

Gene ID	Location	Sample	NanARO Name	ARO Access	ARO Descri	Drug Class	Resistance
gene0005	ChromosomeBP		Streptomyc	ARO:300331	point mutε	aminocoumε	antibiotic
gene0093	ChromosomeBP		sul4	ARO:300436	sul4 is a sulfonam	ic	antibiotic
gene0142	ChromosomeBP		tetT	ARO:300019	Tet (T) is tetracycl		antibiotic
gene0175	ChromosomeBP		patA	ARO:300002	PatA is arfluoroquir		antibiotic
gene0202	ChromosomeBP		Escherichi	ARO:300461	An ampC-lice	phalosp	antibiotic
gene0221	ChromosomeBP		bcrA	ARO:300298	bcrA is ar	peptide	antibiotic
gene0230	ChromosomeBP		bcrA	ARO:300298	bcrA is ar	peptide	antibiotic
gene0233	ChromosomeBP		vanRM	ARO:300292	vanRM is ε	glycopepti	antibiotic
gene0235	ChromosomeBP		msbA	ARO:300398	MsbA is a nitroimidε		antibiotic
gene0240	ChromosomeBP		aadK	ARO:300262	aadK is a aminoglycc		antibiotic
gene0281	ChromosomeBP		vgbC	ARO:300399	VgbC is a streptogrε		antibiotic
gene0297	ChromosomeBP		blaR1	ARO:300021	blaR1 is ε	penam	antibiotic
gene0298	ChromosomeBP		mecI	ARO:300012	mecI acts carbapenen		antibiotic
gene0299	ChromosomeBP		BCL-1	ARO:300474	BCL-1 is ε	penam	antibiotic
gene0312	ChromosomeBP		vanRI	ARO:300372	VanRI is t	glycopepti	antibiotic
gene0314	ChromosomeBP		bcrA	ARO:300298	bcrA is ar	peptide	antibiotic
gene0319	ChromosomeBP		mphK	ARO:300454	A chromosc	macrolide	antibiotic
gene0332	ChromosomeBP		bcrA	ARO:300298	bcrA is ar	peptide	antibiotic
gene0335	ChromosomeBP		vanRM	ARO:300292	vanRM is ε	glycopepti	antibiotic
gene0369	ChromosomeBP		bcrA	ARO:300298	bcrA is ar	peptide	antibiotic
gene0432	ChromosomeBP		macB	ARO:300005	MacB is ar	macrolide	antibiotic
gene0473	ChromosomeBP		tetA (46)	ARO:300403	tetA (46) it	tetracycl	antibiotic
gene0475	ChromosomeBP		vanRM	ARO:300292	vanRM is ε	glycopepti	antibiotic
gene0481	ChromosomeBP		tlrC	ARO:300282	tlrC is ar	lincosami	antibiotic
gene0483	ChromosomeBP		Staphylocc	ARO:300457	MFS trans	aminoglycc	antibiotic
gene0545	ChromosomeBP		gimA	ARO:300046	A macrolic	macrolide	antibiotic
gene0553	ChromosomeBP		bcrA	ARO:300298	bcrA is ar	peptide	antibiotic
gene0561	ChromosomeBP		vanG	ARO:300290	VanG is a glycopepti		antibiotic
gene0652	ChromosomeBP		optrA	ARO:300374	OptrA is ε	lincosami	antibiotic
gene0670	ChromosomeBP		rphB	ARO:300399	rphB is a rifamycin		antibiotic
gene0771	ChromosomeBP		cmeB	ARO:300078	CmeB is th	cephalosp	antibiotic
gene0803	ChromosomeBP		TaeA	ARO:300398	Pleuromu	ti	antibiotic
gene0819	ChromosomeBP		optrA	ARO:300374	OptrA is ε	lincosami	antibiotic
gene0825	ChromosomeBP		macB	ARO:300005	MacB is ar	macrolide	antibiotic
gene0887	ChromosomeBP		oleD	ARO:300008	OleD is a macrolide		antibiotic
gene0919	ChromosomeBP		Bacillus s	ARO:300332	MprF is a peptide		antibiotic
gene0941	ChromosomeBP		novA	ARO:300252	A type III	aminocoumε	antibiotic
gene0943	ChromosomeBP		macB	ARO:300005	MacB is ar	macrolide	antibiotic
gene0984	ChromosomeBP		macB	ARO:300005	MacB is ar	macrolide	antibiotic
gene0991	ChromosomeBP		oleC	ARO:300374	oleC is ar	macrolide	antibiotic
gene1008	ChromosomeBP		lmrB	ARO:300281	lmrB is a lincosami		antibiotic
gene1013	ChromosomeBP		oleC	ARO:300374	oleC is ar	macrolide	antibiotic
gene1014	ChromosomeBP		bcrA	ARO:300298	bcrA is ar	peptide	antibiotic
gene1037	ChromosomeBP		vmlR	ARO:300447	vmlR is ar	lincosami	antibiotic
gene1102	ChromosomeBP		tetA (60)	ARO:300403	tetA (60) it	tetracycl	antibiotic
gene1103	ChromosomeBP		tetB (60)	ARO:300403	tetB (60) it	tetracycl	antibiotic
gene1125	ChromosomeBP		bcrA	ARO:300298	bcrA is ar	peptide	antibiotic
gene1208	ChromosomeBP		vanRI	ARO:300372	VanRI is t	glycopepti	antibiotic
gene1274	ChromosomeBP		bacA	ARO:300298	The bacA ε	peptide	antibiotic
gene1286	ChromosomeBP		macB	ARO:300005	MacB is ar	macrolide	antibiotic

gene1298	ChromosomeBP	efrA	ARO:300394efrA is a fluoroquirantibiotic
gene1383	ChromosomeBP	lmrB	ARO:300281lmrB is a lincosamicantibiotic
gene1466	ChromosomeBP	tetA (58)	ARO:300398TetA (58) itetracycliantibiotic
gene1481	ChromosomeBP	ykkC	ARO:300306ykkC is araminoglyccantibiotic
gene1482	ChromosomeBP	ykkD	ARO:300306ykkD is araminoglyccantibiotic
gene1588	ChromosomeBP	mecA	ARO:300061A foreign carbapenenantibiotic
gene1603	ChromosomeBP	FosB	ARO:300017A thiol trfosfomyrirantibiotic
gene1684	ChromosomeBP	tetA (60)	ARO:300405tetA (60) itetracycliantibiotic
gene1685	ChromosomeBP	tetB (60)	ARO:300405tetB (60) itetracycliantibiotic
gene1688	ChromosomeBP	macB	ARO:300055MacB is armacrolide antibiotic
gene1689	ChromosomeBP	macB	ARO:300055MacB is armacrolide antibiotic
gene1697	ChromosomeBP	optrA	ARO:300374Optra is elincosamicantibiotic
gene1732	ChromosomeBP	iri	ARO:300288iri is a nrifamycin antibiotic
gene1771	ChromosomeBP	mecA	ARO:300061A foreign carbapenenantibiotic
gene1789	ChromosomeBP	tetA (58)	ARO:300398TetA (58) itetracycliantibiotic
gene1790	ChromosomeBP	RlmA (II)	ARO:30013(RlmA (II) ilincosamicantibiotic
gene1798	ChromosomeBP	Staphylocc	ARO:300055An alternemupirocin antibiotic
gene1831	ChromosomeBP	clbC	ARO:300281clbC is a lincosamicantibiotic
gene1993	ChromosomeBP	tet (L)	ARO:300017TetL is a tetracycliantibiotic
gene1998	ChromosomeBP	gimA	ARO:300046A macrolicmacrolide antibiotic
gene2009	ChromosomeBP	Escherichi	ARO:300405Member of macrolide antibiotic
gene2010	ChromosomeBP	abeS	ARO:300076AbeS in araminocoumeantibiotic
gene2088	ChromosomeBP	ykkD	ARO:300306ykkD is araminoglyccantibiotic
gene2089	ChromosomeBP	qacH	ARO:300383qacH is a fluoroquirantibiotic
gene2133	ChromosomeBP	Streptomyc	ARO:300331point mutεaminocoumeantibiotic
gene2188	ChromosomeBP	bcrA	ARO:300298bcrA is arpeptide arantibiotic
gene2211	ChromosomeBP	bcrA	ARO:300298bcrA is arpeptide arantibiotic
gene2254	ChromosomeBP	efrA	ARO:300394efrA is a fluoroquirantibiotic
gene2255	ChromosomeBP	patB	ARO:300002PatB is arfluoroquirantibiotic
gene2259	ChromosomeBP	lmrB	ARO:300281lmrB is a lincosamicantibiotic
gene2262	ChromosomeBP	otr (B)	ARO:300289otr (B) is tetracycliantibiotic
gene2268	ChromosomeBP	vmlR	ARO:300447vmlR is arlincosamicantibiotic
gene2332	ChromosomeBP	rphB	ARO:300399rphB is a rifamycin antibiotic
gene2360	ChromosomeBP	PmpM	ARO:300407PmpM is a aminoglyccantibiotic
gene2414	ChromosomeBP	dfrG	ARO:300286dfrG is a diaminopyrantibiotic
gene2550	ChromosomeBP	mtrA	ARO:300081Mtra is a macrolide antibiotic
gene2552	ChromosomeBP	arlR	ARO:300083ArlR is a acridine cantibiotic
gene2621	ChromosomeBP	msbA	ARO:300395MsbA is a nitroimidεantibiotic
gene2622	ChromosomeBP	macB	ARO:300055MacB is armacrolide antibiotic
gene2633	ChromosomeBP	lsaC	ARO:300311LsaC is arlincosamicantibiotic
gene2635	ChromosomeBP	bcrC	ARO:300325The bcrC εpeptide arantibiotic
gene2636	ChromosomeBP	bcrB	ARO:300298bcrB is arpeptide arantibiotic
gene2637	ChromosomeBP	bcrA	ARO:300298bcrA is arpeptide arantibiotic
gene2638	ChromosomeBP	vanSF	ARO:300295vanSF is εglycopeptiantibiotic
gene2639	ChromosomeBP	vanRF	ARO:300292vanRF is εglycopeptiantibiotic
gene2673	ChromosomeBP	macB	ARO:300055MacB is armacrolide antibiotic
gene2772	ChromosomeBP	bcrA	ARO:300298bcrA is arpeptide arantibiotic
gene2776	ChromosomeBP	lmrD	ARO:300288lmrD is a lincosamicantibiotic
gene2777	ChromosomeBP	patB	ARO:300002PatB is arfluoroquirantibiotic
gene2792	ChromosomeBP	bcrA	ARO:300298bcrA is arpeptide arantibiotic
gene2878	ChromosomeBP	vanRA	ARO:300291vanRA, als glycopeptiantibiotic

gene2915	ChromosomeBP	ErmD	ARO:300049ErmD confelincosamicantibiotic
gene2929	ChromosomeBP	msbA	ARO:300399MsbA is a nitroimidæantibiotic
gene2930	ChromosomeBP	patA	ARO:300002PatA is arfluoroquirantibiotic
gene2932	ChromosomeBP	cdeA	ARO:300389Clostridiacridine cantibiotic
gene2952	ChromosomeBP	catV	ARO:300439A chlorammpenicol æantibiotic
gene2961	ChromosomeBP	cmlv	ARO:300270cmlv is a phenicol æantibiotic
gene3031	ChromosomeBP	vanRF	ARO:300292vanRF is æglycopeptiantibiotic
gene3171	ChromosomeBP	mtrA	ARO:300081MtrA is a macrolide antibiotic
gene3257	ChromosomeBP	bcrA	ARO:300298bcrA is arpeptide arantibiotic
gene3287	ChromosomeBP	macB	ARO:300005MacB is armacrolide antibiotic
gene3289	ChromosomeBP	bcrA	ARO:300298bcrA is arpeptide arantibiotic
gene3309	ChromosomeBP	macB	ARO:300005MacB is armacrolide antibiotic
gene3383	ChromosomeBP	vanTE	ARO:300297vanTE is æglycopeptiantibiotic
gene3401	ChromosomeBP	bacA	ARO:300298The bacA æpeptide arantibiotic
gene3518	ChromosomeBP	vanHB	ARO:300294vanHB is æglycopeptiantibiotic
gene3537	ChromosomeBP	macB	ARO:300005MacB is armacrolide antibiotic
gene3545	ChromosomeBP	blt	ARO:300300blt is an acridine cantibiotic
gene3559	ChromosomeBP	lmrD	ARO:300288lmrD is a lincosamicantibiotic
gene3590	ChromosomeBP	vanRM	ARO:300292vanRM is æglycopeptiantibiotic
gene3628	ChromosomeBP	vanRF	ARO:300292vanRF is æglycopeptiantibiotic
gene3629	ChromosomeBP	msbA	ARO:300399MsbA is a nitroimidæantibiotic
gene3635	ChromosomeBP	Staphylocc	ARO:300457MFS transæaminoglyccantibiotic
gene3655	ChromosomeBP	oleC	ARO:300374oleC is armacrolide antibiotic
gene3730	ChromosomeBP	bcrA	ARO:300298bcrA is arpeptide arantibiotic
gene3758	ChromosomeBP	vanHB	ARO:300294vanHB is æglycopeptiantibiotic
gene3824	ChromosomeBP	macB	ARO:300005MacB is armacrolide antibiotic
gene3849	ChromosomeBP	vanRM	ARO:300292vanRM is æglycopeptiantibiotic
gene3943	ChromosomeBP	blt	ARO:300300blt is an acridine cantibiotic
gene3985	ChromosomeBP	Chlamydia	ARO:300378Chlamydia fosfomycirantibiotic
gene4021	ChromosomeBP	Chlamydia	ARO:300378Chlamydia fosfomycirantibiotic
gene4024	ChromosomeBP	evgS	ARO:300008EvgS is a fluoroquirantibiotic
gene4065	ChromosomeBP	tetA (58)	ARO:300399TetA (58) itetracycliantibiotic
gene4136	ChromosomeBP	emrY	ARO:300002emrY is a tetracycliantibiotic
gene4159	ChromosomeBP	novA	ARO:300252A type IIlaminocoumæantibiotic
gene4165	ChromosomeBP	bcrA	ARO:300298bcrA is arpeptide arantibiotic
gene4178	ChromosomeBP	novA	ARO:300252A type IIlaminocoumæantibiotic
gene4179	ChromosomeBP	msbA	ARO:300399MsbA is a nitroimidæantibiotic
gene4190	ChromosomeBP	vanRM	ARO:300292vanRM is æglycopeptiantibiotic
gene4191	ChromosomeBP	vanSE	ARO:300293vanSE is æglycopeptiantibiotic
gene4192	ChromosomeBP	bcrA	ARO:300298bcrA is arpeptide arantibiotic
gene4261	ChromosomeBP	macB	ARO:300005MacB is armacrolide antibiotic
gene4263	ChromosomeBP	smeR	ARO:300300smeR is tæaminoglyccantibiotic
gene4301	ChromosomeBP	optrA	ARO:300374OptrA is ælincosamicantibiotic
gene4313	ChromosomeBP	novA	ARO:300252A type IIlaminocoumæantibiotic
gene4315	ChromosomeBP	vanRM	ARO:300292vanRM is æglycopeptiantibiotic
gene4349	ChromosomeBP	tetA (58)	ARO:300399TetA (58) itetracycliantibiotic
gene4367	ChromosomeBP	vanRI	ARO:300372VanRI is tglycopeptiantibiotic

Identity (%)	Coverage (%)	Evalue	Score
42.9	97.8	4.90E-147	1325
50.2	91.2	9.10E-77	716
27.1	96.8	1.50E-72	683
30.6	80.8	3.20E-26	280
57.2	91.5	2.70E-139	1257
34.8	70.6	2.20E-33	342
50.5	86.8	5.10E-49	476
35	97.3	8.20E-33	336
29	98.4	1.70E-69	656
49.8	91	3.80E-78	728
59.2	99.3	7.90E-108	984
35.7	93.7	1.20E-99	916
42.9	93	2.60E-23	252
62.5	98.4	1.80E-102	938
37.2	97.4	1.10E-48	473
46.7	98.4	5.20E-78	727
60.4	99.3	3.50E-111	1013
50.9	87	3.70E-55	529
40	97.7	3.50E-36	365
32.3	94.6	1.60E-36	369
37.5	91.9	2.30E-31	324
25.2	97.4	2.60E-10	142
43.7	99.1	6.40E-49	475
27.8	70.8	1.50E-09	136
42.6	97.5	3.70E-99	911
29.1	99.5	5.40E-43	426
36.7	95.8	3.30E-48	470
36.8	95.8	6.00E-65	615
38	97.5	1.30E-115	1054
58.5	99.8	1.50E-292	2581
23.4	72.7	4.90E-43	430
49.8	100	1.20E-177	1589
33.9	94	1.10E-83	778
36.8	98.3	1.70E-25	272
27.2	92.4	4.70E-31	323
63.7	99.1	5.89999999E-115	2757
34	98.3	1.70E-93	863
27.8	75.5	5.70E-19	218
37.3	70.2	1.60E-27	291
24.9	83.9	1.30E-18	214
41.1	82	1.40E-91	846
28.7	91.8	2.10E-18	212
40	96.7	2.10E-55	532
38.6	70.7	1.40E-70	665
38.5	96.6	1.90E-116	1061
45.4	78.1	1.60E-127	1157
30.1	98.7	7.70E-34	346
38.3	96	8.90E-43	422
29.7	98.9	1.70E-27	291
31.1	73.1	3.90E-23	254

31.2	76.5	1.00E-17	207
44.1	97.5	1.50E-103	949
27.1	72.5	1.10E-17	207
71	98.2	4.20E-38	379
72.1	100	1.80E-38	382
36.6	95.6	5.00E-118	1075
55.6	87.7	2.60E-41	408
32	95	9.90E-78	727
36	93.9	1.40E-82	769
46.4	95.7	1.60E-55	532
37	98.5	5.70E-61	581
28.7	98	2.50E-67	637
40	98.4	9.00E-88	813
25.5	79.2	1.40E-27	295
28.8	79.2	6.80E-18	208
33.4	98.3	1.70E-41	412
29.1	88.5	5.20E-105	964
37.2	93.6	1.90E-50	490
42.6	99.8	1.30E-101	932
35.4	98.2	1.80E-59	568
40.2	85.7	4.90E-16	189
42	95.2	1.90E-19	218
32.7	90.9	7.80E-08	118
34.3	97.1	1.20E-13	168
41.6	95.4	5.10E-131	1187
36.7	71.6	1.10E-32	336
28.6	98.6	1.60E-33	343
44.7	99.1	9.00E-132	1193
36.9	94.9	1.30E-101	933
48.5	97.7	7.90E-126	1141
30.8	83	7.60E-58	555
42.9	96	6.70E-111	1013
42.3	99.5	3.80E-206	1836
36.2	97.6	1.70E-72	681
50.6	98.8	4.60E-49	475
39.7	96.6	9.50E-48	465
41	94.6	3.00E-49	478
29	78.5	2.40E-13	169
29.1	88.5	3.60E-19	219
28.9	86.8	5.90E-15	182
98	100	2.00E-110	1005
98.6	85.2	1.00E-105	965
99.3	100	4.40E-167	1495
29.3	89	1.40E-34	353
49.3	97.4	1.70E-60	575
38.7	90.5	6.00E-37	372
35.2	88.1	4.60E-34	347
29	86.9	6.00E-19	217
28	77.8	1.70E-19	222
31.9	81.6	9.40E-28	293
42.5	98.3	1.20E-50	490

97.2	100	3.00E-160	1436
29.4	78.7	1.40E-13	171
30.3	81.9	1.30E-17	206
30.3	93.6	3.80E-53	514
55.6	99.5	1.70E-75	704
36.8	92.4	5.50E-51	495
40.1	97.8	2.80E-41	409
45.3	98.3	1.00E-49	482
30.5	84.7	1.60E-23	256
44.3	95.3	2.50E-48	470
26.1	73.6	8.10E-20	225
30.7	81.1	6.80E-23	251
32	92.4	1.20E-42	423
46.7	97.8	9.50E-63	595
30.3	73.1	1.80E-25	274
38.8	99.5	1.00E-32	335
43.4	96.7	1.00E-89	829
27.6	86.2	6.30E-16	191
39.6	96.4	5.60E-37	372
40.7	95.5	3.10E-49	478
27.1	77.8	1.20E-17	206
43.2	95.2	2.90E-99	912
26.8	88.7	3.10E-20	228
33.9	97.1	2.20E-44	437
32.7	74.4	6.40E-31	321
34.7	96.9	6.10E-31	320
22	96.5	4.70E-07	114
21.8	94.2	1.00E-09	139
34.3	95	1.80E-60	577
34.5	96.3	1.90E-57	551
29.9	86.3	1.40E-10	142
34.2	99	7.00E-54	519
22.7	91.4	4.20E-15	186
33.2	98.9	1.10E-84	787
32.2	99.7	4.30E-37	374
28.9	95.7	3.70E-56	541
28	73.3	3.50E-43	429
34.6	88.6	2.30E-30	315
21.3	92.6	1.90E-06	110
28.1	78.6	1.50E-17	205
40.4	89.3	6.00E-48	467
32.1	96.5	7.90E-31	319
32	94.3	9.00E-75	701
27	78.3	7.20E-17	199
34.1	94.9	4.20E-35	356
31.6	97.3	1.10E-37	379
45.2	96.6	7.60E-53	509