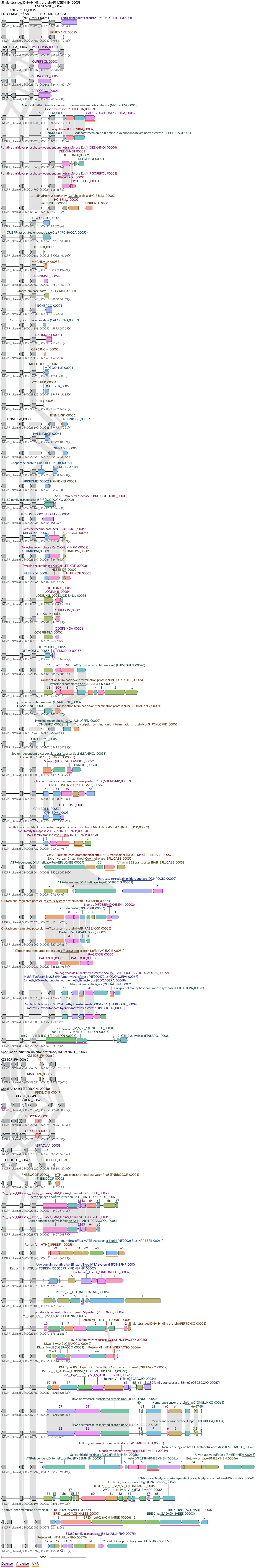
Single-stranded DNA-binding protein (FNLGEMNH_00059)
FNLGEMNH_00062
FNLGEMNH_00060
FNLGEMNH_00058
FNLGEMNH_00063
FNLGEMNH_00061
TonB-dependent receptor P39 (FNLGEMNH_00064)
IMGPR_plasmid_3300023493_000098 46190:55134(+)
BPHEMAKE_00055
IMGPR_plasmid_3300014781_000042 39954:47348(+)
PMDJLPBA_00047
PMDJLPBA_00051
IMGPR_plasmid_7000000475_000027 36934:44351(+)
OLFBFBGL_00003
IMGPR_plasmid_7000000032_000025 796:8213(-)
MCONOCKH_00053
IMGPR_plasmid_3300029476_000106 38440:44341(+)
CFFCCGGO_00001
IMGPR_plasmid_3300009343_000033 787:6688(-)
Adenosylmethionine-8-amino-7-oxononanoate aminotransferase (MPBIPHDA_00058)
Biotin synthase (MPBIPHDA_00057)
MPBIPHDA_00056
CAI-1 (VF0405) (MPBIPHDA_00059)
IMGPR_plasmid_3300030244_000010 40625:51701(+)
Biotin synthase (FEBCNKIA_00002)
FEBCNKIA_00003
Adenosylmethionine-8-amino-7-oxononanoate aminotransferase (FEBCNKIA_00001)
IMGPR_plasmid_3300030422_000013 1058:10955(-)
Putative pyridoxal phosphate-dependent aminotransferase EpsN (DEEKHNOI_00004)
DEEKHNOI_00003
DEEKHNOI_00002
DEEKHNOI_00001
IMGPR_plasmid_3300014560_000037 34:9771(-)
Putative pyridoxal phosphate-dependent aminotransferase EpsN (PGOPEPOL_00003)
PGOPEPOL_00002
PGOPEPOL_00001
IMGPR_plasmid_3300014760_000024 116:8898(-)
1,4-dihydroxy-2-naphthoyl-CoA hydrolase (HGIBJNLL_00002)
HGIBJNLL_00003
HGIBJNLL_00004
HGIBJNLL_00001
IMGPR_plasmid_3300008268_000047 297:11026(-)
HGGGGCJO_00001
IMGPR_plasmid_3300007312_000037 78:5753(-)
CRISPR-associated endonuclease Cas9 (IFCNHCCA_00053)
IMGPR_plasmid_3300029572_000057 37931:43810(+)
HIFIPNJI_00053
IMGPR_plasmid_7000000186_000019 39052:44166(+)
MKGHLMLA_00053
IMGPR_plasmid_7000000098_000019 38059:43473(+)
FFJNGMMF_00054
IMGPR_plasmid_3300029561_000051 39697:45241(+)
Omega-amidase YafV (BEGLFCMM_00054)
IMGPR_plasmid_3300014545_000019 38840:44443(+)
MJGHBPCG_00001
IMGPR_plasmid_3300029539_000048 617:6603(-)
Carboxybiotin decarboxylase (CAFOGCAB_00057)
IMGPR_plasmid_3300014808_000035 44992:50269(+)
IFKHMODH_00001
IMGPR_plasmid_3300029303_000092 251:6181(-)
OBPCJNGM_00001
IMGPR_plasmid_3300029119_000068 157:5430(-)
MDEOOHNE_00002
MDEOOHNE_00001
IMGPR_plasmid_3300014793_000030 1251:6907(-)
DCCJEKFK_00054
DCCJEKFK_00055
IMGPR_plasmid_3300029323_000047 39479:45135(+)
JFPCEIEC_00058
IMGPR_plasmid_3300030320_000080 41482:46521(+)
NENNBJGK_00056
NENNBJGK_00050
NENNBJGK_00057
IMGPR_plasmid_3300029190_000088 39475:47321(+)
PAMMDBCE_00061
IMGPR_plasmid_3300029653_000064 43069:48753(+)
OIGNAMFI_00050
IMGPR_plasmid_3300029720_000070 35506:43362(+)
Chaperone protein DnaK (IELPMJHB_00053)
IELPMJHB_00054
IMGPR_plasmid_7000000006_000020 39458:46088(+)
HPKFDMEI_00002
HPKFDMEI_00001
IMGPR_plasmid_3300029503_000065 254:6108(-)
IS1182 family transposase ISBf3 (IGODOGKC_00001)
IS1182 family transposase ISBf3 (IGODOGKC_00002)
IMGPR_plasmid_2924838147_000001 178:6630(-)
EDLCFLPF_00002
EDLCFLPF_00001
IMGPR_plasmid_3300029235_000055 106:6261(-)
Tyrosine recombinase XerC (KBFCGIOE_00064)
KBFCGIOE_00063
KBFCGIOE_00065
IMGPR_plasmid_3300029407_000074 45804:53383(+)
Tyrosine recombinase XerC (OHJMIKPM_00002)
OHJMIKPM_00003
OHJMIKPM_00001
IMGPR_plasmid_3300029507_000044 344:7955(-)
Tyrosine recombinase XerC (HLEEIKDF_00003)
HLEEIKDF_00002
HLEEIKDF_00004
HLEEIKDF_00001
IMGPR_plasmid_3300029764_000082 1352:9527(-)
JODEJNJL_00055
JODEJNJL_00054
JODEJNJL_00053
JODEJNJL_00056
IMGPR_plasmid_7000000715_000024 38054:45363(+)
OJJKAKJM_00001
OJJKAKJM_00002
IMGPR_plasmid_3300008421_000049 394:7283(-)
ODGFBMGA_00001
ODGFBMGA_00002
IMGPR_plasmid_7000000410_000024 263:7095(-)
OFEMODFO_00056
OFEMODFO_00055
OFEMODFO_00057
IMGPR_plasmid_3300029815_000062 39731:46075(+)
66 67 68 69 Tyrosine recombinase XerC (LHDGGHLN_00070)
IMGPR_plasmid_2919928152_000008 48555:58527(+)
Transcription termination/antitermination protein NusG (JCKIKHEK_00005)
Tyrosine recombinase XerC (JCKIKHEK_00006)
11 109 8 7 4 3 2 1
IMGPR_plasmid_3300029332_000078 25:16137(-)
Tyrosine recombinase XerC (EDAAGKND_00002)
EDAAGKND_00003
Transcription termination/antitermination protein NusG (EDAAGKND_00001)
IMGPR_plasmid_3300029248_000045 149:7157(-)
Tyrosine recombinase XerC (JONLGFFD_00002)
JONLGFFD_00003
Transcription termination/antitermination protein NusG (JONLGFFD_00001)
IMGPR_plasmid_3300014961_000123 90:9304(-)
FBCDHPMP_00068
IMGPR_plasmid_3300029493_000107 53612:58785(+)
Sodium-dependent dicarboxylate transporter SdcS (LEANPICJ_00058)
Cable pilus (VF0700) (LEANPICJ_00057)
Sigma L (VF0855) (LEANPICJ_00059)
LEANPICJ_00060
IMGPR_plasmid_3300000289_000027 44987:54395(+)
Riboflavin transport system permease protein RibX (MJFAIGMP_00057)
FbpABC (VF0272) (MJFAIGMP_00056)
53 54 55 58
IMGPR_plasmid_3300029418_000080 38138:49140(+)
GFHIBDML_00055
GFHIBDML_00053
GFHIBDML_00054
IMGPR_plasmid_3300029392_000096 38137:45529(+)
multidrug efflux RND transporter periplasmic adaptor subunit MexE (NF045904.1) (NPDIBNCP_00002)
IS21 family transposase ISGur9 (NPDIBNCP_00004)
IS21 family transposase ISPpu7 (NPDIBNCP_00003)
6 5 1
IMGPR_plasmid_3300006739_000054 910:11498(-)
CmlA/FloR family chloramphenicol efflux MFS transporter (NF033134.0) (EPLLCABE_00057)
1,4-dihydroxy-2-naphthoyl-CoA hydrolase (EPLLCABE_00055)
ATP-dependent DNA helicase Rep (EPLLCABE_00054)
56
Vitamin B12 transporter BtuB (EPLLCABE_00058)
IMGPR_plasmid_3300029544_000048 39562:54214(+)
Pyruvate:ferredoxin oxidoreductase (DDNPOCIG_00002)
ATP-dependent DNA helicase Rep (DDNPOCIG_00003)
6 5 4 1
IMGPR_plasmid_3300029477_000054 27:19046(-)
Glutathione-regulated potassium-efflux system protein KefB (DKHMPIII_00009)
Sigma L (VF0855) (DKHMPIII_00002)
Protein DedA (DKHMPIII_00006)
8 7 5 4 3 1
IMGPR_plasmid_3300029672_000025 352:14227(-)
Glutathione-regulated potassium-efflux system protein KefB (PABEJKKK_00005)
Protein DedA (PABEJKKK_00002)
4 3 1
IMGPR_plasmid_3300008260_000045 327:10788(-)
Glutathione-regulated potassium-efflux system protein KefB (PAGJDCIE_00054)
PAGJDCIE_00056
PAGJDCIE_00053
PAGJDCIE_00055
IMGPR_plasmid_7000000231_000023 38812:49630(+)
aminoglycoside N-acetyltransferase AAC(6')-IIc (NF000135.2) (ODOAOEPA_00072)
NshR/TsnR family 23S rRNA methyltransferase (NF000477.1) (ODOAOEPA_00069)
3-methyl-2-oxobutanoate hydroxymethyltransferase (ODOAOEPA_00068)
Glutamine--tRNA ligase (ODOAOEPA_00071)
67 70
Polyprenol monophosphomannose synthase (ODOAOEPA_00073)
IMGPR_plasmid_3300039378_000062 47895:61932(+)
NshR/TsnR family 23S rRNA methyltransferase (NF000477.1) (JPEBHOHG_00004)
3-methyl-2-oxobutanoate hydroxymethyltransferase (JPEBHOHG_00005)
6 3 2 1
IMGPR_plasmid_3300039380_000037 15:12342(-)
cas2_I_II_III_IV_V_VI_6 (EPJLBPOJ_00004)
cas1_I_II_III_IV_V_VI_5 (EPJLBPOJ_00005)
cas9_II-A_II-B_II-C_1 (EPJLBPOJ_00006)
3 2 GTP 3',8-cyclase (EPJLBPOJ_00001)
IMGPR_plasmid_3300029454_000052 216:15121(-)
Sporulation initiation inhibitor protein Soj (KDMOJNFH_00063)
KDMOJNFH_00067
KDMOJNFH_00062
IMGPR_plasmid_2731957551_000005 45587:51971(+)
MNIGIJPA_00005
IMGPR_plasmid_3300008692_000025 1278:7667(-)
ShosTA_ShosT (FBDBJCNI_00040)
FBDBJCNI_00047
FBDBJCNI_00043
FBDBJCNI_00045
IMGPR_plasmid_3300028561_000014 30578:38085(+)
IEIGCCNM_00053
IMGPR_plasmid_3300029633_000075 37896:44233(+)
GLJOFEDJ_00004
IMGPR_plasmid_3300029315_000092 803:7140(-)
ABFACJAA_00058
IMGPR_plasmid_3300029743_000061 40499:46026(+)
OJHHOLLE_00049
OJHHOLLE_00053
IMGPR_plasmid_3300008622_000058 36984:43246(+)
FNBBOGOF_00003
HTH-type transcriptional activator RhaS (FNBBOGOF_00001)
FNBBOGOF_00002
IMGPR_plasmid_7000000624_000018 54:6900(-)
RM_Type_I_REases__Type_I_REases_FAM_0.einsi_trimmed (DPKIPEEG_00060)
Bacteriophage abortive infection AbiH_AbiH (DPKIPEEG_00061)
62 63 64 65 66 67
IMGPR_plasmid_3300029359_000059 43421:57143(+)
RM_Type_I_REases__Type_I_REases_FAM_0.einsi_trimmed (PCAAGGOL_00060)
Bacteriophage abortive infection AbiH_AbiH (PCAAGGOL_00061)
62 63 64 65
IMGPR_plasmid_3300029779_000063 43407:54999(+)
multidrug efflux MATE transporter NorM (NF000263.1) (NPPBBFII_00064)
Retron_VI_HTH (NPPBBFII_00058)
59 60 61 62 63 65
IMGPR_plasmid_3300038345_000015 41691:56299(+)
AAA domain, putative AbiEii toxin, Type IV TA system (MFDNBFHP_00004)
Retron_I_B_ATPase_TOPRIM_COG3593 (MFDNBFHP_00007)
Hachiman_HamA_1 (MFDNBFHP_00002)
8 6 5 3 1
IMGPR_plasmid_3300008571_000076 471:14868(-)
Retron_VI_HTH (NGENAKNN_00005)
9 8 7 6 4 3 2 1
IMGPR_plasmid_3300029105_000094 161:18917(-)
putative type I restriction enzymeP M protein (PEFJONIG_00006)
RM_Type_I_S_Type_I_S_01 (PEFJONIG_00009)
Retron_VI_HTH (PEFJONIG_00004)
10 8 7 5 3 2
Single-stranded DNA-binding protein (PEFJONIG_00001)
IMGPR_plasmid_3300029607_000071 875:16186(-)
IS1595 family transposase ISCco3 (NGEPACGO_00065)
Kiwa_KwaA (NGEPACGO_00062)
Kiwa_KwaB (NGEPACGO_00061)
Retron_VI_HTH (NGEPACGO_00066)
58 59 60 63 64 67
IMGPR_plasmid_3300029504_000051 41544:55300(+)
RM_Type_IIG_Type_IIG_Type_IIG_FAM_0.einsi_trimmed (OBCEGOIO_00062)
Retron_I_B_ATPase_TOPRIM_COG3593 (OBCEGOIO_00060)
RM_Type_I_S_Type_I_S_01 (OBCEGOIO_00061)
Retron_VI_HTH (OBCEGOIO_00064)
57 58 59 63 65 66
IS1182 family transposase ISBthe2 (OBCEGOIO_00067)
IMGPR_plasmid_3300029783_000089 45015:62633(+)
RNA polymerase-associated protein RapA (GMJLLNKG_00059)
60
Membrane sensor protein UhpC (GMJLLNKG_00065)
57 58 61 62 63 64 66 67 68
IMGPR_plasmid_3300007975_000025 45015:68640(+)
Membrane sensor protein UhpC (HDEKBCPA_00004)
RNA polymerase-associated protein RapA (HDEKBCPA_00010)
12 11 9 8 7 6 5 3 2 1
IMGPR_plasmid_3300007055_000021 296:23921(-)
HTH-type transcriptional activator RhaR (FMEEMHEH_00057)
Non-reducing end beta-L-arabinofuranosidase (FMEEMHEH_00067)
o-succinylbenzoate synthase (FMEEMHEH_00059)
Sensor histidine kinase RcsC (FMEEMHEH_00056)
Ulvan-active sulfatase (FMEEMHEH_00068)
ATP-dependent DNA helicase Rep (FMEEMHEH_00055)
AslA (VF0238) (FMEEMHEH_00061)
Beta-xylosidase (FMEEMHEH_00066)
54 58 60 62 63 64 65
IMGPR_plasmid_3300029234_000111 39171:69049(+)
2,3-bisphosphoglycerate-independent phosphoglycerate mutase (FDNBMNPP_00069)
IS3 family transposase ISPg5 (FDNBMNPP_00066)
DEDDh_I_II_III_IV_V_VI_1 (FDNBMNPP_00063)
WYL_I_II_III_IV_V_VI_4 (FDNBMNPP_00065)
57
54 55 56 58 59 60 61 62 64 67 68
IMGPR_plasmid_3300029195_000067 38911:59403(+)
Putative inner membrane protein (DUF1819) (AGNNABEE_00009)
BREX_brxL (AGNNABEE_00002)
BREX_brxC (AGNNABEE_00007)
BREX_pglZA (AGNNABEE_00003)
8
BREX_pglX1 (AGNNABEE_00006)
5 4 1
IMGPR_plasmid_3300023505_000079 5:24310(-)
IS1380 family transposase IS613 (JJLLKFBO_00075)
Retron_VI_HTH (JJLLKFBO_00070)
67 68 69 71 72 73 74 76
Cellobiose phosphorylase (JJLLKFBO_00077)
IMGPR_plasmid_3300029334_000085 49558:64351(+)
10000 nt
Defence
Virulence
AMR