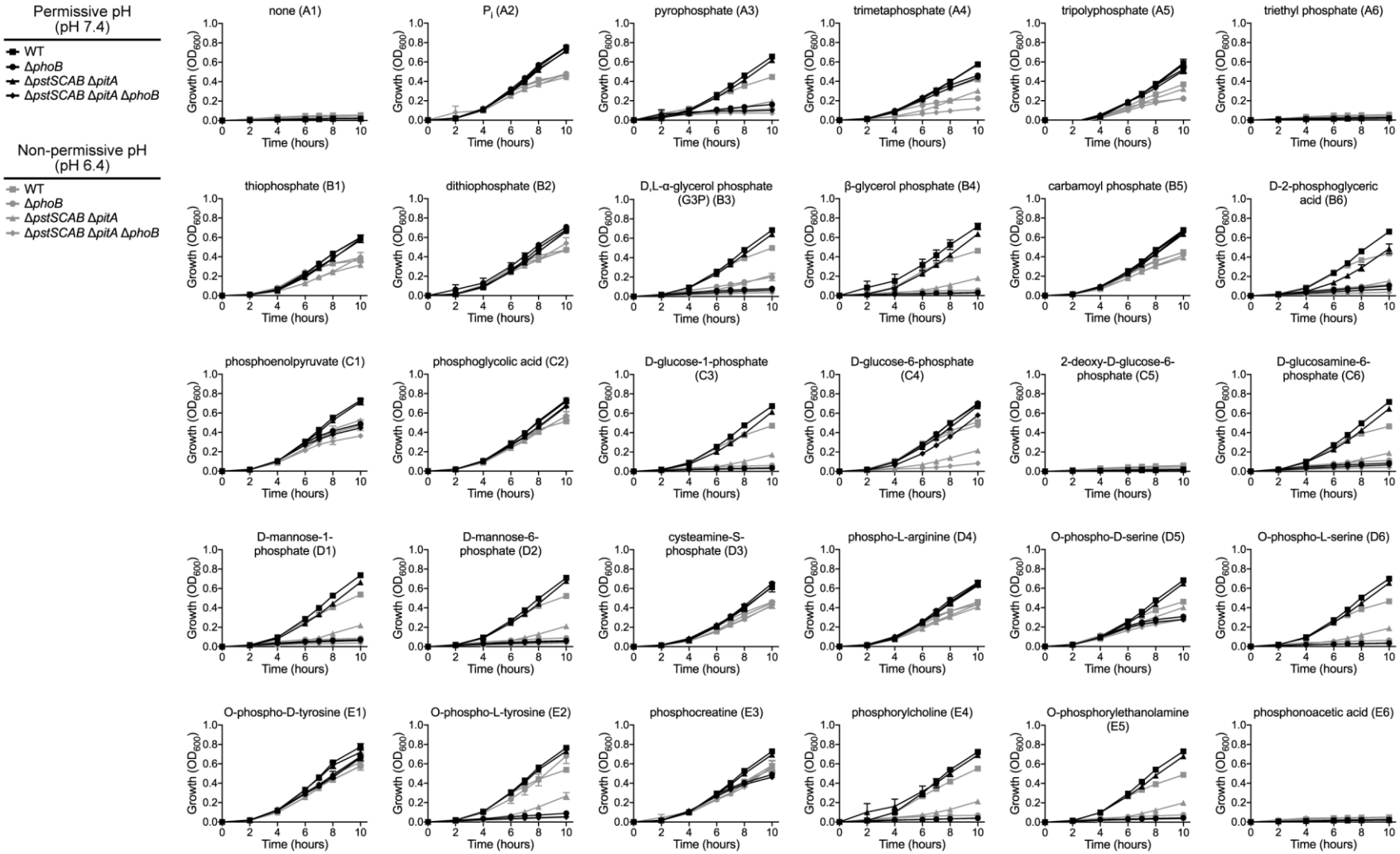
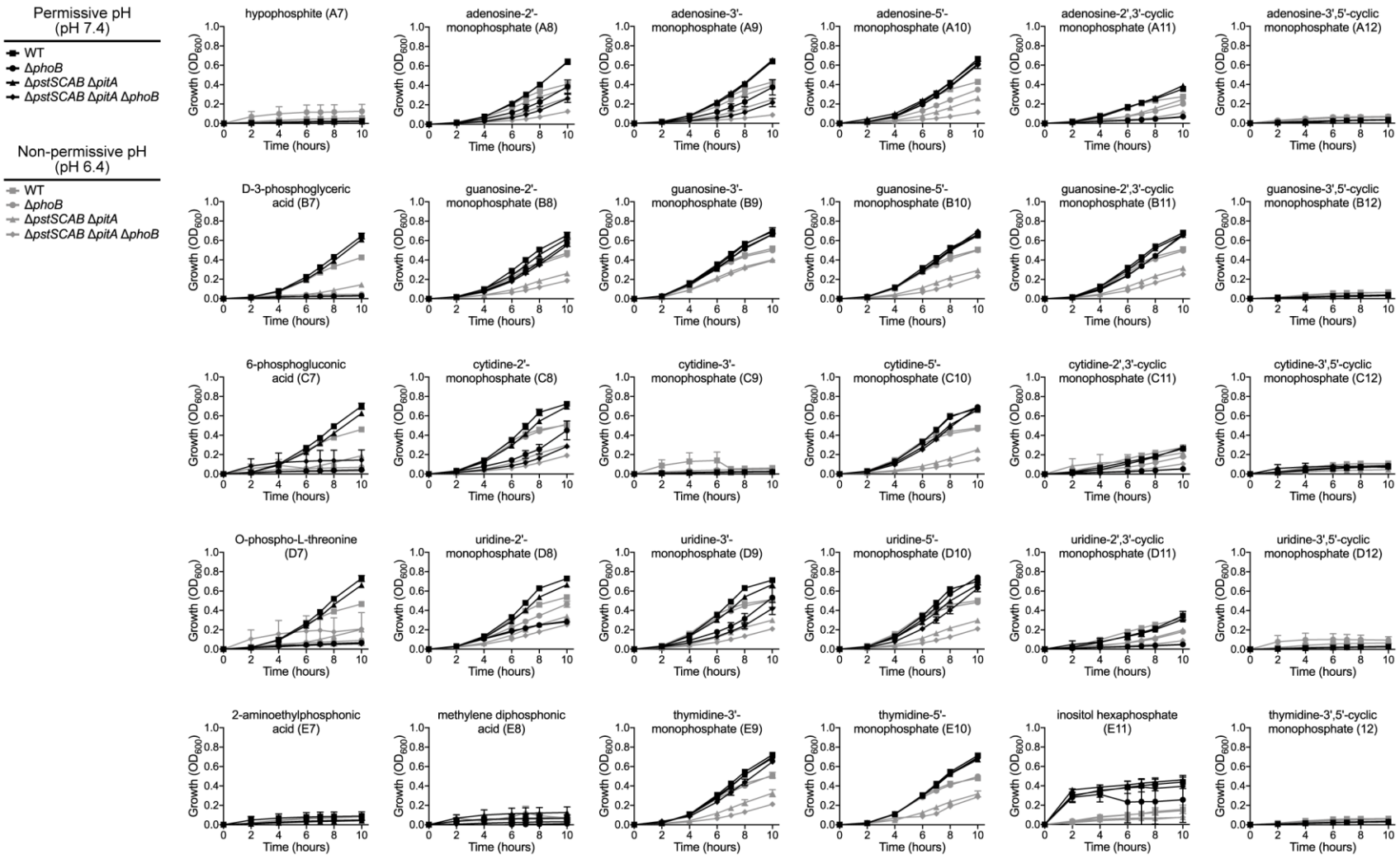
# SUPPLEMENTAL FIGURES




**Supplemental Figure 1 (continued on next page)**




**Supplemental Figure 1 (continued from previous page). *S. aureus* can use a variety of phosphorylated molecules as phosphate sources.** A library of 58 phosphorus-containing compounds was screened for the ability to support growth of *S. aureus* wild type,

Δ*phoB*, Δ*pstSCAB* Δ*pitA*, and Δ*pstSCAB* Δ*pitA* Δ*phoB* in defined, phosphate-deplete medium buffered to pH 7.4 (black symbols and lines) and pH 6.4 (grey symbols and lines). Growth was measured by $OD_{600}$ over 10 hours. The screen was performed in biological triplicate. Labels in parentheses refer to the corresponding Biolog plate wells.

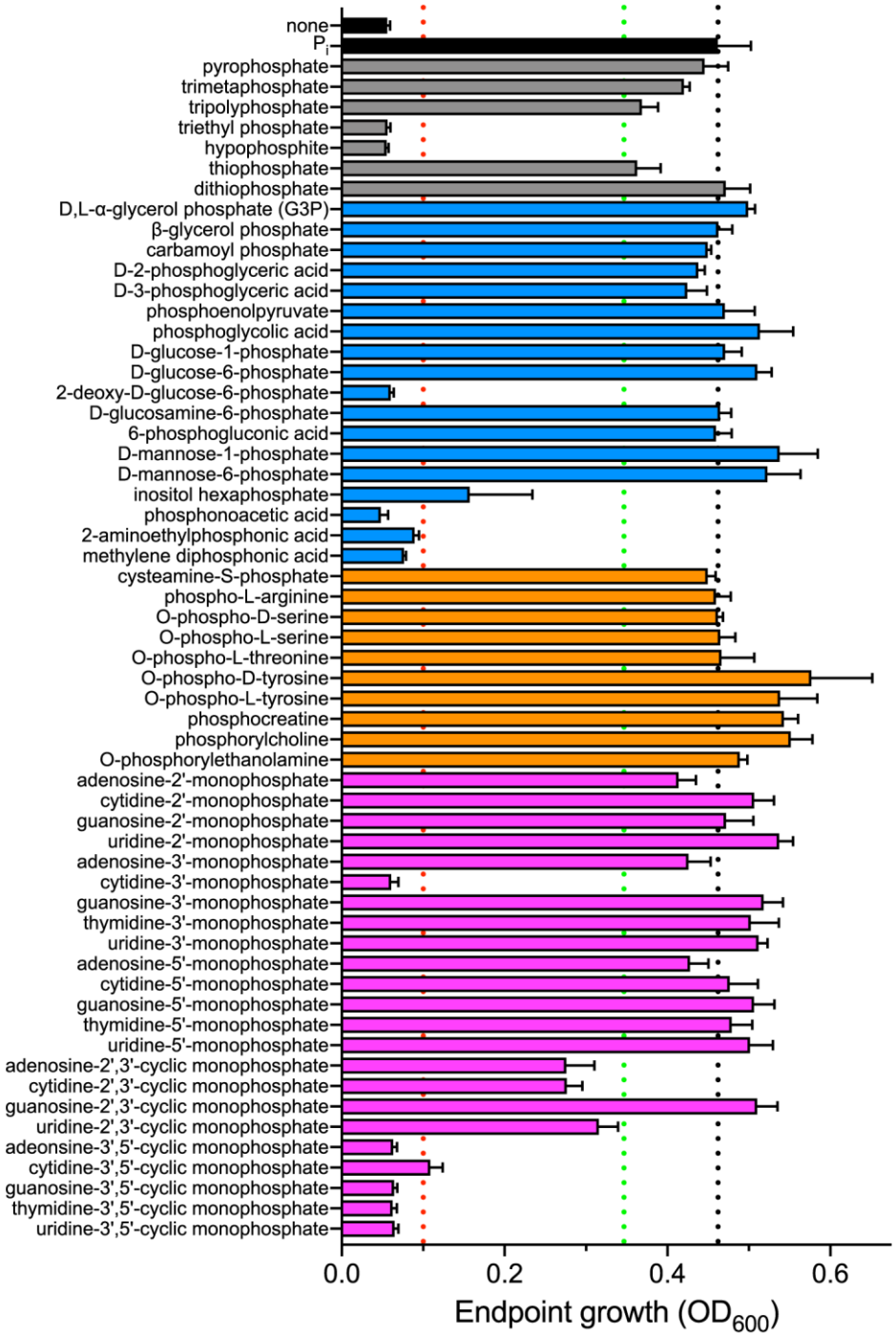



**Figure S2**

**Supplemental Figure 2. An acidic pH does not alter the phosphate sources that can support growth of *S. aureus*.** A library of 58 phosphorus-containing compounds, including inorganic molecules (grey), carbohydrates (blue), amino acids (orange), and nucleotides (purple), was

screened for the ability to support growth of *S. aureus* in defined, phosphate-deplete medium buffered to pH 6.4. Growth was monitored by $OD_{600}$ and endpoint growth after 10 hours is reported. The screen was performed in biological triplicate; error bars indicate standard deviation. An $OD_{600}$ >0.1 (red dotted line) was used as the threshold to define phosphate sources. The black dotted line delineates growth on the positive control, $P_i$. The green dotted line denotes 75% of growth on the positive control, used as the threshold to define good phosphate sources.

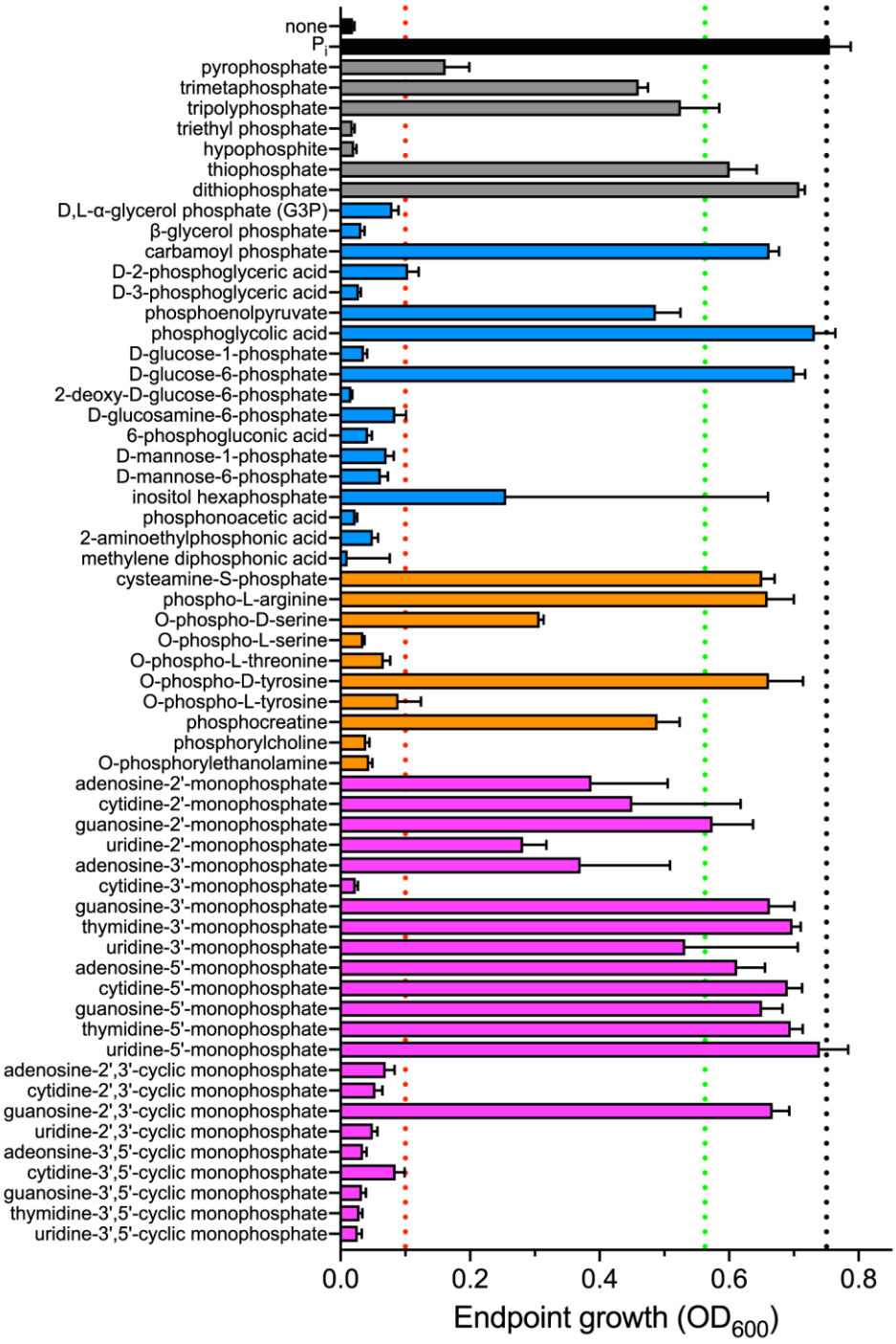



**Figure S3A**

**Supplemental Figure 3A**

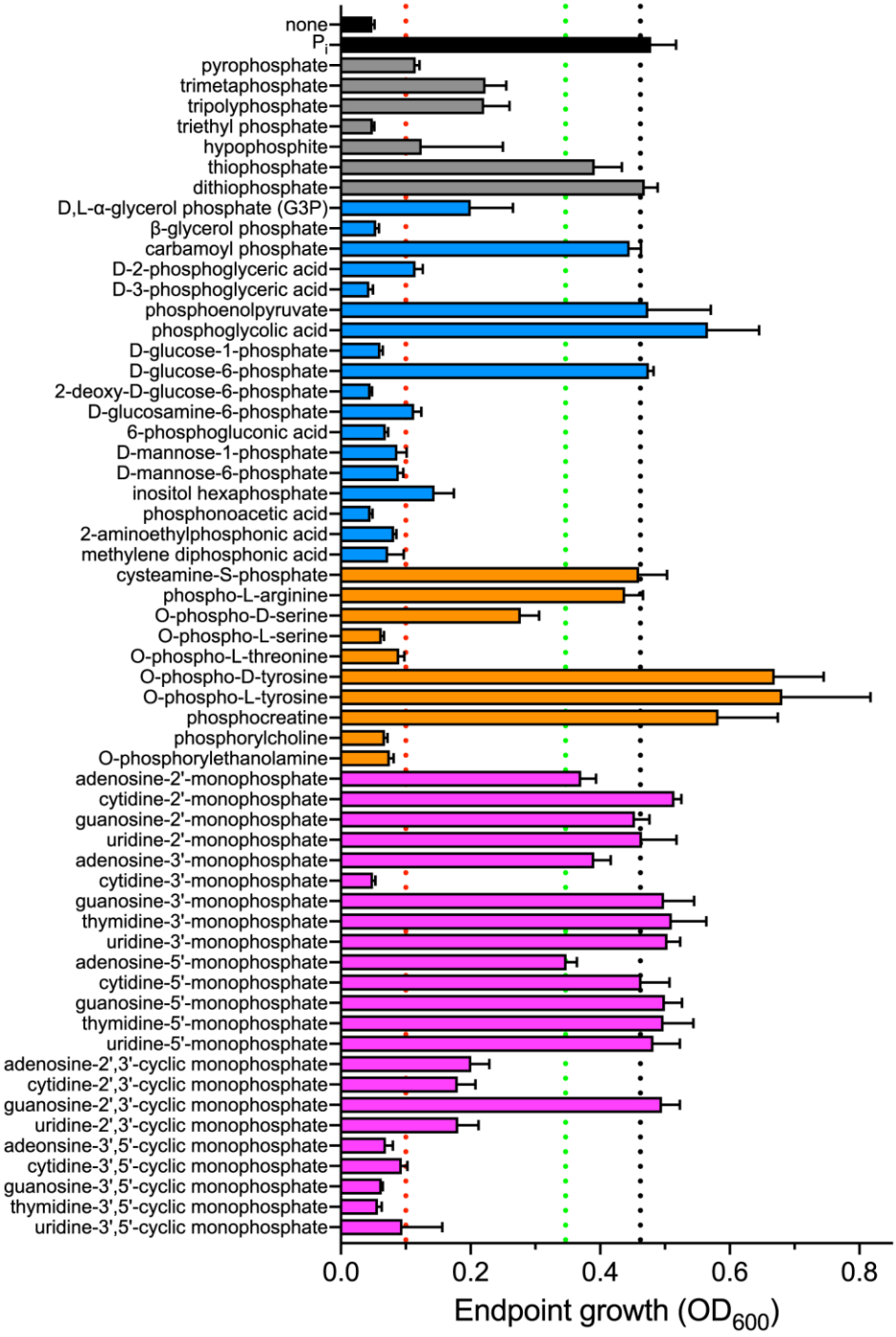



**Figure S3B**

**Supplemental Figure 3B**

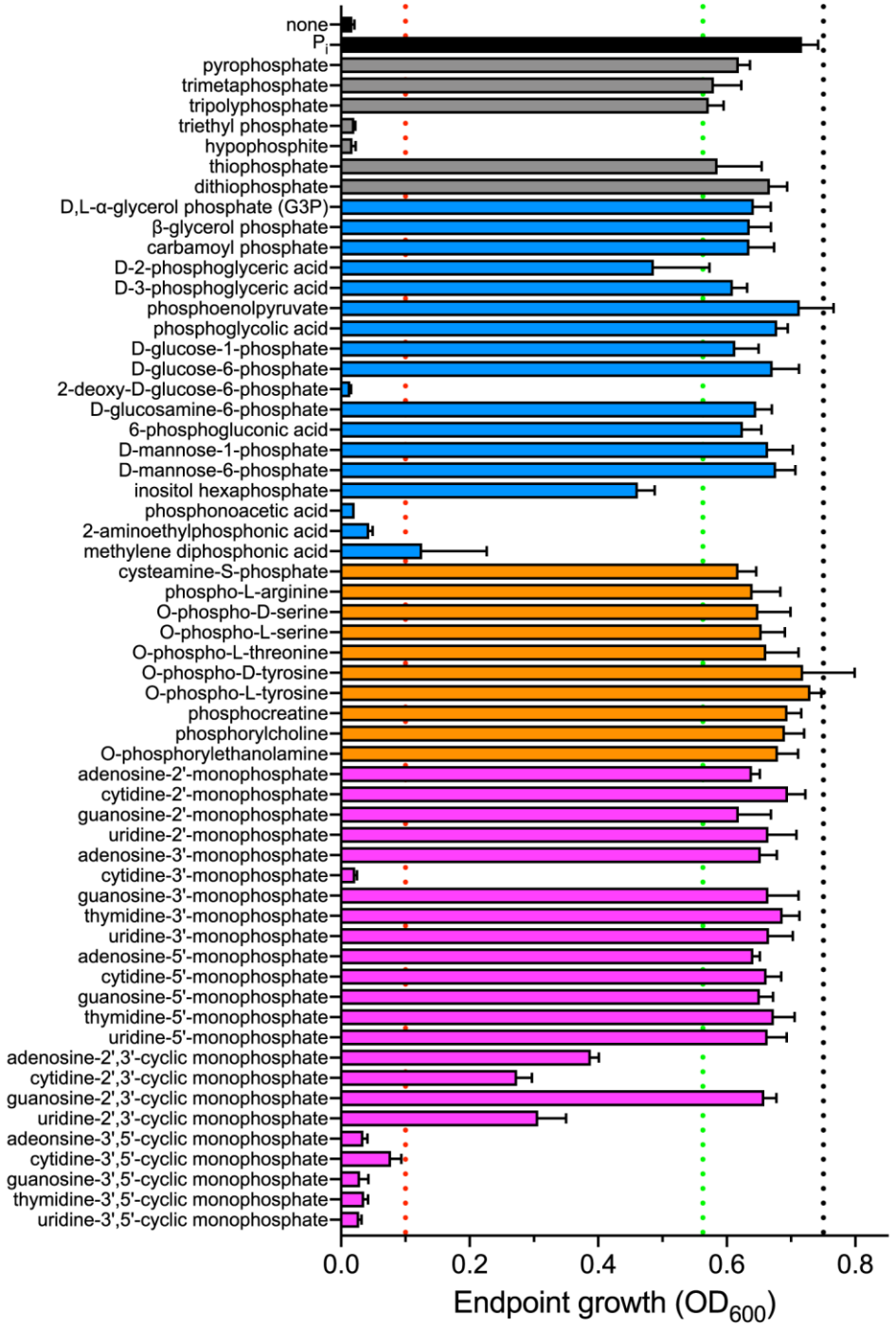



**Figure S3C**

**Supplemental Figure 3C**

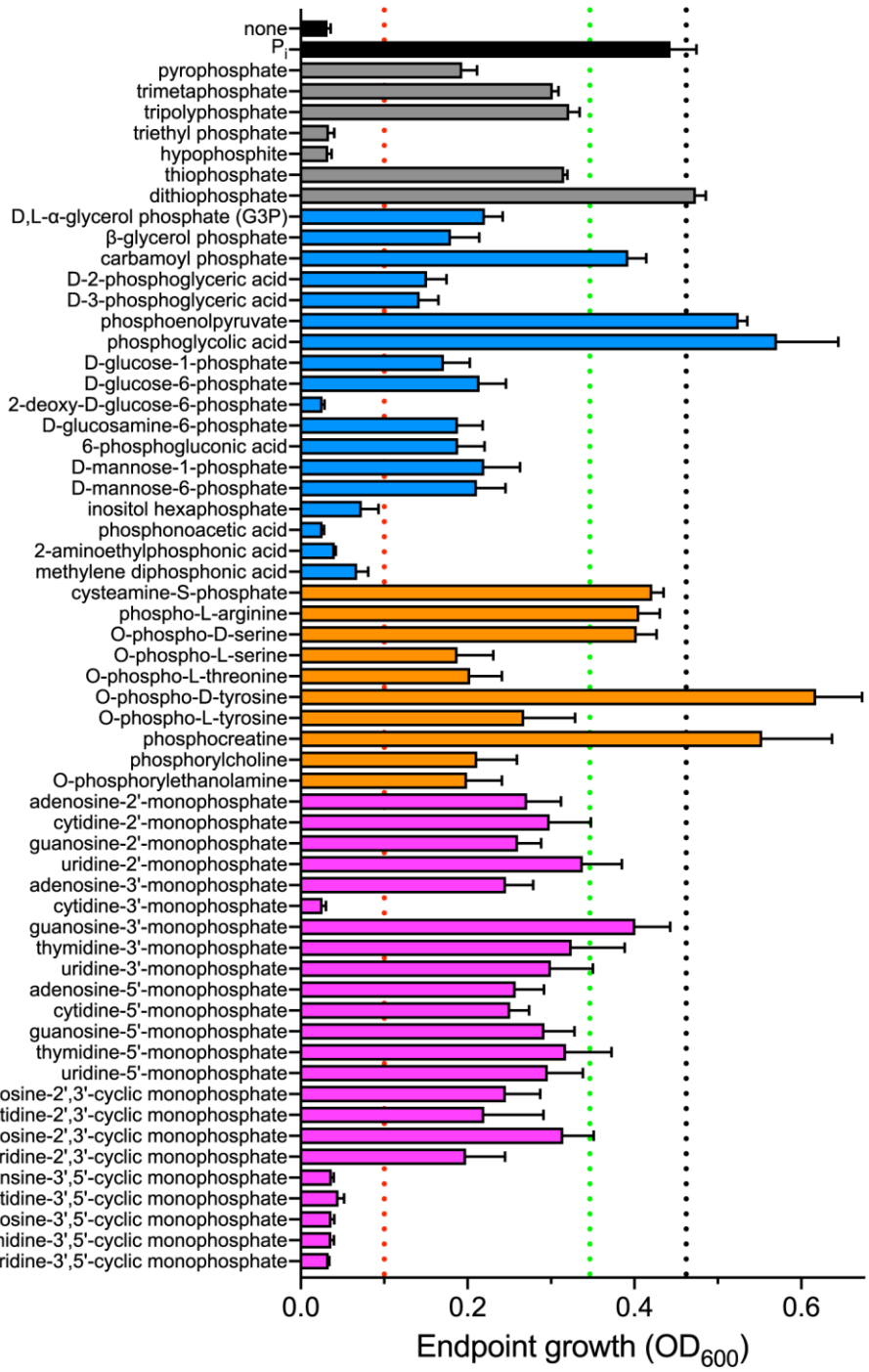



**Figure S3D**

**Supplemental Figure 3D**

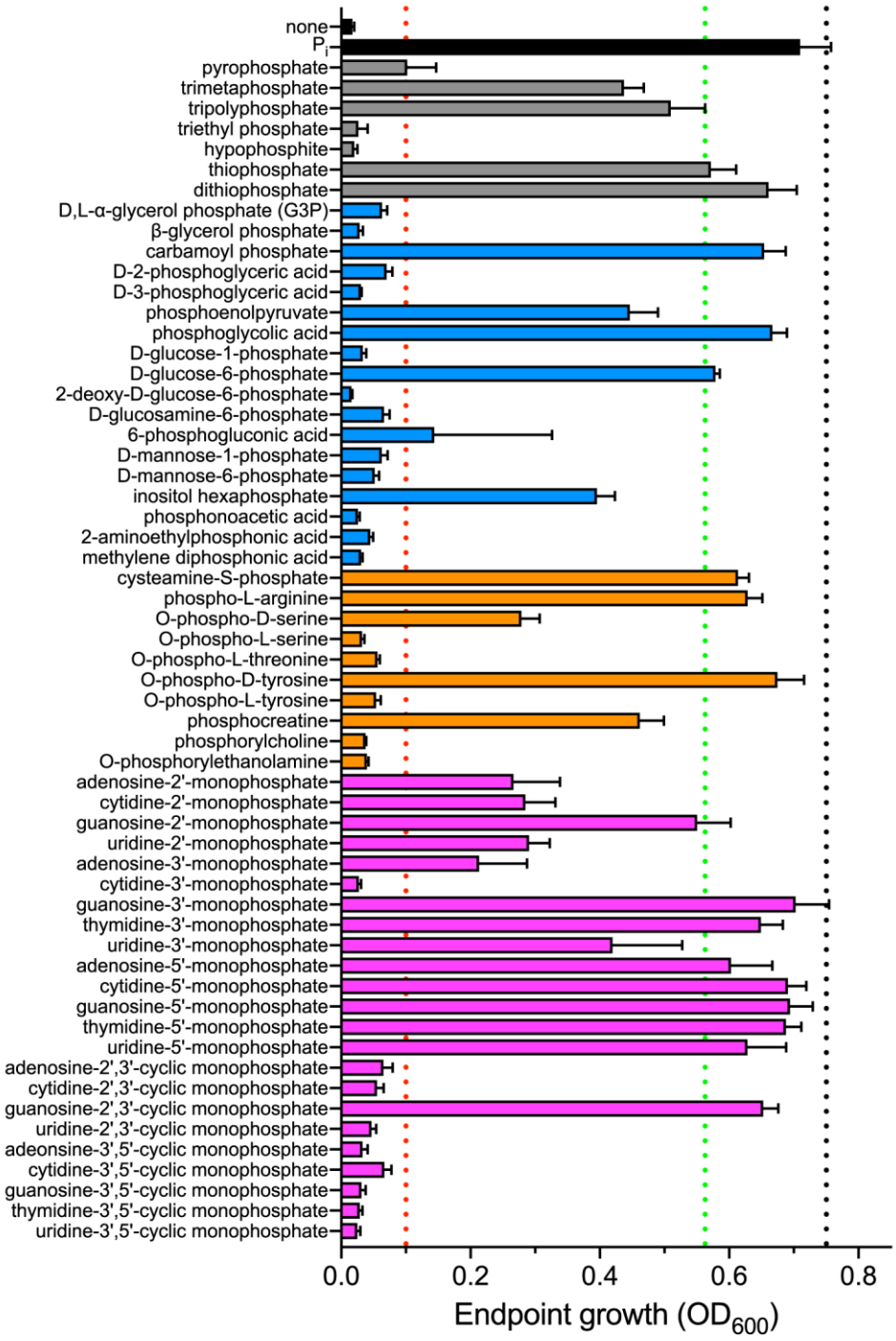



**Figure S3E**

**Supplemental Figure 3E**

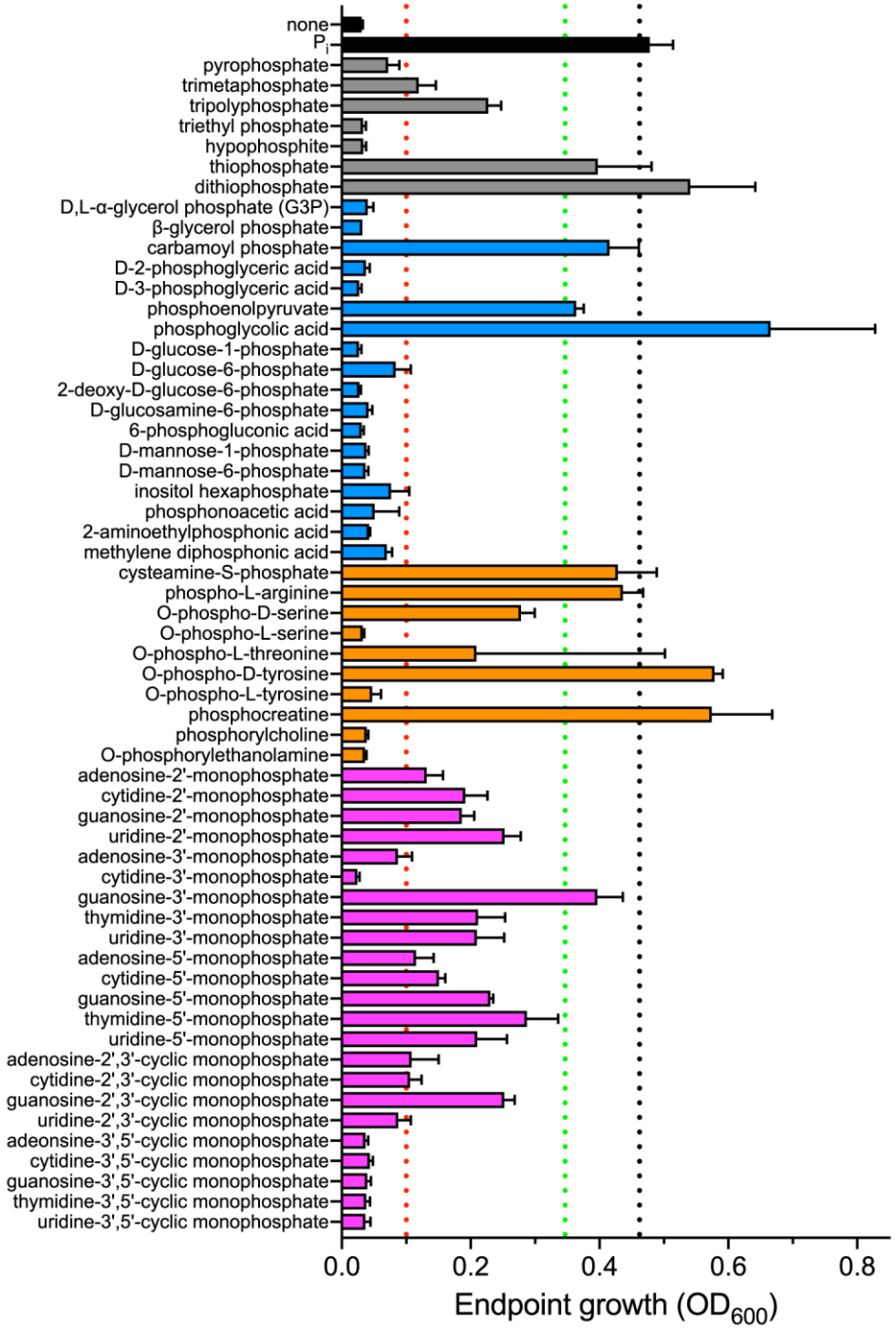



**Figure S3F**

**Supplemental Figure 3F**

**Supplemental Figure 3. Growth of the Δ*phoB*, Δ*pstSCAB* Δ*pitA*, and Δ*pstSCAB* Δ*pitA* Δ*phoB* mutants on potential phosphate sources.** A library of 58 phosphorus-containing

compounds was screened for the ability to support growth of Δ*phoB* (**A** and **B**), Δ*pstSCAB* Δ*pitA* (**C** and **D**), and Δ*pstSCAB* Δ*pitA* Δ*phoB* (**E** and **F**) mutants in defined, phosphate-deplete medium buffered to pH 7.4 (**A**, **C**, and **E**) and pH 6.4 (**B**, **D**, and **F**). Growth was monitored by $OD_{600}$ and endpoint growth after 10 hours is reported. The screen was performed in biological triplicate; error bars indicate standard deviation. An $OD_{600}$ >0.1 (red dotted line) was used as the threshold to define phosphate sources. The black dotted line delineates growth of wild-type *S. aureus* on the positive control ($P_i$) for each pH (see Fig. 1 and Supplemental Fig. 2). The green dotted line denotes 75% of growth of wild type on the positive control ($P_i$), used as the threshold to define good phosphate sources for wild type.