**A**

- **Bacteria**
- **Bead beating**
- **Proteins**
- **Trypsin Digestion**

**B**

- **Pooling (100 μg/sample)**
- **Immunopurification of succinyl-lysine containing peptides**
- **Retained peptides**
- **LC-MS/MS**

**C**

- **GO terms enriched in proteins lower in abundance in NE569 Exp.**
  - GO0006189 : ‘de novo’ IMP biosynthetic process
  - GO0019843 : rRNA binding
  - GO0003735 : structural constituent of ribosome

**D**

- **GO terms enriched in proteins lower in abundance in NE569 Stat.**
  - GO0003735 : structural constituent of ribosome
  - GO0006412 : translation
  - GO0005840 : ribosome

**Volcano plot**

- **SucC Exp vs. JE2 Exp**
  - Higher in NE569 Exp.
  - Higher in JE2 Exp.
  - Not Significant

- **NE569 Stat vs. JE2 Stat**
  - Higher in NE569 Stat.
  - Higher in JE2 Stat.
  - Not Significant

**GO terms enriched in proteins higher in abundance in NE569 Exp.**

- GO0009362 : peptidoglycan biosynthetic process

**GO terms enriched in proteins higher in abundance in NE569 Stat.**

- GO0016491 : oxidoreductase activity

**Retained peptides**

- **Global proteome (flow through)**

**Immunopurification of succinyl-lysine containing peptides**

- **LC-MS/MS**

**Volcano plot**

- **log2(NE569_Exp/JE2_Exp)**
  - 187 proteins
  - 330 proteins

- **log2(NE569_Stat/JE2_Stat)**
  - 307 proteins
  - 381 proteins
Fig. S2. Mutation of *sucC* impacts the MRSA global proteome. A. Workflow for MRSA proteome and succinylome analysis by LC-MS/MS. B. Principal component analysis grouping protein samples by strain and growth phase. C. Comparison of the relative abundance of proteins from JE2 and NE569 (*sucC*) exponential phase cultures. The volcano plot depicts the fold-change and the -log10(p) of the Student’s t-test. The bar plots show the GO terms significantly enriched (EASE modified Fisher’s exact p<0.05) either for the protein significantly less abundant in NE569 (left) or more abundant in NE569 (right). D. Comparison of the relative abundance of proteins from JE2 and NE569 (*sucC*) stationary phase cultures. The volcano plot depicts the fold-change and the -log10(p) of the Student’s t-test. The bar plots show the GO terms significantly enriched (EASE modified Fisher’s exact p<0.05) either for the protein significantly less abundant in NE569 (left) or more abundant in NE569 (right).