

Supplementary table 1

Number of completely assembled genomes with CRISPR arrays

Phylum	Number Of Organisms	CRISPR																				Unidentified				
		Containing Organisms	Number Of CRISPRs	CAS-I	CAS-I-A	CAS-I-B	CAS-I-C	CAS-I-D	CAS-I-E	CAS-I-F	CAS-I-U	CAS-II-A	CAS-II-B	CAS-II-C	CAS-III	CAS-III-A	CAS-III-B	CAS-III-C	CAS-III-D	CAS-IV-A	CAS-V-A		CAS-V-B	CAS-V-U	CAS-VI-A	CAS-VI-B
Acidithiobacillia	5	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	1	0	0	0
Acidobacteria	6	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Actinobacteria	521	252	331	4	2	5	25	0	105	0	35	5	0	20	1	64	2	0	7	11	0	0	1	0	0	44
Alphaproteobacteria	389	72	118	0	1	0	29	0	29	0	8	0	0	15	0	0	2	0	7	1	0	1	0	1	0	24
Aquificae	16	14	25	1	0	12	0	0	0	0	0	0	0	0	1	0	2	0	0	0	0	0	0	0	9	
Archaeoglobi	8	6	12	1	2	3	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	4	
Armatimonadetes	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bacteria candidate phyla	20	1	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Bacteroidetes/Chlorobi group	191	88	139	1	0	18	11	0	4	0	1	0	0	50	3	8	6	2	2	0	1	0	0	1	23	8
Betaproteobacteria	337	69	100	0	0	0	17	0	12	11	0	0	0	16	0	4	2	0	0	5	0	0	0	0	0	33
Blastocatella	1	1	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Caldiserica	1	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Candidatus Korarchaeota	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chlamydiae	107	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chloroflexi	25	14	30	1	0	9	3	1	6	0	0	0	0	2	6	0	0	0	1	0	0	0	0	0	0	1
Chrysiogenetes	1	1	2	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Cloacimonetes	1	1	2	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Crenarchaeota	62	59	132	6	43	0	0	6	0	0	0	0	0	8	9	14	1	14	2	0	0	0	0	0	0	29
Cyanobacteria/Melainobacteria g	91	51	138	2	2	18	1	28	3	0	3	0	0	8	0	23	0	13	1	0	0	13	0	0	0	23
Deferribacteres	4	3	7	0	0	3	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	1
Deinococcus-Thermus	24	16	52	0	2	7	4	0	10	0	2	0	0	2	6	5	0	0	0	0	0	1	0	0	0	13
Dictyoglomia	2	2	5	0	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2
Elusimicrobia	1	1	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Endomicrobia	1	1	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Fibrobacteres	2	2	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
Firmicutes	1038	445	696	5	6	117	113	4	30	1	5	141	0	8	17	38	23	6	20	4	2	0	0	2	0	154
Fusobacteria	22	19	24	0	0	12	0	0	0	0	0	2	0	2	1	3	0	0	1	0	0	0	0	0	0	3
Gammaproteobacteria	1351	655	913	61	0	1	69	3	284	177	4	0	8	11	0	7	12	0	1	5	3	0	0	0	0	267
Gemmatimonadetes	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Halobacteria	33	20	28	0	0	16	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
Methanobacteria	17	14	19	0	0	11	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	4
Methanococci	16	13	35	0	4	6	0	4	0	0	0	0	0	3	5	2	1	0	1	0	0	0	0	0	0	9
Methanomicrobia	48	41	90	1	1	28	5	3	10	0	4	0	0	0	1	4	6	11	7	0	0	0	0	0	0	9
Methanopyri	1	1	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Nanoarchaeota	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nitrospira	8	5	9	0	0	2	1	0	2	0	1	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0
Planctomycetes	6	4	4	0	0	1	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Solibacteres	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Spirochaetia	65	25	27	0	0	8	6	1	1	1	0	2	0	3	0	2	1	0	0	0	0	0	0	0	0	2
Synergistia	4	3	4	0	0	2	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
Tenericutes	141	26	26	0	0	0	0	0	0	0	0	21	0	2	0	0	0	0	0	0	0	0	0	0	0	2
Thaumarchaeota	11	3	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Thermobaculum	1	1	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Thermococci	23	23	54	3	11	12	0	0	0	0	0	0	0	0	4	2	0	0	0	0	0	0	0	0	0	22
Thermodesulfobacteria	4	4	7	0	0	3	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2
Thermoplasmata	8	7	9	0	0	2	0	1	1	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	1
Thermotogae	25	24	60	0	1	20	0	0	0	0	0	0	0	0	12	6	2	0	0	0	0	0	0	0	0	19
Verrucomicrobia	8	5	6	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0
delta/epsilon subdivisions	301	99	125	2	0	19	22	0	15	2	6	0	0	35	3	3	4	0	3	1	0	0	1	0	0	9
environmental samples	1	1	2	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
unclassified Archaea (miscellaneous)	3	1	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
unclassified Bacteria (miscellaneous)	1	1	2	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
unclassified Euryarchaeota	2	2	3	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
	4961	2103	3260	88	76	344	310	56	515	193	71	171	8	171	52	191	114	26	76	35	9	2	17	4	23	707

