gene^a	position	site	score^b
<i>Deide_23280</i> (correct <i>ddrC</i>)	-37	TTATGTTTTTTAGCATAA	15.00
<i>Deide_02990</i> (<i>ddrB</i>)	-30	TTATGTTATTTACATAA	14.86
<i>Deide_01160</i> (<i>ddrD</i>)	-27	TTCTGCTTTAAACATAA	14.56
<i>Deide_15490</i> (<i>gyrB</i>)	-145	TTACGTTATATACGTAA	14.21
<i>Deide_18730</i> (operon, conserved genes: <i>Deide_18730</i> , <i>Deide_18720</i> , <i>Deide_18710</i> , <i>Deide_18700</i> , <i>Deide_18690</i>)	-43	TTACGTTCAAAGCGTAA	14.20
<i>Deide_12520</i> (<i>gyrA</i>)	-119	TTACGCCCATAACATAA	14.11
<i>Deide_3p00210</i> (<i>recA-P3</i>)	-64	TTATGCTGGAATCATAA	14.11
<i>Deide_1p01260</i> (<i>recA-P1</i>)	-64	TTATGCTGCAATCATAA	14.06
<i>Deide_19430</i> (<i>cinA</i> ; operon with <i>ligT</i> + <i>recA</i>)	-2	TTATGCTTCTAGCAGAA	13.98
<i>Deide_11320</i> (<i>recQ</i>)	-35	TTACGCTAATGACATAA	13.96
<i>Deide_2p01380</i> (<i>pprA</i>)	-91	TTCTGTTTTATACAGAA	13.94
<i>Deide_12100</i> (<i>uvrD</i>)	-39	TTACGCTTTCAACAGAA	13.84
<i>Deide_09150</i> (<i>ddrA</i>)	-42	TTACGCCTTGACCAGAA	13.40
	-20	TTCTGTTATAAACTAAA	13.79
<i>Deide_00600</i> (transketolase)	-191	TTCTGTTCTCACC GGAA	13.79
<i>Deide_12760</i> (<i>uvrA</i>)	-67	TTACGCACGCAACGTAA	13.74
<i>Deide_16210</i> (<i>recD</i>)	-45	TTCTGCCACAAACAGAA	13.65
<i>Deide_16610</i> (membrane protein)	+15	TTCTGTCAGAAGCGGAA	13.57
<i>Deide_03120</i> (<i>uvrB</i>)	-92	TTACGTCAGGGGCGTAA	13.53
<i>Deide_00120</i> (<i>ssb</i>)	-132	TTACGGCATTGACGTAA	13.52
<i>Deide_04721</i> (conserved protein)	-18	TTCTGCTAGTATCAGAA	13.52
<i>Deide_08700</i> (conserved protein)	-395	TTACGGCGGGATCATAA	13.34
	-159	TTATGATGAGTTCATAA	12.91
<i>Deide_20312</i> (glycosyl transferase)	-66	TTTTGTTGCCATCGGAA	13.31
<i>Deide_07131</i> (membrane protein; operon with <i>recJ</i>)	-32	TTTTGCTCTGCACGAAA	12.96
<i>Deide_22810</i> (<i>Deinococcus</i> -specific)	-67	TTTCGCTTACAACGAAA	12.86
<i>Deide_20570</i> (<i>ddrO</i>)	-173	TTCTGTATTGACCGTAC	12.84

^a Grey indicates gene products identified in proteome analysis after standard cultivation.

^b The motifs were identified using Virtual Footprint (1). First, a position weight matrix was created using the palindromic sequences near genes from *D. radiodurans* and *D. geothermalis*, listed in Makarova et al (2), to search for matches near homologous genes in *D. deserti*. Then the identified sequences were added to those from *D. radiodurans* and *D. geothermalis* to create a new position weight matrix and to scan the entire *D. deserti* genome.

1. Münch R, Hiller K, Grote A, Scheer M, Klein J, et al. (2005) Virtual Footprint and PRODORIC: an integrative framework for regulon prediction in prokaryotes. *Bioinformatics* 21: 4187-4189.

2. Makarova KS, Omelchenko MV, Gaidamakova EK, Matrosova VY, Vasilenko A, et al. (2007) *Deinococcus geothermalis*: the pool of extreme radiation resistance genes shrinks. *PLoS ONE* 2: e955.