| **K279a locus** | **Details** | **Percent identity with K279a genomic locus** |
| --- | --- | --- |
| **B1** | **B4** | **B5** | **C11** | **A2** | ***D457*** |
| Smlt4476/5/4 (*smeABC*) | RND efflux pump, contributes to resistance to ciprofloxacin, gentamicin, tetracycline ([Chang et al. 2004](#_ENREF_5)) | 93% | 63% | 93% | 93% | 93% | 93% |
| Smlt4072/1/0 (*smeDEF*) | RND efflux pump, contributes to resistance to tetracycline, chloramphenicol, amikacin, erythromycin, norfloxacin, ofloxacin ([Alonso & Martínez 2000](#_ENREF_3)) | 94% | 90% | 95% | 94% | 96% | 96% |
| Smlt3170/1 (*smeGH*) | RND efflux pump, does not contribute to resistance in K279a ([Crossman et al. 2008](#_ENREF_6)) | 96% | 93% | 95% | 95% | 96% | 95% |
| Smlt4280/81 (*smeIJK*) | RND efflux pump, contributes to resistance to gentamicin, amikacin, tetracycline, minocycline, ciprofloxacin ([Crossman et al. 2008](#_ENREF_6)) | 95% | 92% | 95% | 95% | 95% | 95% |
| Smlt3788/7 (*smeMN*) | RND efflux pump, does not contribute to resistance in K279a ([Crossman et al. 2008](#_ENREF_6)) | 93% | 90% | 93% | 93% | 94% | 94% |
| Smlt3925/4 (*smeOP*) | RND efflux pump, does not contribute to resistance in K279a ([Crossman et al. 2008](#_ENREF_6)) | 95% | 89% | 95% | 95% | 95% | 95% |
| Smlt1830/1/2 (*smeVWX*) | RND efflux pump, does not contribute to resistance in K279a ([Crossman et al. 2008](#_ENREF_6)) | 96% | 93% | 96% | 96% | 96% | 96% |
| Smlt2201/2 (*smeYZ*) | RND efflux pump, contributes to resistance to gentamicin, kanamycin, amikacin, tobramycin ([Crossman et al. 2008](#_ENREF_6)) | 93% | 86% | 92% | 92% | 93% | 93% |
| Smlt1471 (*smrA*) | ABC efflux pump, contributes to resistance to ciprofloxacin, norfloxacin and tetracycline ([Al-Hamad et al. 2009](#_ENREF_1)) | 95% | 92% | 94% | 96% | 96% | 96% |
| Smlt1537/8/9 | Putative ABC-type tripartite efflux transporter | 94% | 70% | 93% | 93% | 94% | 94% |
| Smlt2642/3 | Putative ABC efflux transporter and MFP | 84% | - | 84% | - | 86% | 86% |
| Smlt0032 | Putative MFS-type tripartite efflux transporter | - | 70% | - | - | - | 70% |
| Smlt1528/9/30 (*emrAB*) | Putative MFS-type tripartite efflux transporter | 96% | 91% | 95% | 95% | 95% | 95% |
| Smlt2796/7/8 | Efflux pump, multidrug/fusaric acid resistance protein | 90% | - | - | 90% | 93% | 92% |
| Smlt2667 (*bla*L1) | Metallo-β-lactamase, contributes to resistance to penicillins, cephalosporins, carbapenems ([Avison et al. 2001](#_ENREF_4)) | 89% | 81% | 86% | 86% | 88% | 89% |
| Smlt3722 (*bla*L2) | Clavulanic acid sensitive β-lactamase, contributes to resistance to cephalosporins ([Avison et al. 2001](#_ENREF_4)) | 76% | 81% | 77% | 76% | 93% | 76% |
| Smlt0412/3 (*ampNG*) | β-lactamase induction signal transducer, essential for β-lactamase activity ([Huang et al. 2010](#_ENREF_7)). No BLAST hit in other strains to K279a *ampG.* See below for identity with *ampG* from strain D457. | 96% | 91% | 97% | 96% | 96% | 96% |
| SMD\_0331/2 (*ampNG*) | β-lactamase induction signal transducer operon from strain D457. No BLAST hit in strain K279a to D457 version of *ampG.* | 94% | 91% | 95% | 98% | 99% | - |
| Smlt0115 (*ampC*) | Putative β-lactamase (cephalosporinase) | 93% | 79% | - | 88% | 95% | 93% |
| Smlt0347 | Putative metallo-β-lactamase | 91% | 87% | 91% | 92% | 92% | 92% |
| Smlt2120 (*aph(3’)-IIc*) | Aminoglycoside 3' phosphotransferase, contributes to resistance to butirosin, kanamycin, neomycin and paromomycin ([Okazaki & Avison 2007](#_ENREF_9)) | 89% | - | 83% | 84% | 87% | 88% |
| Smlt3615 (*aac(6’)-lz*) | Aminoglycoside 6'N acetyltransferase, contributes to resistance to amikacin, netilmicin, sisomicin and tobramycin (Li, 2003) | - | 84% | - | 90% | - | - |
| Smlt0191 | Putative aminoglycoside phosphotransferase | 91% | 80% | 88% | 92% | 91% | 91% |
| Smlt1669 | Putative aminoglycoside 2' N-acetyltransferase | - | - | - | - | - | - |
| Smlt2336 | Putative streptomycin 3' phosphotransferase/kinase | 89% | 85% | 87% | 90% | 90% | 89% |
| Smlt2125 (*spcN*) | Putative spectinomycin phosphotransferase | 89% | 78% | 87% | 87% | 89% | 89% |
| Smlt0620 (*cat*) | Putative chloramphenicol acetyltransferase | - | - | - | - | - | - |
| Smlt1071 (*qnrB*) | Quinolone target binding, contributes to resistance to levofloxacin, moxifloxacin, ciprofloxacin, ofloxacin, gatifloxacin ([Sánchez & Martínez 2010](#_ENREF_10)) | 92% | 92% | 92% | 95% | 94% | 94% |
| Smlt0818 (*ksgA*) | Putative kasuagamycin resistance protein | 95% | 93% | 95% | 96% | 96% | 96% |
| Smlt0821(*ostA*) | Organic solvent tolerance protein | 92% | 88% | 95% | 92% | 92% | 92% |
| Smlt0269(*ohr*) | Organic hydroperoxide | 97% | 96% | 97% | 97% | 97% | 97% |
| Smlt2409-12(*merRTPA*) | Mercury resistance | - | 99% | - | 99% | - | 80% |
| Smlt2440-9(*copLABMGCDF*) | Copper resistance | - | 99% | - | 99% | - | - |
| Smlt2691/2(*copCD*) | Copper resistance | 87% | 75% | 82% | - | 89% | 87% |
| Smlt3690/1/2(*copL2A2B2*) | Copper resistance | 92% | 88% | 89% | 90% | 92% | 91% |

Strain D457 is a clinical isolate displaying broad antibiotic susceptibility ([Alonso & Martínez 1997](#_ENREF_2); [Lira et al. 2012](#_ENREF_8))

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