Table S8 AMR profile of the *P. aeruginosa* JNQH-PA57

|  |  |  |  |
| --- | --- | --- | --- |
| Mechanism | Gene | Gene locus | Product and function |
| Antibiotic efflux | *triA* | H5409\_00825 | TriA is a membrane protein and required for the triclosan efflux pump function of TriABC-OpmH in *P. aeruginosa*. |
| *triB* | H5409\_00830 | TriB is a membrane protein and required for the triclosan efflux pump function of TriABC-OpmH in P. aeruginosa. |
| *triC* | H5409\_00835 | TriC is a resistance nodulation cell division (RND) transporter that is a part of TriABC-OpmH a triclosan-specific efflux protein. |
| *mexA* | H5409\_02275 | MexA is the membrane fusion protein of the MexAB-OprM multidrug efflux complex. |
| *mexB* | H5409\_02280 | MexB is the inner membrane multidrug exporter of the efflux complex MexAB-OprM. |
| *oprM* | H5409\_02285 | OprM is an outer membrane factor protein and is part of the MexAB-OprM, MexVW-OprM, MexXY-OprM and the AmrAB-OprM complex. |
| *opmD* | H5409\_03885 | OpmD is the outer membrane channel protein of the efflux complex MexGHI-OpmD. |
| *mexI* | H5409\_03890 | MexI is the inner membrane transporter of the efflux complex MexGHI-OpmD. |
| *mexH* | H5409\_03895 | MexH is the membrane fusion protein of the efflux complex MexGHI-OpmD. |
| *mexG* | H5409\_03900 | MexG is a membrane protein required for MexGHI-OpmD efflux activity. |
| *bcr-1* | H5409\_04220 | Transmembrane protein which expels bicyclomycin from the cell leading to bicyclomycin resistance. |
| *armR* | H5409\_06800 | ArmR is an antirepressor allosterically inhibits MexR dimer-DNA binding, which is related to up-regulation of MexAB-OprM. |
| *mexL* | H5409\_07005 | MexL is a specific repressor of mexJK transcription and autoregulates its own expression. |
| *mexJ* | H5409\_07010 | mexJ is the membrane fusion protein of the MexJK multidrug efflux protein. |
| *mexK* | H5409\_07015 | mexK is the inner membrane resistance-nodulation-cell division (RND) transporter in the MexJK multidrug efflux protein. |
| *mexP* | H5409\_07785 | MexP is the membrane fusion protein of the MexPQ-OpmE multidrug efflux complex |
| *mexQ* | H5409\_07790 | MexQ is the inner membrane transporter of the multidrug efflux pump MexPQ-OpmE. |
| *opmE* | H5409\_07795 | opmE is an outer membrane factor protein that is part of the multidrug efflux pump MexPQ-OpmE. |
| *cpxR* | H5409\_09490 | CpxR is a response regulator transcription factor directly involved in activation of expression of RND efflux pump MexAB-OprM in P. aeruginosa.  |
| *muxA* | H5409\_13115 | MuxA is a membrane fusion protein component of the efflux pump system MuxABC-OpmB in P. aeruginosa. |
| *muxB* | H5409\_13120 | MuxB is one of the two necessary RND components in the P. aeruginosa efflux pump system MuxABC-OpmB. |
| *muxC* | H5409\_13125 | MuxC is one of the two necessary RND components of the MuxABC-OpmB efflux pumps system in P. aeruginosa. |
| *opmB* | H5409\_13130 | OpmB is an outer membrane efflux protein cooperation with MuxABC to form the efflux pump system MuxABC-OpmB. |
| *oprN* | H5409\_13285 | OprN is the outer membrane channel component of the MexEF-OprN multidrug efflux complex. |
| *mexF* | H5409\_13290 | MexF is the multidrug inner membrane transporter of the MexEF-OprN complex. |
| *mexE* | H5409\_13295 | MexE is the membrane fusion protein of the MexEF-OprN multidrug efflux complex. |
| *soxR* | H5409\_14405 | SoxR is a transcriptional activator induces expression of the RND efflux pump-encoding operon mexGHI-opmD. |
| *mexX* | H5409\_16065 | MexX is the membrane fusion protein of the MexXY-OprM multidrug efflux complex. |
| *mexY* | H5409\_16070 | MexY is the RND-type membrane protein of the efflux complex MexXY-OprM. |
| *mexN* | H5409\_19360 | MexN is the inner membrane transporter of the MexMN-OprM multidrug efflux complex. |
| *mexM* | H5409\_19365 | mexM is the membrane fusion protein of the MexMN-OprM multidrug efflux complex. |
| *pmpM* | H5409\_19830 | PmpM is a multidrug efflux pump belonging to the MATE family of Pseudomonas aeruginosa.  |
| *mexV* | H5409\_24075 | MexV is the membrane fusion protein of the MexVW-OprM multidrug efflux complex. |
| *mexW* | H5409\_24080 | MexW is the RND-type membrane protein of the efflux complex MexVW-OprM. |
| *oprJ* | H5409\_25950 | OprJ is the outer membrane channel component of the MexCD-OprJ multidrug efflux complex. |
| *mexD* | H5409\_25955 | MexD is the multidrug inner membrane transporter of the MexCD-OprJ complex. |
| *mexC* | H5409\_25960 | MexC is the membrane fusion protein of the MexCD-OprJ multidrug efflux complex. |
| *opmH* | H5409\_27985 | OpmH is an outer membrane efflux protein required for triclosan-specific efflux pump function. |
| *emrE* | H5409\_28070 | EmrE is a small multidrug transporter which confers resistance to tetraphenylphosphonium methyl viologen gentamicin kanamycin and neomycin. |
| Antibiotic inactivation | *bla**OXA-488* | H5409\_30915 | OXA-488 is an OXA-50 family oxacillin-hydrolyzing class D beta-lactamase  |
| *aph(3')-IIb* | H5409\_04305 | APH(3')-IIb is a chromosomal-encoded aminoglycoside phosphotransferase in P. aeruginosa |
| *pdc-12* | H5409\_04350 | PDC-12 is an extended-spectrum beta-lactamase found in P. aeruginosa. |
| *catB* | H5409\_23380 | CatB is a type B chloramphenicol O-acetyltransferase which is responsible for the phenicol resistance. |
| *crpP* | H5409\_25165 | CrpP is a ciprofloxacin resistance protein and confers resistance to ciprofloxacin by antibiotic inactivation through phosphorylation.  |
| *fosA* | H5409\_21010 | FosA catalyzes the conjugation of glutathione to carbon-1 of fosfomycin rendering it ineffective as an antibacterial drug. |
| Antibiotic target alternation | *arnA* | H5409\_07630 | ArnA modifies lipid A and confers resistance to the cationic antimicrobial peptides and antibiotics such as polymyxin.  |
| *pmrB* | H5409\_26975 | PrmB is a histidine protein kinase sensor which modifies Lipid A and is involved in polymyxin resistance |