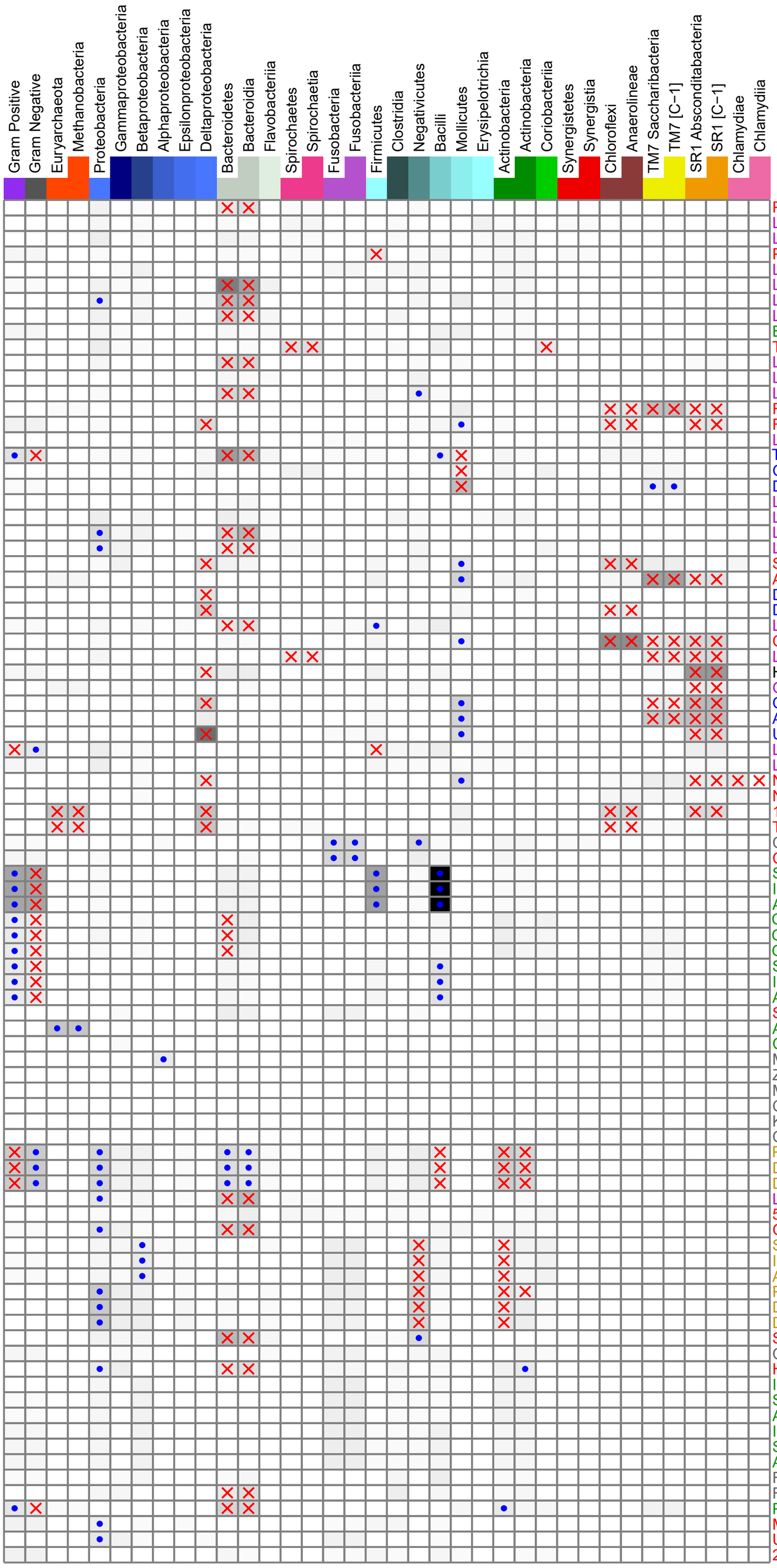
Gram Positive
Gram Negative
Euryarchaeota
Methanobacteria
Proteobacteria
Gammaproteobacteria
Betaproteobacteria
Alphaproteobacteria
Epsilonproteobacteria
Deltaproteobacteria
Bacteroidetes
Bacteroidia
Flavobacteriia
Spirochaetes
Spirochaetia
Fusobacteria
Fusobacteriia
Firmicutes
Clostridia
Negativicutes
Bacilli
Mollicutes
Erysipelotrichia
Actinobacteria
Actinobacteria
Coriobacteriia
Synergistetes
Synergistia
Chloroflexi
Anaerolineae
TM7 Saccharibacteria
TM7 [C−1]
SR1 Absconditabacteria
SR1 [C−1]
Chlamydiae
Chlamydiia
Putrescine
L−Valine
L−Isoleucine
Pyridoxal phosphate
L−Asparagine
L−Proline
L−Arginine
L−Histidine
Bactoprenyl diphosphate
Thiamin diphosphate
L−Lysine
L−Phenylalanine
L−Tyrosine
Flavin adenine dinucleotide
Riboflavin
L−Serine
Thymidine−triphosphate
Guanosine−triphosphate
Deoxyguanosine−triphosphate
L−Threonine
L−Leucine
L−Cysteine
L−Methionine
S−Adenosyl−L−methionine
Acyl carrier protien
Deoxycytidine−triphosphate
Deoxyadenosine−triphosphate
L−Alanine
Coenzyme A
L−Aspartate
H2O
Glycine
Cytidine−triphosphate
Adenosine−triphosphate
Uridine−triphosthate
L−Glutamate
L−Glutamine
Nicotinamide adenine dinucleotide
Nicotinamide adenine dinucleotide phosphate
10−Formyltetrahydrofolate
Tetrahydrofolate
Co2+
Cobamamide
Stearoyllipoteichoic acid n=24 linked D−alanine substituted
Isoheptadecanoyllipoteichoic acid n=24 linked D−alanine substituted
Anteisoheptadecanoyllipoteichoic acid n=24 linked D−alanine substituted
Glycerol teichoic acid n=45 linked D-ala substituted
Glycerol teichoic acid n=45 linked unsubstituted
Glycerol teichoic acid n=45 linked glucose substituted
Stearoyllipoteichoic acid n=24 linked glucose substituted
Isoheptadecanoyllipoteichoic acid n=24 linked glucose substituted
Anteisoheptadecanoyllipoteichoic acid n=24 linked glucose substituted
Siroheme
Acetylgalactosamine glucose phosphate
Core oligosaccharide lipid A
Mg2+
Zn2+
Mn2+
Cu2+
K+
Ca2+
Phosphatidylethanolamine dioctadecanoyl
Diisoheptadecanoylphosphatidylethanolamine
Dianteisoheptadecanoylphosphatidylethanolamine
L−Tryptophan
5−Methyltetrahydrofolate
Glutathione
Stearoylcardiolipin
Isoheptadecanoylcardiolipin
Anteisoheptadecanoylcardiolipin
Phosphatidylglycerol dioctadecanoyl
Diisoheptadecanoylphosphatidylglycerol
Dianteisoheptadecanoylphosphatidylglycerol
Spermidine
Cl−
Heme
Isoheptadecanoyllipoteichoic acid n=24 linked N−acetyl−D−glucosamine
Stearoyllipoteichoic acid n=24 linked N−acetyl−D−glucosamine
Anteisoheptadecanoyllipoteichoic acid n=24 linked N−acetyl−D−glucosamine
Isoheptadecanoyllipoteichoic acid n=24 linked unsubstituted
Stearoyllipoteichoic acid n=24 linked unsubstituted
Anteisoheptadecanoyllipoteichoic acid n=24 linked unsubstituted
Fe3+
Fe2+
Peptidoglycan polymer
Menaquinone−8
Ubiquinone−8
2−Demethylmenaquinone−8
I
III
IV
VI
II
VII
VIII
IX
V
Log likelihood ratio
250
200
150
100
50
0
Metabolites
DNA/RNA (8)
Metal Ions (10)
Protein (20)
Vitamins (21)
Cell Wall (19)
Lipids (9)
H2O