

Supplementary Table S3. Types and phylum distribution of PDOs and SQRs of *pdo-sqr* gene clusters

Phylum	PDO types			SQR types				the counts of 4929 strains in the phylum level
	type I	type II	type III	type I	type II	type IV	type VI	
Actinobacteria	0	0	21	0	21	0	0	531
Bacteroidetes	0	0	3	0	2	1	0	185
Chloroflexi	0	0	3	0	3	0	0	25
Cyanobacteria	1	0	0	0	1	0	0	91
Deinococcus-Thermus	0	0	2	0	2	0	0	24
Firmicutes	0	0	134	0	134	0	0	1086
Planctomycetes	0	0	2	0	2	0	0	6
Proteobacteria	56	232	0	1	284	0	4	2504