

Fig. S1. Generation of putative quinoproteins deletion mutants of *Deinococcus radiodurans* R1. Knockout plasmid constructs generated for the individual ORFs (Fig. S2) were linearized and transformed into *D. radiodurans* R1 and transformants were grown several generations in presence of selection antibiotics pressure. Genomic DNA from wild type (**R**) and perspective deletion mutants (**M**) of *dr0503*, *dr0766*, *dr1769*, *dr2518* and *drc0015* genes was used for PCR amplification of 500 bp internal fragment of corresponding gene (**A**) and 982bp *nptII* gene (**B**) using gene specific primers and sizes of products were estimated with molecular size marker on 1% agarose gel.

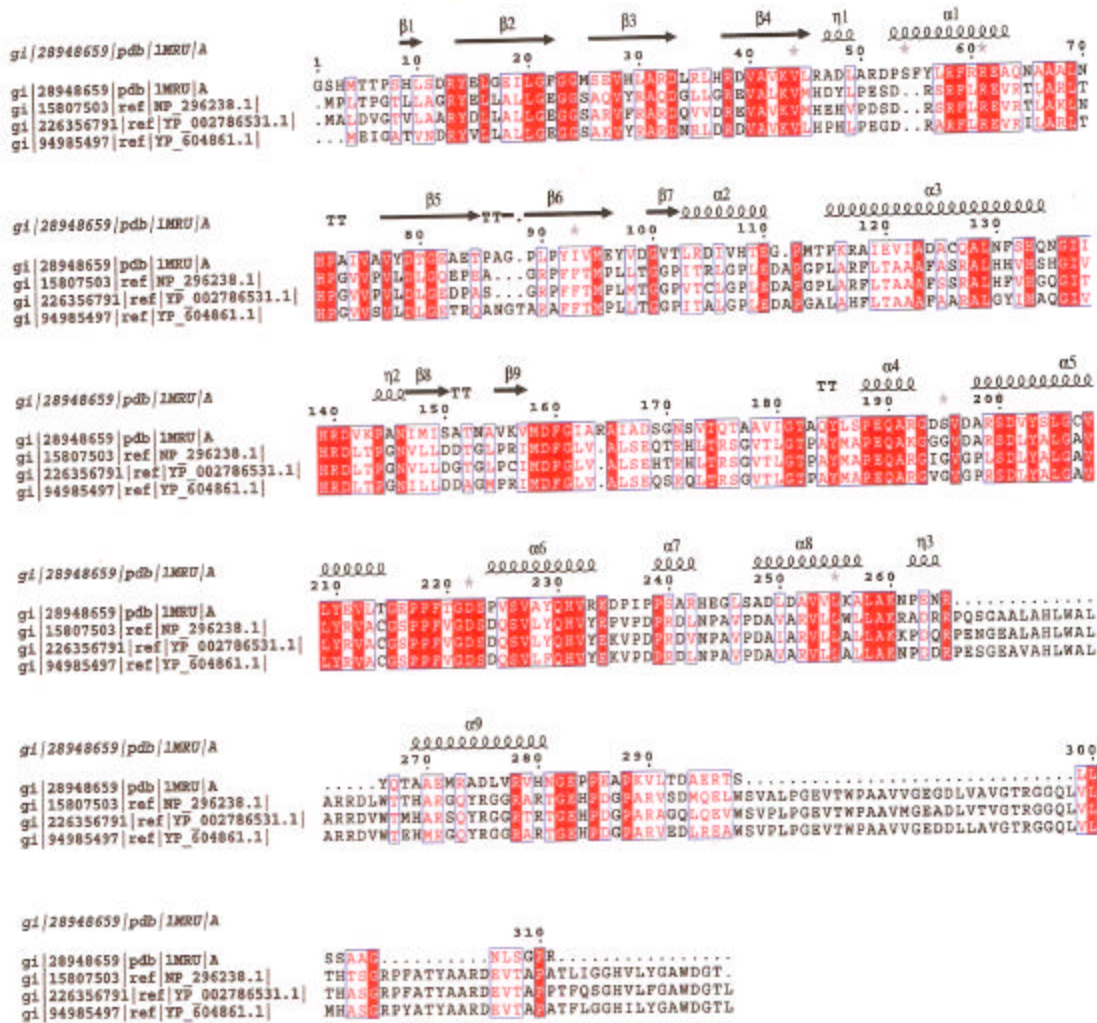


Fig. S2. Multiple sequence alignment of N-terminal portion of DR2518 (NP_296238.1) protein showing highest similarities with PknB (1MRU) and two other reference kinases from eukaryotes.

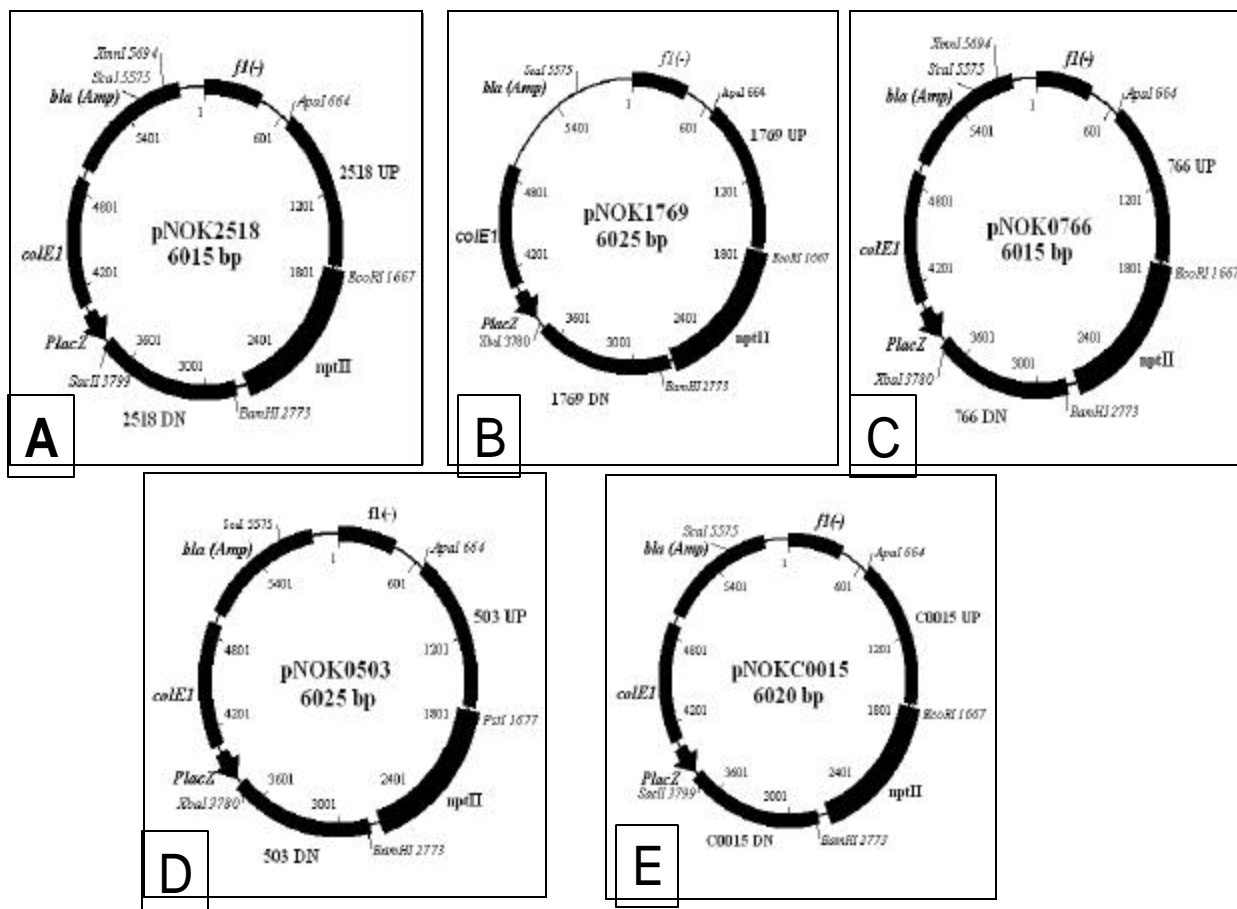


Fig. S3. Partial restriction map of constructs used for the generation of $\Delta dr2518$ (A), $\Delta dr1769$ (B), $\Delta dr0766$ (C), $\Delta dr0503$ (D) and $\Delta drc0015$ (E) mutants of *Deinococcus radiodurans*.

Table S1. List of primers used in this study.

Sl. No.	Name of primers	Nucleotide sequences of primers	Purpose
Expression plasmid construction			
1	2518F	5'AAAGGGCCCATGCCGCTGACCCCTGGA3'	pGro2518
2	2518R	5'CTAGTCTAGACTACCCTTCCTGCTCGCT3'	pGro2518
3	2518PF	5'CGAATTCATATGCCGCTGACCCCTGGA3	pET2518
4	2518PR	5'CGGGATCCCTACCCTTCCTGCTCGCT3'	pET2518
Integration plasmid construction			
5	2518UF	5-GGCGGGCCCCGTGGCCGTTTCGGGAAGT-3	pNOK2518
6	2518UR	5-CGGAATTCGCCGAGCAGGGCGAGCAACT-3	pNOK2518
7	2518DF	5-CCCGGATCCCCTTCATGGACGGTACCCT-3	pNOK2518
8	2518DR	5-CCCCGCGGCTGCGCCGCGAACTGAAGAT-3	pNOK2518
9	1769UF	5-CGGGCCCCATCCCGAGGAATTTGGTGTA-3	pNOK1769
10	1769UR	5-GGAATTCGCGGGCAGCGGGGTCAGGCAT-3	pNOK1769
11	1769DF	5-GCGGGATCCAGCCGGAATTCGCGGCGT-3	pNOK1769
12	1769DR	5-GTTGGATCCTTGCCCTGCGCTTCGTCACT-3	pNOK1769
13	503UF	5-CGGGCCCACGGAGGAGTAACAGCCA GT-3	pNOK0503
14	503UR	5-CTGCAGTGACACACGCCCGCAAG GACA-3	pNOK0503
15	503DF	5-CGCGGATCCCACGCCTACCAGCCGCT-3	pNOK0503
16	503DR	5-CTCTAGAGCATAAGCCTCAGTTCCCG GT-3	pNOK0503
17	766UF	5-CGGGCCCCAAGGAACCTAAATTCATCA-3	pNOK0766
18	766UR	5-GGAATTCCTCAATCTCAAATCAAGGTCA-3	pNOK0766
19	766DF	5-GCGGATCCCTGTGGTGC GCGAGCCCTGA-3	pNOK0766
20	766DR	5-TCTAGAATGTGGTTCGATGCCATCTCCA-3	pNOK0766
21	C15UF	5-GGGGCCCCGGTGCACCATGACTCTGCCGA-3	pNOK0015
22	C15UR	5-CGGAATTCGCGGGTGGCGCTTCGCGTCA-3	pNOK0015
23	C15DF	5-CGGATCCGCATACTCTCCTGGCCGTGA-3	pNOK0015
24	C15DR	5-CCCGCGCCAGAGAAGTGTCCGGTCACCA-3	pNOK0015
25	PqqE UpF	5'- CTAGGGCCCCAGTGGGAGTACCTC -3'	pNOKpqqE
26	PqqE UpR	5' - GGAATTCCTACTGTTAGACTGTTG-3'	pNOKpqqE
27	PqqE DnF	5'-CGGGATCCATGTCCAAATTTAAGCATC-3'	pNOKpqqE
28	PqqE DnR	5'-CTCTAGACTGCGACTGGGAATGAAG- 3'	pNOKpqqE
29	CatF	5'-AACTGCAGCTACGAGTTGCTGCCCA-3'	PPQCAT
30	CatR	5'-CGGGATCCTCAGGCGTAGCACCAGGC-3'	pPPQCAT
Mutants screening			
25	DR100F	5-CGTTACAGTCACGGCA-3	dr2518 internal
26	DR101R	5-CAGTTCCTGCATGTCGGA-3	dr2518 internal
27	DR102F	5-GACGACACGGTGTACGC-3	dr1769 internal
28	DR103R	5- CCATTGGTGTTCAGGGC-3	dr1769 internal
29	DR104F	5- CTCGCGAAGTCTTCGCT-3	drc0015 internal
30	DR105R	5- CGGACGCAAACCTCCA-3	drc0015 internal
31	DR106F	5-GCCGAACGTCAAGGTGGT-3	dr0766 internal
32	DR107R	5-CCGAGGCGGTAGAGCTGT-3	dr0766 internal
33	DR108F	5-GCACCAATTACGCCAC-3	dr0503 internal
34	DR109R	5-GGAACTTCTTCCAGGCT-3	dr0503 internal
35	<i>pqqE</i> F	5'-ATGGTGGCATTCTCCGTGGC-3'	<i>PqqE:cat</i>
36	<i>pqqE</i> R	5'-TCATGCGTGACTTACCAATGGA-3'	<i>PqqE:cat</i>