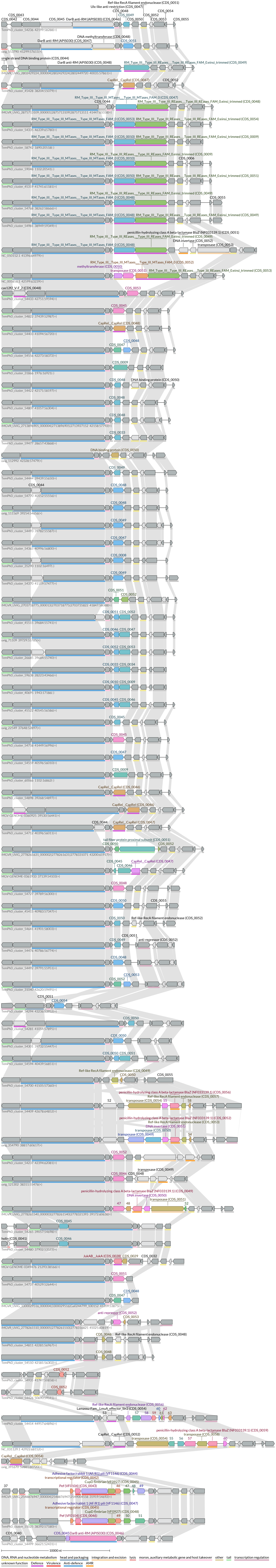
Ref-like RecA filament endonuclease (CDS_0051)
Ulx-like anti-restriction (CDS_0047)
CDS_0048
CDS_0054
CDS_0043
CDS_0049
CDS_0052
CDS_0042
CDS_0044
CDS_0045
DarB anti-RM (APIS030) (CDS_0046)
CDS_0050
CDS_0053
CDS_0055
TemPhD_cluster_54236 42199:58288(+)
DNA methyltransferase (CDS_0048)
DarB anti-RM (APIS030) (CDS_0047)
CDS_0051
uvig_553790 41299:57611(+)
single strand DNA binding protein (CDS_0044)
DarB anti-RM (APIS030) (CDS_0048)
RM_Type_III__Type_III_REases__Type_III_REases_FAM_0.einsi_trimmed (CDS_0049)
IMGVR_UViG_2802429224_000004|2802429224|2802449720 40035:57861(+)
CapRel__CapRel (CDS_0047)
CDS_0052
TemPhD_cluster_45428 38204:55079(+)
RM_Type_III__Type_III_MTases__Type_III_MTases_FAM_0 (CDS_0047)
CDS_0044
RM_Type_III__Type_III_REases__Type_III_REases_FAM_0.einsi_trimmed (CDS_0048)
IMGVR_UViG_2875713109_000001|2875713109|2875713111 41447:61038(+)
RM_Type_III__Type_III_MTases__Type_III_MTases_FAM_0 (CDS_0053)
RM_Type_III__Type_III_REases__Type_III_REases_FAM_0.einsi_trimmed (CDS_0054)
TemPhD_cluster_54335 46339:65780(+)
RM_Type_III__Type_III_MTases__Type_III_MTases_FAM_0 (CDS_0010)
RM_Type_III__Type_III_REases__Type_III_REases_FAM_0.einsi_trimmed (CDS_0009)
TemPhD_cluster_58742 1890:20518(-)
RM_Type_III__Type_III_REases__Type_III_REases_FAM_0.einsi_trimmed (CDS_0009)
RM_Type_III__Type_III_MTases__Type_III_MTases_FAM_0 (CDS_0010)
CDS_0006
TemPhD_cluster_59048 1102:20541(-)
RM_Type_III__Type_III_MTases__Type_III_MTases_FAM_0 (CDS_0050)
RM_Type_III__Type_III_REases__Type_III_REases_FAM_0.einsi_trimmed (CDS_0051)
TemPhD_cluster_45319 41741:61181(+)
RM_Type_III__Type_III_REases__Type_III_REases_FAM_0.einsi_trimmed (CDS_0049)
RM_Type_III__Type_III_MTases__Type_III_MTases_FAM_0 (CDS_0048)
CDS_0055
TemPhD_cluster_54768 38262:58666(+)
RM_Type_III__Type_III_MTases__Type_III_MTases_FAM_0 (CDS_0048)
RM_Type_III__Type_III_REases__Type_III_REases_FAM_0.einsi_trimmed (CDS_0049)
TemPhD_cluster_54981 38949:59349(+)
penicillin-hydrolyzing class A beta-lactamase BlaZ (NF033139.1) (CDS_0051)
RM_Type_III__Type_III_REases__Type_III_REases_FAM_0.einsi_trimmed (CDS_0049)
DNA invertase (CDS_0052)
RM_Type_III__Type_III_MTases__Type_III_MTases_FAM_0 (CDS_0048)
transposase (CDS_0053)
NC_050152.1 41396:64979(+)
RM_Type_III__Type_III_MTases__Type_III_MTases_FAM_0 (CDS_0052)
methyltransferase (CDS_0050)
transposase (CDS_0051)
RM_Type_III__Type_III_REases__Type_III_REases_FAM_0.einsi_trimmed (CDS_0053)
NC_005856.1 42599:63239(+)
cas12f2_V-F_2 (CDS_0048)
CDS_0053
TemPhD_cluster_54433 42751:59594(+)
CDS_0045
TemPhD_cluster_54822 37439:52987(+)
CapRel__CapRel (CDS_0048)
TemPhD_cluster_54403 41094:56720(+)
CDS_0048
CDS_0047
TemPhD_cluster_54556 42273:58372(+)
CDS_0009
TemPhD_cluster_31866 1976:16921(-)
CDS_0048
DNA binding protein (CDS_0050)
TemPhD_cluster_54422 42171:58197(+)
CDS_0048
TemPhD_cluster_54807 41057:56304(+)
CDS_0048
IMGVR_UViG_2713896905_000004|2713896905|2713927152 42158:57792(+)
CDS_0033
TemPhD_cluster_59477 28657:43868(+)
DNA binding protein (CDS_0050)
uvig_112992 42328:57479(+)
CDS_0049
TemPhD_cluster_54444 39439:55650(+)
CDS_0044
CDS_0048
TemPhD_cluster_54770 40152:55556(+)
CDS_0048
uvig_111569 39254:54656(+)
CDS_0049
TemPhD_cluster_54493 39782:55587(+)
CDS_0047
TemPhD_cluster_54365 40996:56800(+)
CDS_0008
TemPhD_cluster_35290 1102:16497(-)
CDS_0049
TemPhD_cluster_54370 41119:57477(+)
CDS_0051
CDS_0052
IMGVR_UViG_2703718775_000013|2703718775|2703735822 41847:58088(+)
CDS_0051 CDS_0052
TemPhD_cluster_45515 39684:55741(+)
CDS_0046 CDS_0047
uvig_71109 39729:55785(+)
CDS_0052 CDS_0053
TemPhD_cluster_26685 39684:55740(+)
CDS_0033 CDS_0034
TemPhD_cluster_59638 28223:43466(+)
CDS_0010 CDS_0009
TemPhD_cluster_40695 1943:17186(-)
CDS_0045 CDS_0046
TemPhD_cluster_45522 40545:56586(+)
CDS_0045
uvig_22549 37648:52897(+)
CDS_0045
TemPhD_cluster_54758 41449:56996(+)
CDS_0047
TemPhD_cluster_54559 40596:56010(+)
CDS_0009
TemPhD_cluster_60066 1102:16862(-)
CapRel__CapRel (CDS_0046)
TemPhD_cluster_54898 39268:54897(+)
CapRel__CapRel (CDS_0046)
MGV-GENOME-0360925 39530:56441(+)
CDS_0044
CapRel__CapRel (CDS_0047)
TemPhD_cluster_54712 40396:56011(+)
tail fiber protein proximal subunit (CDS_0051)
CDS_0050
CDS_0052
IMGVR_UViG_2778261631_000002|2778261631|2778331071 43200:61917(+)
CDS_0045
CapRel__CapRel (CDS_0047)
CDS_0046
MGV-GENOME-0361933 37139:54103(+)
CDS_0048
TemPhD_cluster_54727 39789:56300(+)
CDS_0050
CDS_0055
TemPhD_cluster_45415 40983:57347(+)
CDS_0050
Ref-like RecA filament endonuclease (CDS_0052)
TemPhD_cluster_54641 41901:58003(+)
CDS_0051
CDS_0049
anti-repressor (CDS_0052)
TemPhD_cluster_54476 40786:56774(+)
CDS_0048
TemPhD_cluster_54492 39791:55951(+)
CDS_0053
CDS_0052
TemPhD_cluster_31040 42620:59495(+)
CDS_0051
CDS_0054
TemPhD_cluster_54294 43236:53952(+)
CDS_0050
TemPhD_cluster_54281 41054:57895(+)
CDS_0050
TemPhD_cluster_54301 39732:55447(+)
CDS_0050 CDS_0051
TemPhD_cluster_54594 40439:56851(+)
Ref-like RecA filament endonuclease (CDS_0049)
CDS_0050
CDS_0055
TemPhD_cluster_54700 41505:57360(+)
penicillin-hydrolyzing class A beta-lactamase BlaZ (NF033139.1) (CDS_0056)
Ref-like RecA filament endonuclease (CDS_0057)
52
transposase (CDS_0054)
55
58
TemPhD_cluster_54409 42678:64852(+)
penicillin-hydrolyzing class A beta-lactamase BlaZ (NF033139.1) (CDS_0052)
Ref-like RecA filament endonuclease (CDS_0053)
DNA invertase (CDS_0051)
transposase (CDS_0050)
transposase (CDS_0049)
54
uvig_354790 38817:60617(+)
CDS_0052
TemPhD_cluster_54237 42394:62081(+)
transposase (CDS_0049)
CDS_0046
CDS_0048
uvig_121302 38311:55476(+)
penicillin-hydrolyzing class A beta-lactamase BlaZ (NF033139.1) (CDS_0049)
DNA invertase (CDS_0050)
transposase (CDS_0051)
47
48
52
IMGVR_UViG_2778261540_000003|2778261540|2778321393 39172:60636(+)
CDS_0045
TemPhD_cluster_54265 39057:54698(+)
holin (CDS_0041)
CDS_0046
TemPhD_cluster_54480 37902:53522(+)
JukAB__JukA (CDS_0028)
CDS_0029
CDS_0032
MGV-GENOME-0349476 21293:38166(+)
CDS_0051
TemPhD_cluster_54737 40529:52644(+)
CDS_0048
CDS_0047
IMGVR_UViG_3300029516_000004|3300029516|Ga0244799_100152 41209:53875(+)
anti-repressor (CDS_0052)
CDS_0053
IMGVR_UViG_2778261510_000005|2778261510|2778316825 45025:60819(+)
CDS_0046
Ref-like RecA filament endonuclease (CDS_0048)
TemPhD_cluster_54811 42281:56967(+)
CDS_0048
TemPhD_cluster_54510 42181:56302(+)
CDS_0052
TemPhD_cluster_54935 41747:50858(+)
CDS_0052
TemPhD_cluster_54426 50690:59593(+)
Ref-like RecA filament endonuclease (CDS_0056)
Lamassu-Fam__LmuA_effector_Sir2 (CDS_0054)
53
57
58
59
60
61
62
63
TemPhD_cluster_54414 44957:64896(+)
penicillin-hydrolyzing class A beta-lactamase BlaZ (NF033139.1) (CDS_0059)
CapRel__CapRel (CDS_0052)
transposase (CDS_0058)
transposase (CDS_0054)
55
56
57
60
NC_031129.1 42922:68152(+)
CapRel__CapRel (CDS_0054)
uvig_391670 52881:60720(+)
Adhesive factor/rabbit 1 (AF/R1) pili (VF1146) (CDS_0044)
transcriptional regulator (CDS_0042)
CupD fimbriae (VF0927) (CDS_0045)
37
Pef (VF0104) (CDS_0043)
46
47
48
49
IMGVR_UViG_2548876947_000004|2548876947|2549004558 35919:54692(+)
Adhesive factor/rabbit 1 (AF/R1) pili (VF1146) (CDS_0047)
transcriptional regulator (CDS_0045)
CupD fimbriae (VF0927) (CDS_0048)
Pef (VF0104) (CDS_0046)
49
50
51
TemPhD_cluster_55025 38392:57180(+)
CDS_0040
CDS_0045
DarB anti-RM (APIS030) (CDS_0046)
TemPhD_cluster_54499 36621:52431(+)
10000 nt
DNA, RNA and nucleotide metabolism
head and packaging
integration and excision
lysis
moron, auxiliary metabolic gene and host takeover
other
tail
transcription regulation
unknown function
Defence
Virulence
Anti-defence
AMR