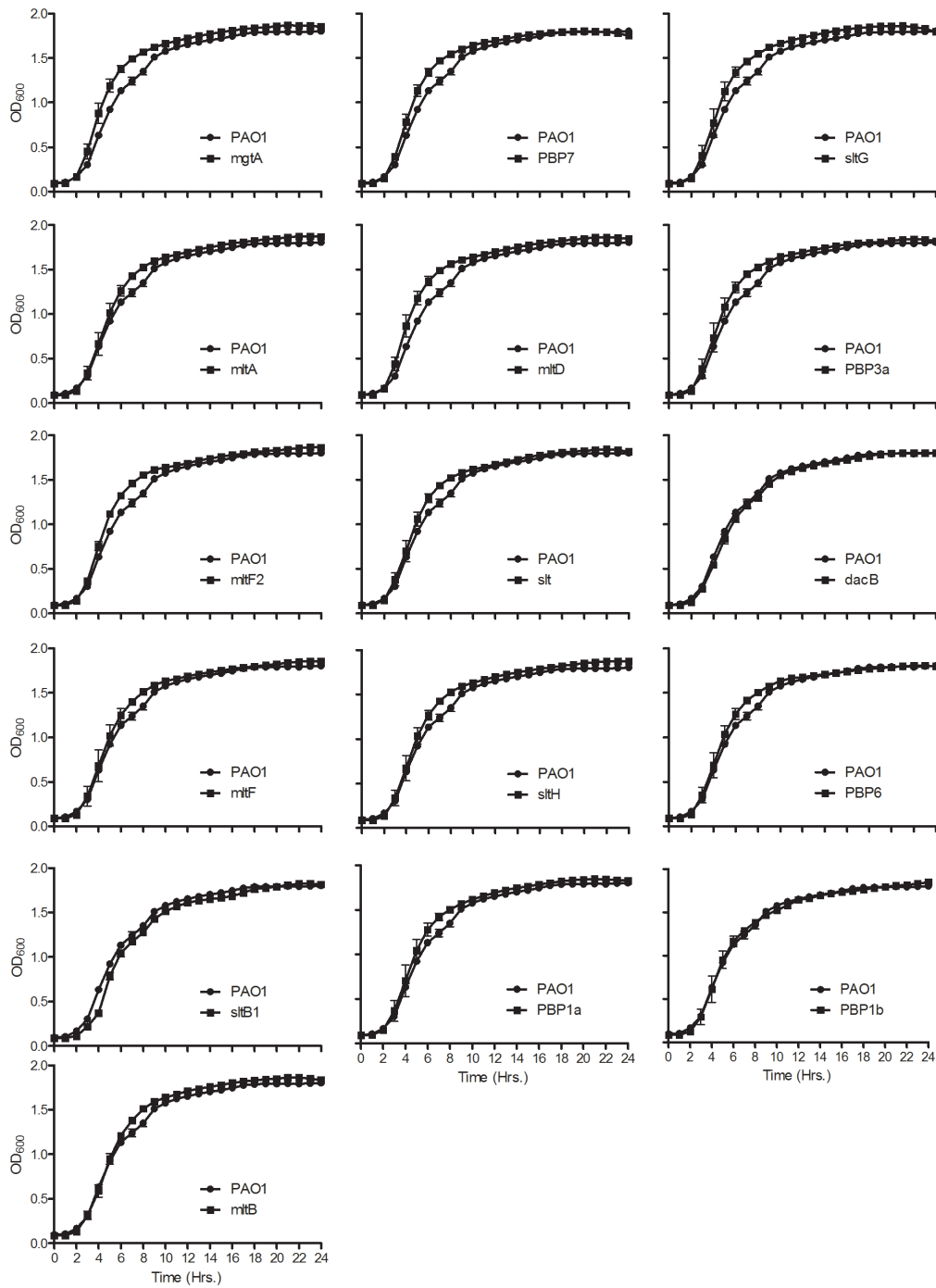


SUPPLEMENTARY TABLE 1. Minimal-inhibitory concentrations of β -lactam, fluoroquinolone, and aminoglycoside antibiotics for *P. aeruginosa* peptidoglycan-active enzyme mutants.

Strain ^a	Minimum-Inhibitory Concentrations ($\mu\text{g/mL}$) ^b					
	PP	CT	TZ	IP	CI	TM
PAO1	4	12	0.75	1	0.125	1.5
<i>ponA</i> (PBP1a)	4	8	0.75	1	0.125	1
<i>mrcB</i> (PBP1b)	3	8	0.5	1	0.125	1
<i>pbpC</i> (PBP3a)	4	12	1	1.5	0.125	1.5
<i>dacB</i> (PBP4)	64	>256	16	1	0.125	1
<i>dacC</i> (PBP6)	4	8	0.5	1	0.125	1
<i>pbpG</i> (PBP7)	4	12	0.75	1	0.125	1
<i>mgtA</i>	4	8	1	2	0.125	1
<i>mltA</i>	4	8	0.5	1.5	0.125	1
<i>mltB</i>	8	12	1.5	1.5	0.19	1
<i>mltD</i>	4	8	0.75	1.5	0.125	1
<i>mltF</i>	2	6	0.38	1	0.125	1
<i>mltF2</i>	4	8	0.75	1	0.125	1
<i>slt</i>	1.5	6	0.19	1	0.125	1
<i>sltB1</i>	12	16	1	0.75	0.125	1.5
<i>sltG</i>	4	12	1	1.5	0.125	1
<i>sltH</i>	4	8	0.75	1	0.125	1

^aProtein names are listed in parentheses when different from gene name.

^bAbbreviations: PP, piperacillin; CT, cefotaxime; TZ, ceftazidime; IP, imipenem; CI, ciprofloxacin; TM, tobramycin.



SUPPLEMENTARY FIGURE 1. Loss of PG-active enzymes does not affect bacterial growth. Bacterial growth (OD_{600nm}) was monitored over a 24-hour period to detect abnormalities due to the loss of specific PG-active enzymes. The assay was performed using a plate-based assay (described below). N=3. Error bars represent the mean \pm standard error.

Bacterial growth assays

Overnight bacterial cultures were sub-cultured 1:200 in Mueller-Hinton broth (MHB; Becton, Dickinson and Company, Mississauga, ON, Canada) and 300 μL of each sample was aliquotted into triplicate wells of a sterile 100-well Honeycomb 2 plate (Oy Growth Curves Ab Ltd). Plates were incubated for 24 hours at 37°C with medium shaking in a Bioscreen C plate reader (Oy Growth Curves Ab Ltd) with $\text{OD}_{600\text{nm}}$ reads every hour. Growth data were analyzed using GraphPad Prism software V5.0C.