

Supplementary table 1: Relative abundance of phyla across the experimental conditions. Each column is an average of 4 biological replicates.

Enzyme	ImProm-II 42°C	ImProm-II 55°C	SuperScriptIV	TGIRT
Class				
0319-7L14	527	442	332	392
ABY1	0	0	0	0
AKAU4049	0	1	3	4
Acidimicrobiia	1203	1617	1518	1858
Acidobacteria	257	259	444	359
Actinobacteria	5864	11263	10105	11353
Alphaproteobacteria	12943	9302	12148	12385
Anaerolineae	191	175	113	89
Armatimonadia	6	19	1	2
BD2-11	26	33	48	42
BD7-11	7	4	4	0
Babeliae	11	10	18	9
Bacilli	1356	656	663	520
Bacteroidia	2825	1817	2307	3005
Berkelbacteria	2	0	1	0
Blastocatellia	336	243	309	328
Chlamydiae	25	23	6	3
Chloroflexia	441	825	666	789
Chthonomonadetes	0	0	0	0
Clostridia	13	13	8	16
Coriobacteria	1	0	0	0
Dehalococcoidia	70	98	155	97
Deinococci	89	28	44	29
Deltaproteobacteria	4330	2154	3141	3001
Elusimicrobia	6	0	2	2
Entotheonellia	125	122	221	164
Erysipelotrichia	0	1	5	0
FFCH5909	0	0	1	0
Fibrobacteria	45	35	46	36
Fimbriimonadia	69	29	32	43
Fusobacteria	1	0	0	0
Gammaproteobacteria	5967	7610	2793	2576
Gemmatimonadetes	532	591	518	463
Gitt-GS-136	270	171	239	274
Holophagae	235	139	308	191
Hydrogenedentia	0	2	1	0
Ignavibacteria	31	22	37	32
JG30-KF-CM66	76	145	175	175
KD4-96	298	264	370	406
Ktedonobacteria	26	41	61	52
Lineage	27	9	5	8
Longimicrobia	328	217	213	197
MB-A2-108	61	101	67	99
Melainabacteria	15	3	13	9
Methanomicrobia	2	0	0	0
Microgenomatia	9	4	0	5
Mollicutes	0	4	0	0
NC10	3	4	7	10
Negativicutes	10	4	0	0
Nitriliruptoria	253	380	410	408
Nitrososphaeria	0	12	1	0
Nitrospira	32	34	74	70
OLB14	23	24	44	56
OM190	0	0	0	0
Oxyphotobacteria	2798	962	1711	877
P2-11E	7	3	3	3
Parcubacteria	3	1	0	2
Phycisphaerae	101	128	18	17
Pla4	8	4	3	8
Planctomycetacia	357	710	247	283
Rhodothermia	0	11	10	5
Rubrobacteria	1351	1505	2380	1974
S0134	116	75	73	114
SHA-26	4	12	16	4
Saccharimonadia	130	57	49	30
Sericytochromatia	53	25	33	27
Spirochaetia	0	1	0	0
Subgroup	385	284	681	501
Synergistia	0	0	0	0
TK10	275	583	522	611
Thermoanaerobaculia	117	127	122	146
Thermodesulfobivibrionia	0	0	0	0
Thermoleophilia	2745	4643	3733	3562
Thermoplasmata	14	14	5	4
Unclassified	1211	1210	1292	1216
Verrucomicrobiae	1310	620	1391	1029
WS6	0	0	2	1
WWE3	0	0	0	0
Woesearchaeia	0	2	0	0
uncultured	41	66	31	28
vadinHA49	7	7	1	1