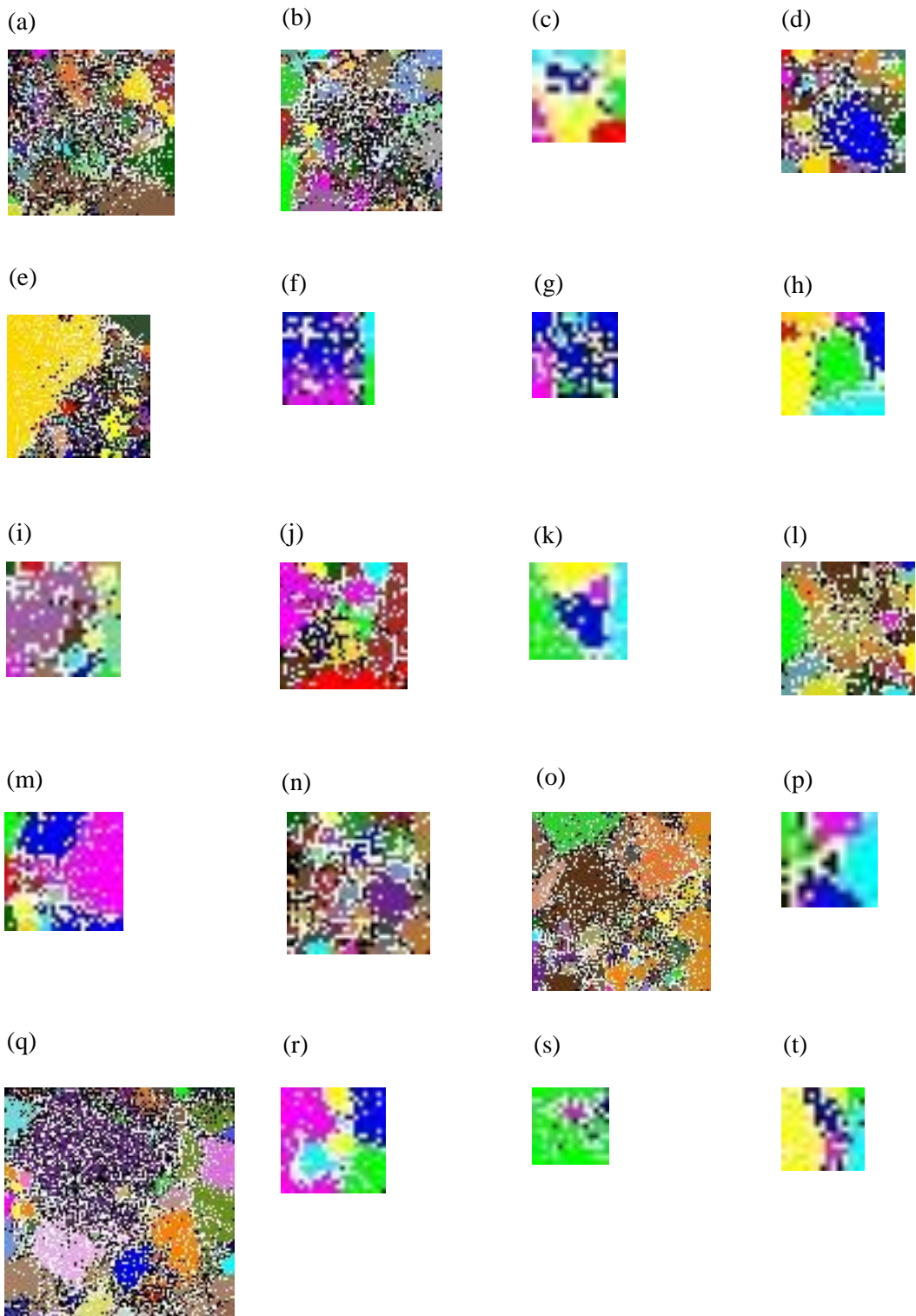


Supplementary Table S1. Numbers of Species and sequence fragments that were used in SC-BLSOM and BLSOM at Figure 2.

Phylum	Species#	sequence fragments#
Actinobacteria	91	10935
Alphaproteobacteria	103	9921
Aquificae	8	304
Bacteroidetes	31	2883
Betaproteobacteria	63	8557
Chlamydiae	8	622
Chlorobi	10	575
Chloroflexi	11	957
Crenarchaeota	23	1266
Cyanobacteria	13	2700
Deinococcus-Thermus	8	473
Deltaproteobacteria	32	3776
Epsilonproteobacteria	20	1724
Euryarchaeota	58	2823
Firmicutes	150	17219
Fusobacteria	5	255
Gammaproteobacteria	139	24067
Spirochaetes	17	1097
Tenericutes	16	407
Thermotogae	11	437
Total	817	90998



Supplementary Figure S1. BLSOM with DegeTetra in 5-Kb sequences from each phylum in the first layer. (a) Actinobacteria, (b) Alphaproteobacteria, (c) Aquificae, (d) Bacteroidetes, (e) Betaproteobacteria, (f) Chlamydiae, (g) Chlorobi, (h) Chloroflexi, (i) Crenarchaeota, (j) Cyanobacteria, (k) Deinococcus-Thermus, (l) Deltaproteobacteria, (m) Epsilonproteobacteria, (n) Firmicutes, (o) Firmicutes, (p) Fusobacteria, (q) Gammaproteobacteria, (r) Spirochaetes, (s) Tenericutes, (t) Thermotogae.