

Table S2. Distribution of genes in general COG categories in the genomes of strainsIMCC43871^T, IMCC45206^T, *R. marina* SAORIC-28^T, and *R. profundus* SAORIC-476^TStrains: 1, IMCC43871^T; 2, IMCC45206^T; 3, *R. marina* SAORIC-28^T; 4, *R. profundus*SAORIC-476^T

Code	Description	1	2	3	4
J	Translation	7.2	6.9	6.1	6.9
A	RNA processing and modification	-	-	-	-
K	Transcription	4.5	4.2	4.7	4.6
L	Replication, recombination and repair	4.3	4.1	4.6	4.1
B	Chromatin structure and dynamics	0.1	0.1	0.1	0.1
D	Cell cycle control, cell division, chromosome partitioning	1.4	2.4	1.7	2.5
V	Defense mechanisms	2.6	2.6	2.5	2.3
T	Signal transduction mechanisms	8.1	7.9	7.2	7.6
M	Cell wall/membrane/envelope biogenesis	9.0	8.7	8.5	8.7
N	Cell motility	1.8	1.9	1.6	1.0
Z	Cytoskeleton	-	0.1	-	-
W	Extracellular structures	-	-	-	-
U	Intracellular trafficking, secretion, and vesicular transport	2.8	2.3	2.6	2.7
O	Posttranslational modification, protein turnover, chaperones	5.1	5.6	5.2	4.9
X	Mobilome: prophages, transposons	0.3	0.2	0.7	0.6
C	Energy production and conversion	4.9	5.1	4.7	4.7
G	Carbohydrate transport and metabolism	4.4	4.6	7.5	6.3
E	Amino acid transport and metabolism	7.0	6.3	6.3	6.1
F	Nucleotide transport and metabolism	2.4	2.5	2.2	2.5
H	Coenzyme transport and metabolism	5.3	5.3	4.4	4.7
I	Lipid transport and metabolism	4.6	4.7	4.3	4.5
P	Inorganic ion transport and metabolism	4.9	5.0	6.1	5.3
Q	Secondary metabolites biosynthesis, transport and catabolism	2.1	2.1	1.9	1.9
R	General function prediction only	10.0	10.3	9.6	9.6
S	Function unknown	7.0	7.2	7.4	8.3