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*ORF, open reading frame
TABLE S2. Genes differently expressed in the *S. aureus* hemB mutant after incubation for 150 min (wildtype) and 240 min (*hemB* mutant), respectively.

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**Metabolism of carbohydrates and related molecules**

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**Metabolism of coenzymes and prosthetic groups**

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**Metabolism of lipids**

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**Metabolism of nucleotides and nucleic acids**

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**Metabolism of phosphate**

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**Pathogenic factors (toxins and colonization factors)**

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**Phage-related functions**

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**Protein synthesis**

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<td>elongation factor EF-Ts</td>
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**RNA modification**

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**RNA synthesis**

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**Sensors (signal transduction)**

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**Transport / binding proteins and lipoproteins**

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Membrane bioenergetics (electron transport chain and ATP synthase)

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<th>Fold Change</th>
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<tbody>
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</tbody>
</table>

1

2  ^a^ ORF, open reading frame

3  ^b^ Only ORFs with a t-test p-values < 0.05 have been listed.

4  ^c^ Only ORFs with a fold change < 0.4 or ≥ 2.0 have been listed.
TABLE S3. Genes differently expressed in the *S. aureus hemB* mutant after incubation for 270 min (wildtype) and 330 min (*hemB* mutant), respectively.

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Adaptation to atypical conditions

Cell division

Cell wall

Membrane bioenergetics (electron transport chain and ATP synthase)

Metabolism of amino acids and related molecules

Metabolism of carbohydrates and related molecules
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**Metabolism of coenzymes and prosthetic groups**

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**Metabolism of lipids**

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**Metabolism of nucleotides and nucleic acids**

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1. ORF, open reading frame
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3. Only ORFs with a t-test p-values < 0.05 have been listed.
4. Only ORFs with a fold change < 0.4 or ≥ 2.0 have been listed.
TABLE S4. Genes differently expressed in the *S. aureus hemB* mutant after incubation for 375 min (wildtype) and 390 min (*hemB* mutant), respectively.

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Metabolism of lipids

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Metabolism of nucleotides and nucleic acids

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Metabolism of phosphate

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No similarity

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1. ORF, open reading frame
2. Only ORFs with a t-test p-values < 0.05 have been listed.
3. Only ORFs with a fold change < 0.4 or ≥ 2.0 have been listed.
TABLE S5. Genes differently expressed in the *S. aureus* *hemB* mutant after incubation for 480 min (wildtype) and 495 min (*hemB* mutant), respectively.

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**Metabolism of coenzymes and prosthetic groups**

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**Metabolism of lipids**

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**Metabolism of nucleotides and nucleic acids**

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**Pathogenic factors (toxins and colonization factors)**

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**Phage-related functions**

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**Protein folding**
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1. ORF, open reading frame
2. Only ORFs with a t-test p-values < 0.05 have been listed.
3. Only ORFs with a fold change < 0.4 or ≥ 2.0 have been listed.
TABLE S6. Genes differently expressed in the *S. aureus* hemB mutant after incubation for 600 min (wildtype and hemB mutant).

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### Sensors (signal transduction)

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### Similar to unknown proteins

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<td>SA0175</td>
<td>0.04</td>
<td>3.82</td>
<td>conserved hypothetical protein</td>
</tr>
<tr>
<td>SA0546</td>
<td>0.05</td>
<td>2.08</td>
<td>conserved hypothetical protein</td>
</tr>
</tbody>
</table>

### Transport / binding proteins and lipoproteins

<table>
<thead>
<tr>
<th>ORF</th>
<th>P-value</th>
<th>Log2FC</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SA0541</td>
<td>0.01</td>
<td>4.25</td>
<td>hypothetical protein similar to amino acid transporter</td>
</tr>
<tr>
<td>SA1893</td>
<td>0.03</td>
<td>4.02</td>
<td>lipoprotein precursor</td>
</tr>
<tr>
<td>SA1140</td>
<td>0.04</td>
<td>8.70</td>
<td>glycerol uptake facilitator</td>
</tr>
</tbody>
</table>

---

1 ORF, open reading frame

2 Only ORFs with a t-test p-values < 0.05 have been listed.

3 Only ORFs with a fold change < 0.4 or ≥ 2.0 have been listed.