### Overview

| Component       | % of Biomass |
|-----------------|--------------|
| Protein         | 60%          |
| RNA             | 12%          |
| DNA             | 3%           |
| Lipids          | 5%           |
| Lipoteichoic Acid | 2%         |
| Cell Wall Components | 15%     |
| Trace Components | 3%          |

### Full Description

| Quantity | Compound Abbreviation | Compound Name |
|----------|-----------------------|---------------|
| 0.01     | 10fthf                | 10-Formyltetrahydrofolate (C20H21N7O7) |
| 0.42     | 12dgr_SA              | 1,2-Daicylglycerol (Saureus) (C1560H3065O42) |
| 1.27     | 26dap-LL              | LL-2,6-Diaminoheptanediolate (C7H14N2O4) |
| 0.01     | SA_FREE_FA            | SA Free Fatty Acids (X) |
| 0.38     | acgam                 | N-Acetyl-D-glucosamine (C8H15NO6) |
| 1.22     | acgam1p               | N-Acetyl-D-glucosamine 1-phosphate (C8H14NO9P) |
| 6.6      | ala-L                 | L-Alanine (C3H7NO2) |
| 3.11     | amp                   | AMP (C10H12N5O7P) |
| 3.88     | arg-L                 | L-Arginine (C6H15N4O2) |
| 4.48     | asn-L                 | L-Asparagine (C4H6N2O4) |
| 4.48     | asp-L                 | L-Aspartate (C4H6N2O4) |
| 0.01     | atp                   | ATP (C10H12N5O13P3) |
| 2.51     | c1pn_SA               | Cardiolipin (Saureus) (C3270H6330O434P100) |
| 2.2      | cmp                   | CMP (C8H12N3O8P) |
| 0.79     | cys-L                 | L-Cysteine (C3H7NO2S) |
| 0.76     | dcmp                  | dCMP (C9H12N3O7P) |
| 0.01     | dcmpy-SA              | Diglucosyl-diacylglycerol (SA) 2 (C2160H4165O342) |
| 0.6      | dgmp                  | dGMP (C10H12N5O7P) |
| 0.73     | dmp                   | dTMP (C10H13N2O6P) |
| 0.01     | fad                   | FAD (C27H31N9O15P2) |
| 0.23     | gam1p                 | D-Glucosamine 1-phosphate (C6H13N2O8P) |
| 5.3      | glicp_SA              | Glucosyl Phosphoglycerol (SA) (C996H1868N62O1116P150) |
| 8.72     | glm-L                 | L-Glutamine (C5H10N2O3) |
| 9.68     | glu-L                 | L-Glutamate (C5H8N4O4) |
| 3.51     | glys                  | Glycine (C2H5NO3) |
| 4.01     | gmp                   | GMP (C10H12N5O8P) |
| 20000    | h2o                   | H2O (H2O) |
| 0.01     | hemeO                 | Heme O (C49H56FeN4O5) |
| 1.45     | his-L                 | L-Histidine (C6H9N3O2) |
| 4.06     | ile-L                 | L-Isolucine (C6H13N2O2) |
| 5.21     | leu-L                 | L-Leucine (C6H13N2O2) |
| 5.45     | lys-L                 | L-Lysine (C6H15N2O2) |
| 1.94     | met-L                 | L-Methionine (C5H11NO2S) |
| 0.01     | mthf                  | 5,10-Methylenetetrahydrofolate (C20H21N7O6) |
| 0.01     | nad                   | Nicotinamide adenine dinucleotide (C21H26N7O14P2) |
| 0.01     | nadp                  | Nicotinamide adenine dinucleotide phosphate (C21H25N7O17P3) |
| 0.01     | pala_SA               | Phosphatidylalanine_SA2 (C1710H3315N500242P50) |
| 0.89     | pe_SA                 | Phosphatidylethanolamine (Saureus) (C1660H3650N500192P50) |
| 2.31     | pg_SA                 | Phosphatidylglycerol (Saureus) (C1710H3650292P50) |
| 0.01     | pglyy_SA              | Phosphatidylglycine_SA2 (C1660H3215N500242P50) |
| 3.33     | phe-L                 | L-Phenylalanine (C9H11N2O) |
| 0.01     | pheu_SA               | Phosphatidyleucine_SA2 (C1860H3615N500242P50) |
| 0.15     | plys_SA               | Phosphatidyllysine_SA2 (C1860H3715N1000242P50) |
| 2.12     | pro-L                 | L-Proline (C5H9N2O2) |
| 0.01     | ptrc                  | Putrescine (C4H14N2) |
| 2.6      | ser-L                 | L-Serine (C3H7NO3) |
| 0.01     | sheme                 | Siroheme (C42H36FeN4O16) |
| 0.01     | spmd                  | Spermidine (C7H22N3) |
| 2.86     | tcam                  | minor teichoic acid (acetylgalactosamine glucose phosphate, n=30) (C420H750N300242P30) |
| 0.01     | thf                   | 5,6,7,8-Tetrahydrofolate (C19H21N7O6) |
| 0.01     | thm                   | Thiamin (C12H17N4O5) |
| 2.54     | thr-L                 | L-Threonine (C4H9N3O3) |
| 1.27     | trp-L                 | L-Tryptophan (C11H12N2O2) |
| 2.3      | tyr-L                 | L-Tyrosine (C9H11N03) |
| 1.78     | umar                  | UDP-N-acetylmuramate (C20H28N3O19P2) |
| 2.39     | ump                   | UMP (C9H11N2O9P) |
| 4.12     | val-L                 | L-Valine (C5H11N2O2) |