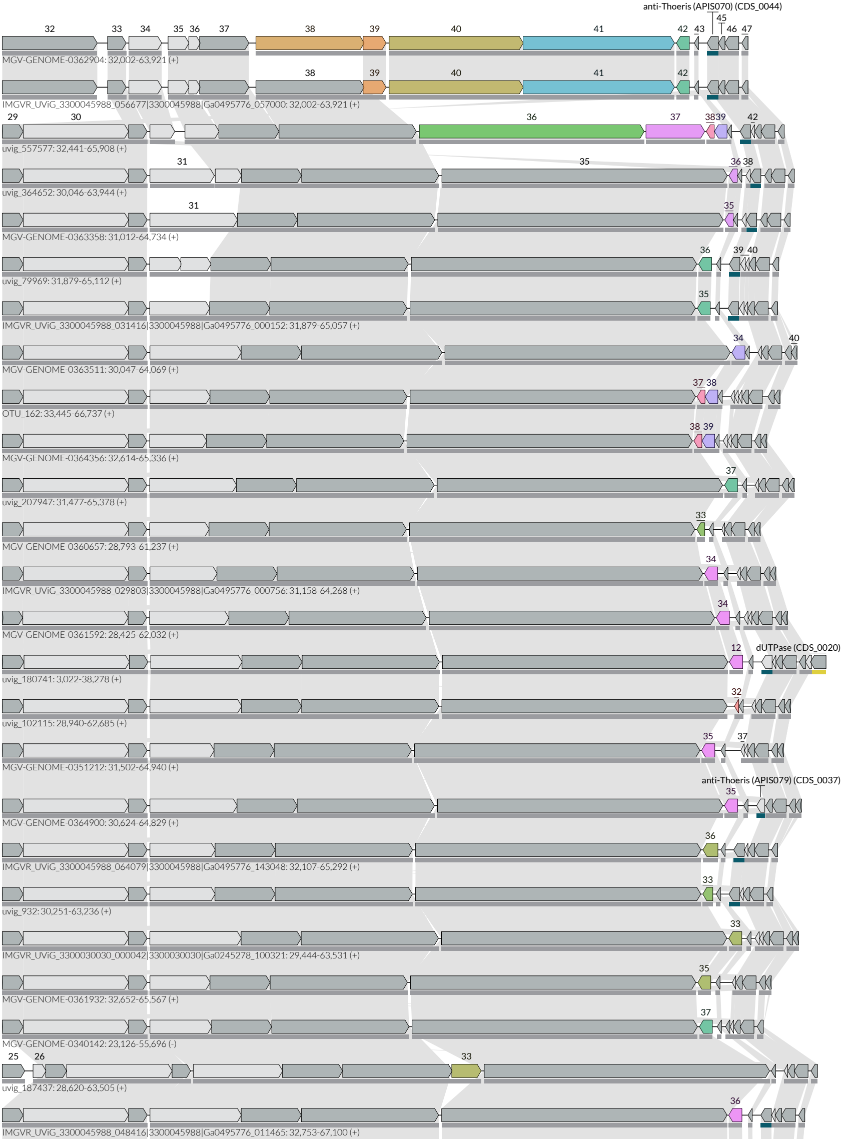
anti-Thoeris (APIS070) (CDS_0044)
32
33
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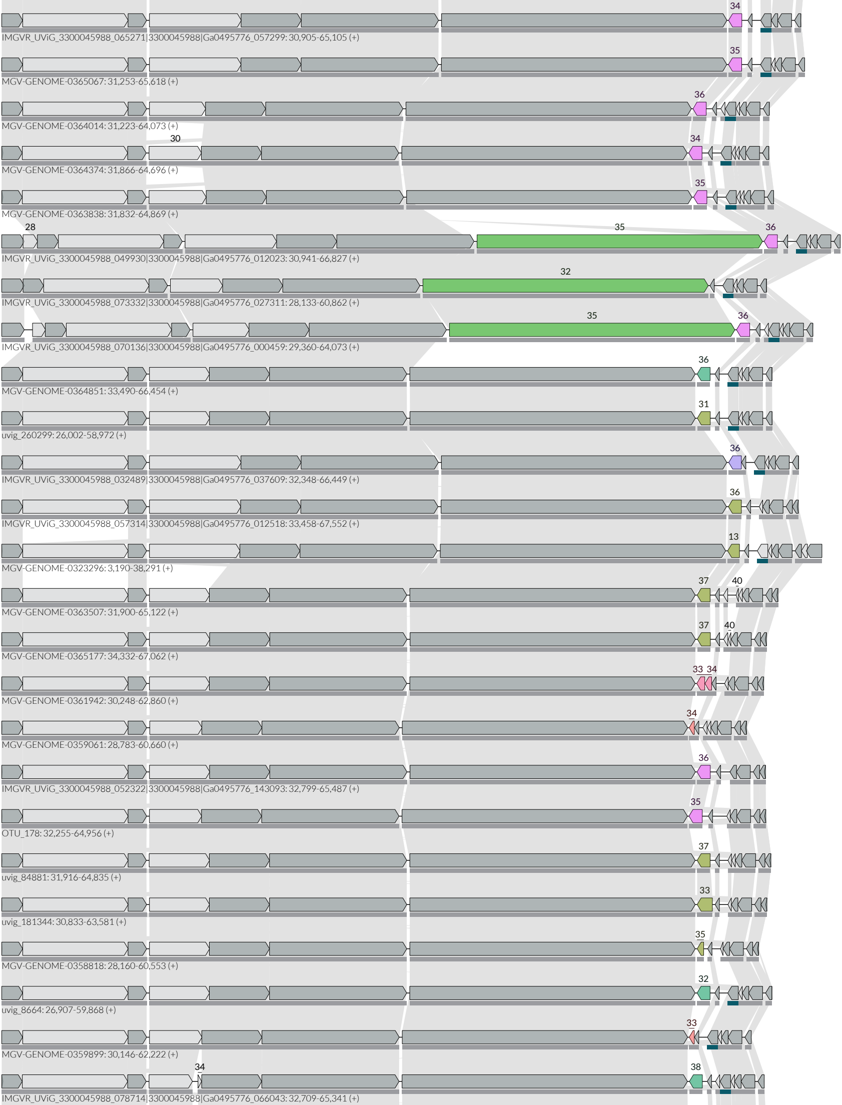
40
41
42
43
45
46
47
MGV-GENOME-0362904: 32,002-63,921 (+)
38
39
40
41
42
IMGVR_UViG_3300045988_056677|3300045988|Ga0495776_057000: 32,002-63,921 (+)
29
30
36
37
38
39
42
uvig_557577: 32,441-65,908 (+)
31
35
36
38
uvig_364652: 30,046-63,944 (+)
31
35
MGV-GENOME-0363358: 31,012-64,734 (+)
36
39
40
uvig_79969: 31,879-65,112 (+)
35
IMGVR_UViG_3300045988_031416|3300045988|Ga0495776_000152: 31,879-65,057 (+)
34
40
MGV-GENOME-0363511: 30,047-64,069 (+)
37
38
OTU_162: 33,445-66,737 (+)
38
39
MGV-GENOME-0364356: 32,614-65,336 (+)
37
uvig_207947: 31,477-65,378 (+)
33
MGV-GENOME-0360657: 28,793-61,237 (+)
34
IMGVR_UViG_3300045988_029803|3300045988|Ga0495776_000756: 31,158-64,268 (+)
34
MGV-GENOME-0361592: 28,425-62,032 (+)
12
dUTPase (CDS_0020)
uvig_180741: 3,022-38,278 (+)
32
uvig_102115: 28,940-62,685 (+)
35
37
MGV-GENOME-0351212: 31,502-64,940 (+)
anti-Thoeris (APIS079) (CDS_0037)
35
MGV-GENOME-0364900: 30,624-64,829 (+)
36
IMGVR_UViG_3300045988_064079|3300045988|Ga0495776_143048: 32,107-65,292 (+)
33
uvig_932: 30,251-63,236 (+)
33
IMGVR_UViG_3300030030_000042|3300030030|Ga0245278_100321: 29,444-63,531 (+)
35
MGV-GENOME-0361932: 32,652-65,567 (+)
37
MGV-GENOME-0340142: 23,126-55,696 (-)
25
26
33
uvig_187437: 28,620-63,505 (+)
36
IMGVR_UViG_3300045988_048416|3300045988|Ga0495776_011465: 32,753-67,100 (+)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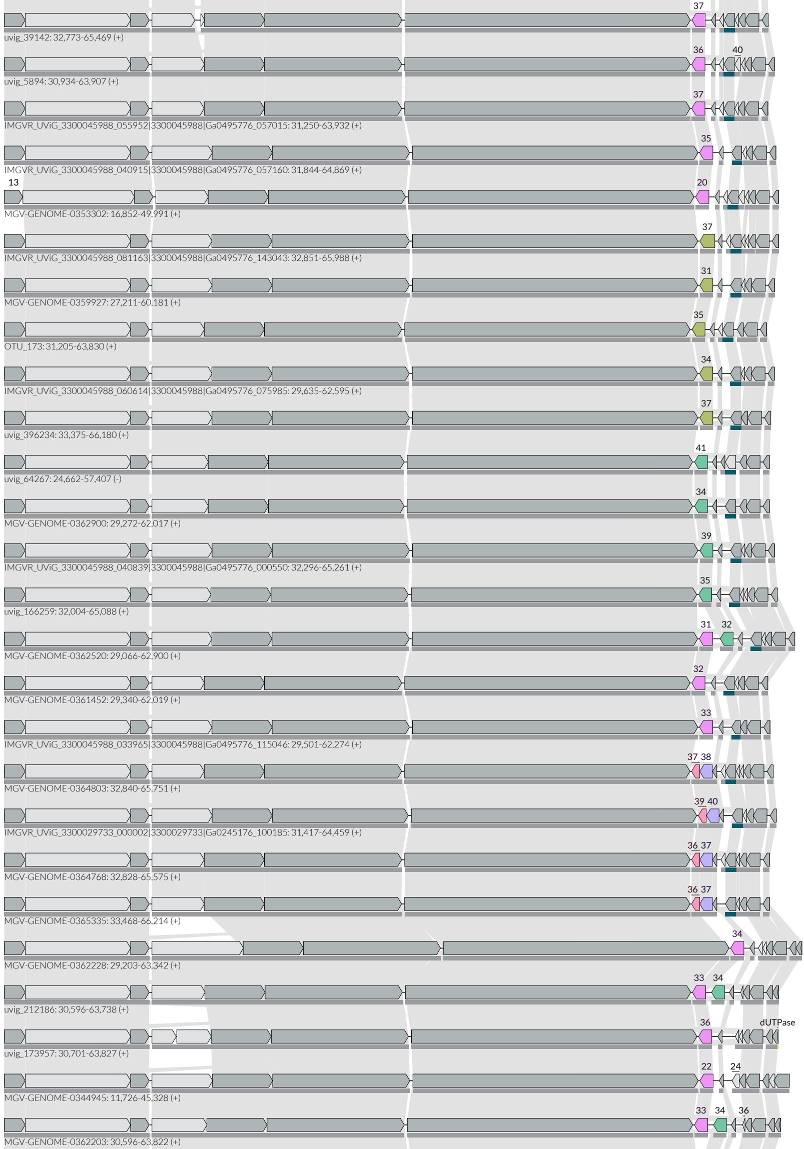
IMGVR_UViG_3300045988_065271|3300045988|Ga0495776_057299: 30,905-65,105 (+)
35
MGV-GENOME-0365067: 31,253-65,618 (+)
36
MGV-GENOME-0364014: 31,223-64,073 (+)
30
34
MGV-GENOME-0364374: 31,866-64,696 (+)
35
MGV-GENOME-0363838: 31,832-64,869 (+)
28
35
36
IMGVR_UViG_3300045988_049930|3300045988|Ga0495776_012023: 30,941-66,827 (+)
32
IMGVR_UViG_3300045988_073332|3300045988|Ga0495776_027311: 28,133-60,862 (+)
35
36
IMGVR_UViG_3300045988_070136|3300045988|Ga0495776_000459: 29,360-64,073 (+)
36
MGV-GENOME-0364851: 33,490-66,454 (+)
31
uvig_260299: 26,002-58,972 (+)
36
IMGVR_UViG_3300045988_032489|3300045988|Ga0495776_037609: 32,348-66,449 (+)
36
IMGVR_UViG_3300045988_057314|3300045988|Ga0495776_012518: 33,458-67,552 (+)
13
MGV-GENOME-0323296: 3,190-38,291 (+)
37
40
MGV-GENOME-0363507: 31,900-65,122 (+)
37
40
MGV-GENOME-0365177: 34,332-67,062 (+)
33
34
MGV-GENOME-0361942: 30,248-62,860 (+)
34
MGV-GENOME-0359061: 28,783-60,660 (+)
36
IMGVR_UViG_3300045988_052322|3300045988|Ga0495776_143093: 32,799-65,487 (+)
35
OTU_178: 32,255-64,956 (+)
37
uvig_84881: 31,916-64,835 (+)
33
uvig_181344: 30,833-63,581 (+)
35
MGV-GENOME-0358818: 28,160-60,553 (+)
32
uvig_8664: 26,907-59,868 (+)
33
MGV-GENOME-0359899: 30,146-62,222 (+)
34
38
IMGVR_UViG_3300045988_078714|3300045988|Ga0495776_066043: 32,709-65,341 (+)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uvig_39142: 32,773-65,469 (+)
36
40
uvig_5894: 30,934-63,907 (+)
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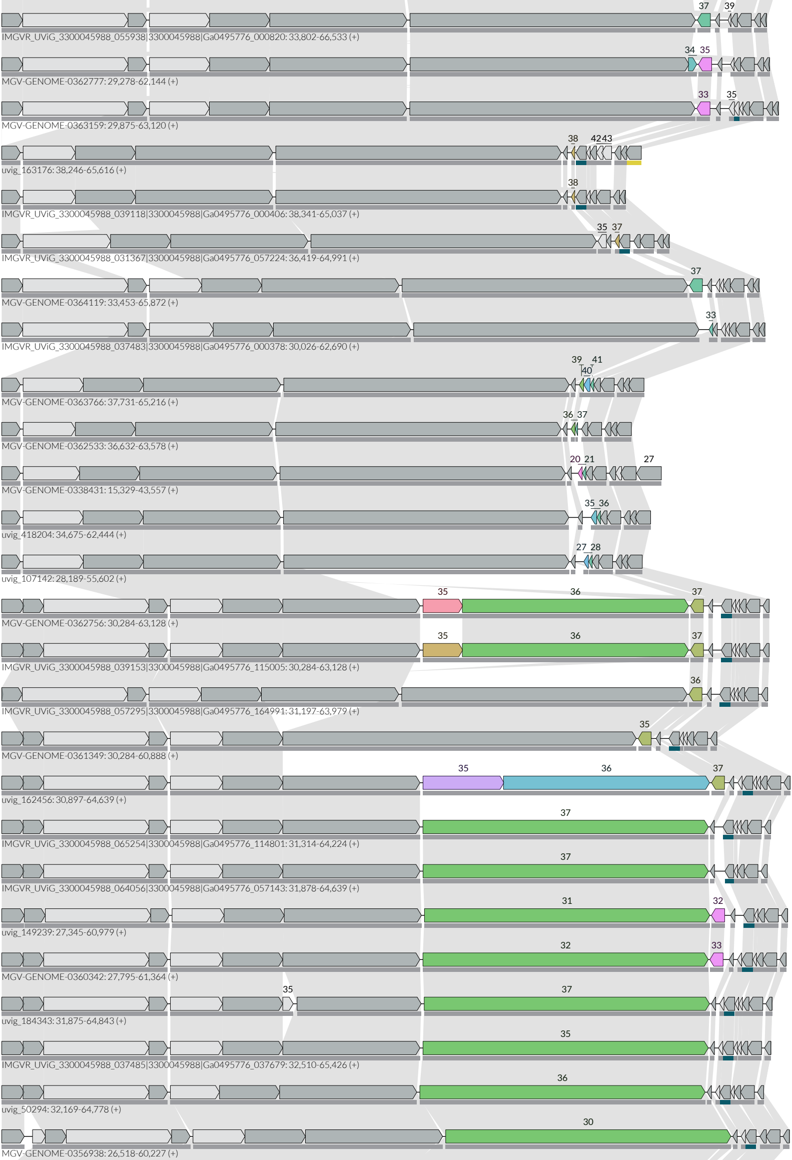
IMGVR_UViG_3300045988_055952|3300045988|Ga0495776_057015: 31,250-63,932 (+)
35
IMGVR_UViG_3300045988_040915|3300045988|Ga0495776_057160: 31,844-64,869 (+)
13
20
MGV-GENOME-0353302: 16,852-49,991 (+)
37
IMGVR_UViG_3300045988_081163|3300045988|Ga0495776_143043: 32,851-65,988 (+)
31
MGV-GENOME-0359927: 27,211-60,181 (+)
35
OTU_173: 31,205-63,830 (+)
34
IMGVR_UViG_3300045988_060614|3300045988|Ga0495776_075985: 29,635-62,595 (+)
37
uvig_396234: 33,375-66,180 (+)
41
uvig_64267: 24,662-57,407 (-)
34
MGV-GENOME-0362900: 29,272-62,017 (+)
39
IMGVR_UViG_3300045988_040839|3300045988|Ga0495776_000550: 32,296-65,261 (+)
35
uvig_166259: 32,004-65,088 (+)
31
32
MGV-GENOME-0362520: 29,066-62,900 (+)
32
MGV-GENOME-0361452: 29,340-62,019 (+)
33
IMGVR_UViG_3300045988_033965|3300045988|Ga0495776_115046: 29,501-62,274 (+)
37
38
MGV-GENOME-0364803: 32,840-65,751 (+)
39
40
IMGVR_UViG_3300029733_000002|3300029733|Ga0245176_100185: 31,417-64,459 (+)
36
37
MGV-GENOME-0364768: 32,828-65,575 (+)
36
37
MGV-GENOME-0365335: 33,468-66,214 (+)
34
MGV-GENOME-0362228: 29,203-63,342 (+)
33
34
uvig_212186: 30,596-63,738 (+)
36
dUTPase
uvig_173957: 30,701-63,827 (+)
22
24
MGV-GENOME-0344945: 11,726-45,328 (+)
33
34
36
MGV-GENOME-0362203: 30,596-63,822 (+)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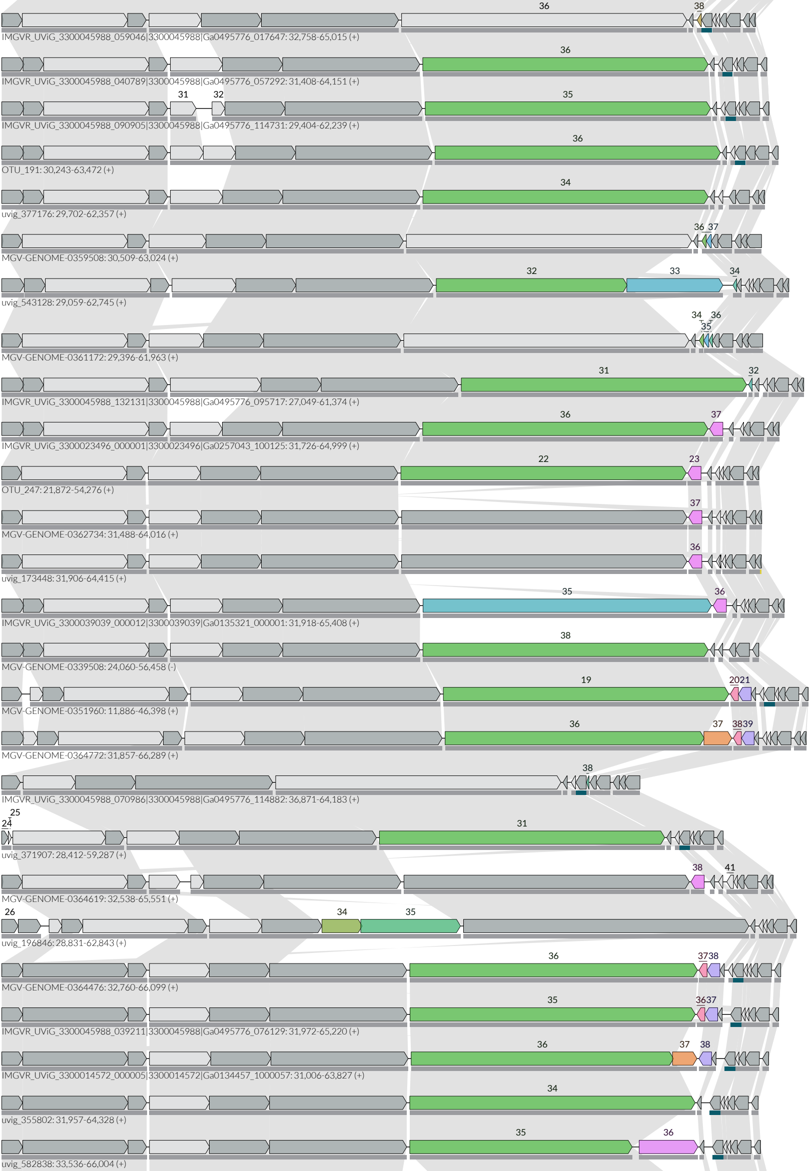
39
IMGVR_UViG_3300045988_055938|3300045988|Ga0495776_000820: 33,802-66,533 (+)
34
35
MGV-GENOME-0362777: 29,278-62,144 (+)
33
35
MGV-GENOME-0363159: 29,875-63,120 (+)
38
42
43
uvig_163176: 38,246-65,616 (+)
38
IMGVR_UViG_3300045988_039118|3300045988|Ga0495776_000406: 38,341-65,037 (+)
35
37
IMGVR_UViG_3300045988_031367|3300045988|Ga0495776_057224: 36,419-64,991 (+)
37
MGV-GENOME-0364119: 33,453-65,872 (+)
33
IMGVR_UViG_3300045988_037483|3300045988|Ga0495776_000378: 30,026-62,690 (+)
39
40
41
MGV-GENOME-0363766: 37,731-65,216 (+)
36
37
MGV-GENOME-0362533: 36,632-63,578 (+)
20
21
27
MGV-GENOME-0338431: 15,329-43,557 (+)
35
36
uvig_418204: 34,675-62,444 (+)
27
28
uvig_107142: 28,189-55,602 (+)
35
36
37
MGV-GENOME-0362756: 30,284-63,128 (+)
35
36
37
IMGVR_UViG_3300045988_039153|3300045988|Ga0495776_115005: 30,284-63,128 (+)
36
IMGVR_UViG_3300045988_057295|3300045988|Ga0495776_164991: 31,197-63,979 (+)
35
MGV-GENOME-0361349: 30,284-60,888 (+)
35
36
37
uvig_162456: 30,897-64,639 (+)
37
IMGVR_UViG_3300045988_065254|3300045988|Ga0495776_114801: 31,314-64,224 (+)
37
IMGVR_UViG_3300045988_064056|3300045988|Ga0495776_057143: 31,878-64,639 (+)
31
32
uvig_149239: 27,345-60,979 (+)
32
33
MGV-GENOME-0360342: 27,795-61,364 (+)
35
37
uvig_184343: 31,875-64,843 (+)
35
IMGVR_UViG_3300045988_037485|3300045988|Ga0495776_037679: 32,510-65,426 (+)
36
uvig_50294: 32,169-64,778 (+)
30
MGV-GENOME-0356938: 26,518-60,227 (+)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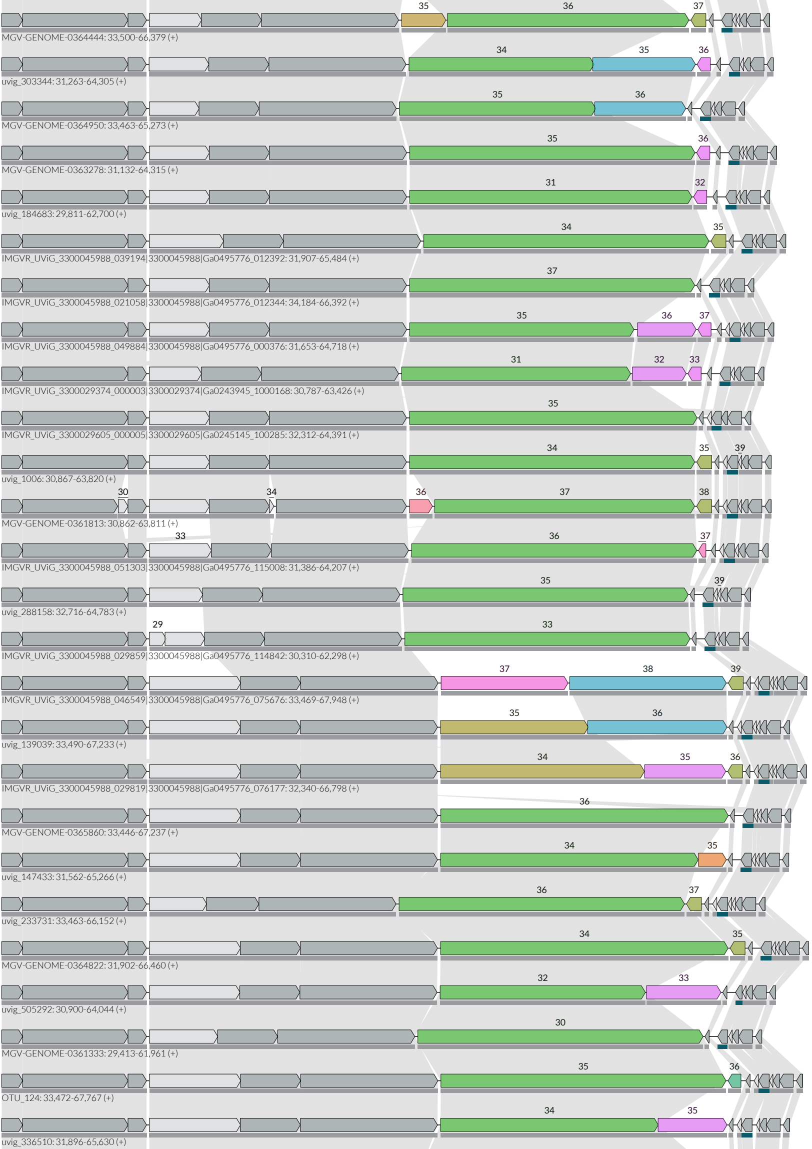
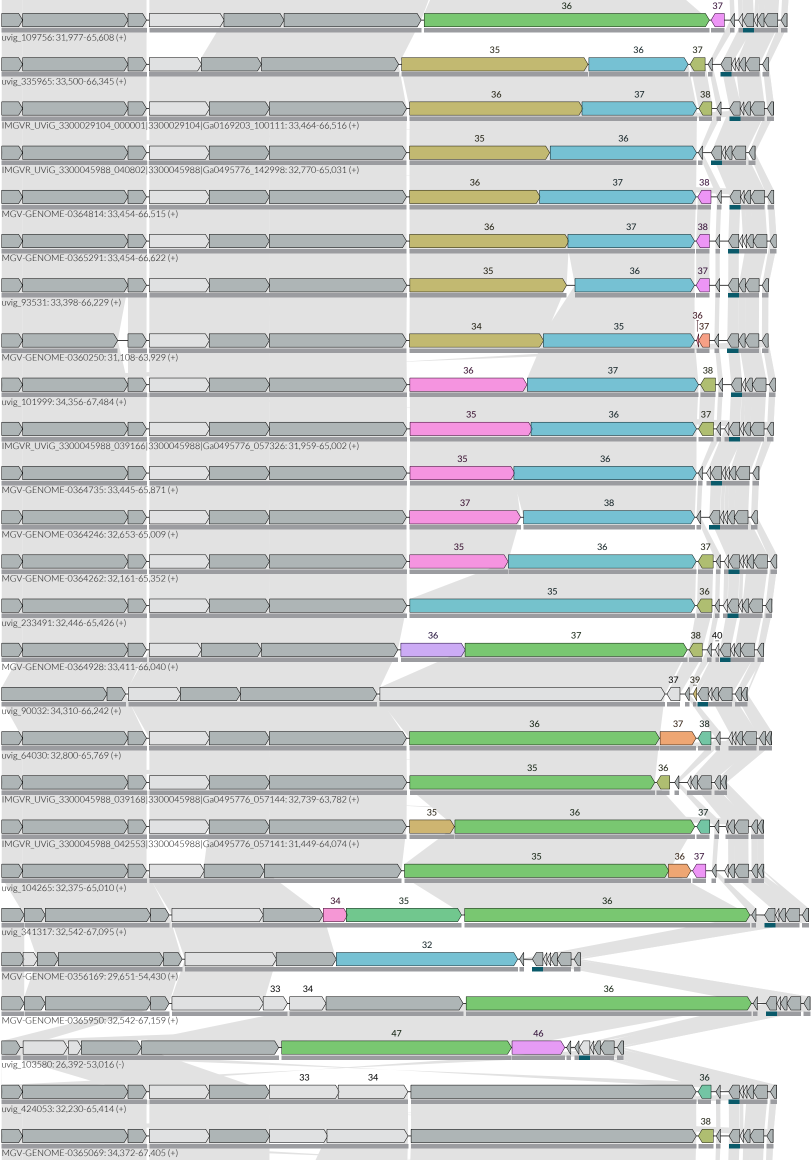
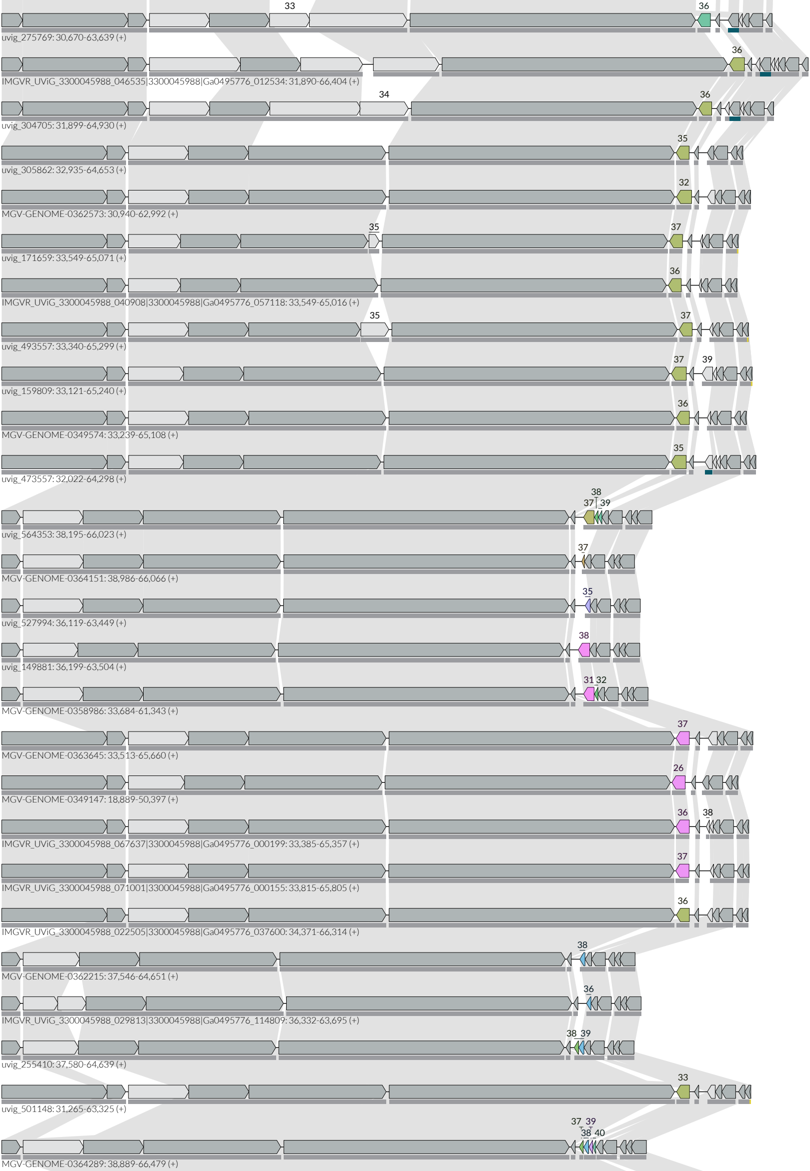
38
IMGVR_UViG_3300045988_059046|3300045988|Ga0495776_017647: 32,758-65,015 (+)
36
IMGVR_UViG_3300045988_040789|3300045988|Ga0495776_057292: 31,408-64,151 (+)
31
32
35
IMGVR_UViG_3300045988_090905|3300045988|Ga0495776_114731: 29,404-62,239 (+)
36
OTU_191: 30,243-63,472 (+)
34
uvig_377176: 29,702-62,357 (+)
36
37
MGV-GENOME-0359508: 30,509-63,024 (+)
32
33
34
uvig_543128: 29,059-62,745 (+)
34
36
35
MGV-GENOME-0361172: 29,396-61,963 (+)
31
32
IMGVR_UViG_3300045988_132131|3300045988|Ga0495776_095717: 27,049-61,374 (+)
36
37
IMGVR_UViG_3300023496_000001|3300023496|Ga0257043_100125: 31,726-64,999 (+)
22
23
OTU_247: 21,872-54,276 (+)
37
MGV-GENOME-0362734: 31,488-64,016 (+)
36
uvig_173448: 31,906-64,415 (+)
35
36
IMGVR_UViG_3300039039_000012|3300039039|Ga0135321_000001: 31,918-65,408 (+)
38
MGV-GENOME-0339508: 24,060-56,458 (-)
19
20
21
MGV-GENOME-0351960: 11,886-46,398 (+)
36
37
38
39
MGV-GENOME-0364772: 31,857-66,289 (+)
38
IMGVR_UViG_3300045988_070986|3300045988|Ga0495776_114882: 36,871-64,183 (+)
25
24
31
uvig_371907: 28,412-59,287 (+)
38
41
MGV-GENOME-0364619: 32,538-65,551 (+)
26
34
35
uvig_196846: 28,831-62,843 (+)
36
37
38
MGV-GENOME-0364476: 32,760-66,099 (+)
35
36
37
IMGVR_UViG_3300045988_039211|3300045988|Ga0495776_076129: 31,972-65,220 (+)
36
37
38
IMGVR_UViG_3300014572_000005|3300014572|Ga0134457_1000057: 31,006-63,827 (+)
34
uvig_355802: 31,957-64,328 (+)
35
36
uvig_582838: 33,536-66,004 (+)


35
36
37
MGV-GENOME-0364444: 33,500-66,379 (+)
34
35
36
uvig_303344: 31,263-64,305 (+)
35
36
MGV-GENOME-0364950: 33,463-65,273 (+)
35
36
MGV-GENOME-0363278: 31,132-64,315 (+)
31
32
uvig_184683: 29,811-62,700 (+)
34
35
IMGVR_UViG_3300045988_039194|3300045988|Ga0495776_012392: 31,907-65,484 (+)
37
IMGVR_UViG_3300045988_021058|3300045988|Ga0495776_012344: 34,184-66,392 (+)
35
36
37
IMGVR_UViG_3300045988_049884|3300045988|Ga0495776_000376: 31,653-64,718 (+)
31
32
33
IMGVR_UViG_3300029374_000003|3300029374|Ga0243945_1000168: 30,787-63,426 (+)
35
IMGVR_UViG_3300029605_000005|3300029605|Ga0245145_100285: 32,312-64,391 (+)
34
35
39
uvig_1006: 30,867-63,820 (+)
30
34
36
37
38
MGV-GENOME-0361813: 30,862-63,811 (+)
33
36
37
IMGVR_UViG_3300045988_051303|3300045988|Ga0495776_115008: 31,386-64,207 (+)
35
39
uvig_288158: 32,716-64,783 (+)
29
33
IMGVR_UViG_3300045988_029859|3300045988|Ga0495776_114842: 30,310-62,298 (+)
37
38
39
IMGVR_UViG_3300045988_046549|3300045988|Ga0495776_075676: 33,469-67,948 (+)
35
36
uvig_139039: 33,490-67,233 (+)
34
35
36
IMGVR_UViG_3300045988_029819|3300045988|Ga0495776_076177: 32,340-66,798 (+)
36
MGV-GENOME-0365860: 33,446-67,237 (+)
34
35
uvig_147433: 31,562-65,266 (+)
36
37
uvig_233731: 33,463-66,152 (+)
34
35
MGV-GENOME-0364822: 31,902-66,460 (+)
32
33
uvig_505292: 30,900-64,044 (+)
30
MGV-GENOME-0361333: 29,413-61,961 (+)
35
36
OTU_124: 33,472-67,767 (+)
34
35
uvig_336510: 31,896-65,630 (+)


36 37
uvig_109756: 31,977-65,608 (+)
35 36 37
uvig_335965: 33,500-66,345 (+)
36 37 38
IMGVR_UViG_3300029104_000001|3300029104|Ga0169203_100111: 33,464-66,516 (+)
35 36
IMGVR_UViG_3300045988_040802|3300045988|Ga0495776_142998: 32,770-65,031 (+)
36 37 38
MGV-GENOME-0364814: 33,454-66,515 (+)
36 37 38
MGV-GENOME-0365291: 33,454-66,622 (+)
35 36 37
uvig_93531: 33,398-66,229 (+)
34 35 36 37
MGV-GENOME-0360250: 31,108-63,929 (+)
36 37 38
uvig_101999: 34,356-67,484 (+)
35 36 37
IMGVR_UViG_3300045988_039166|3300045988|Ga0495776_057326: 31,959-65,002 (+)
35 36
MGV-GENOME-0364735: 33,445-65,871 (+)
37 38
MGV-GENOME-0364246: 32,653-65,009 (+)
35 36 37
MGV-GENOME-0364262: 32,161-65,352 (+)
35 36
uvig_233491: 32,446-65,426 (+)
36 37 38 40
MGV-GENOME-0364928: 33,411-66,040 (+)
37 39
uvig_90032: 34,310-66,242 (+)
36 37 38
uvig_64030: 32,800-65,769 (+)
35 36
IMGVR_UViG_3300045988_039168|3300045988|Ga0495776_057144: 32,739-63,782 (+)
35 36 37
IMGVR_UViG_3300045988_042553|3300045988|Ga0495776_057141: 31,449-64,074 (+)
35 36 37
uvig_104265: 32,375-65,010 (+)
34 35 36
uvig_341317: 32,542-67,095 (+)
32
MGV-GENOME-0356169: 29,651-54,430 (+)
33 34 36
MGV-GENOME-0365950: 32,542-67,159 (+)
47 46
uvig_103580: 26,392-53,016 (-)
33 34 36
uvig_424053: 32,230-65,414 (+)
38
MGV-GENOME-0365069: 34,372-67,405 (+)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36
uvig_275769: 30,670-63,639 (+)
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IMGVR_UViG_3300045988_046535|3300045988|Ga0495776_012534: 31,890-66,404 (+)
34
36
uvig_304705: 31,899-64,930 (+)
35
uvig_305862: 32,935-64,653 (+)
32
MGV-GENOME-0362573: 30,940-62,992 (+)
35
37
uvig_171659: 33,549-65,071 (+)
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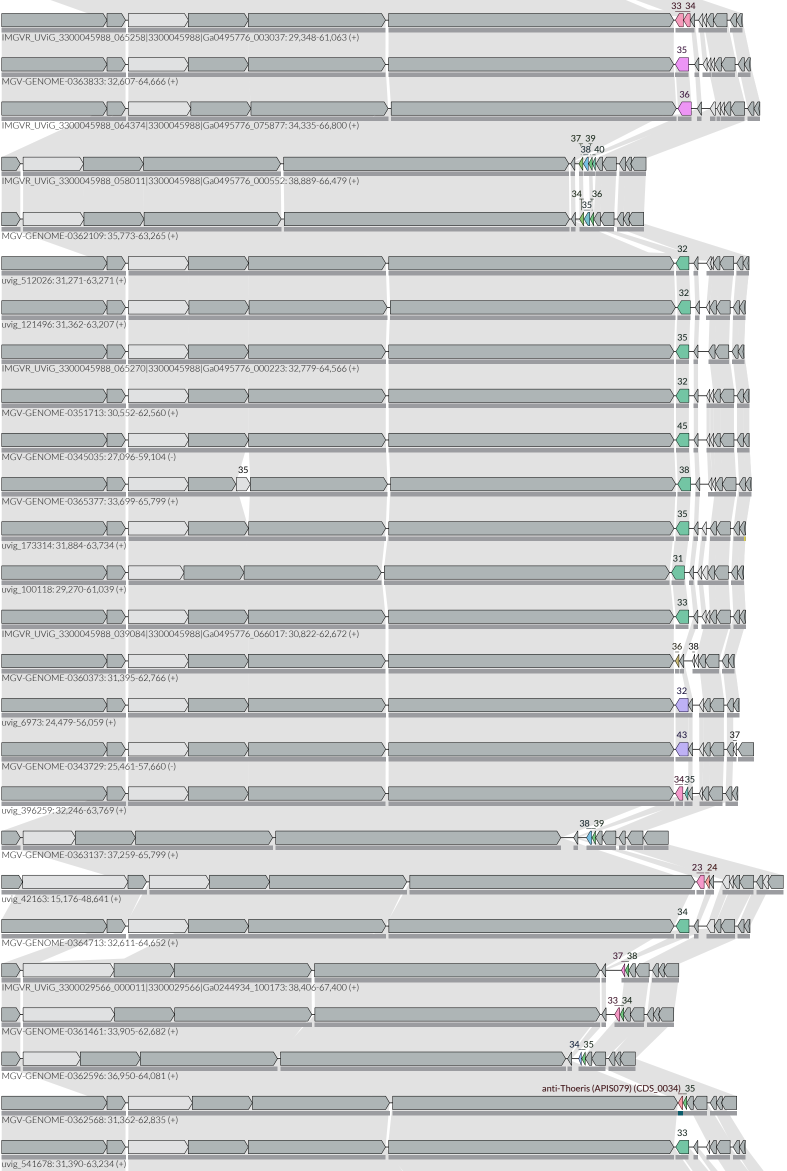
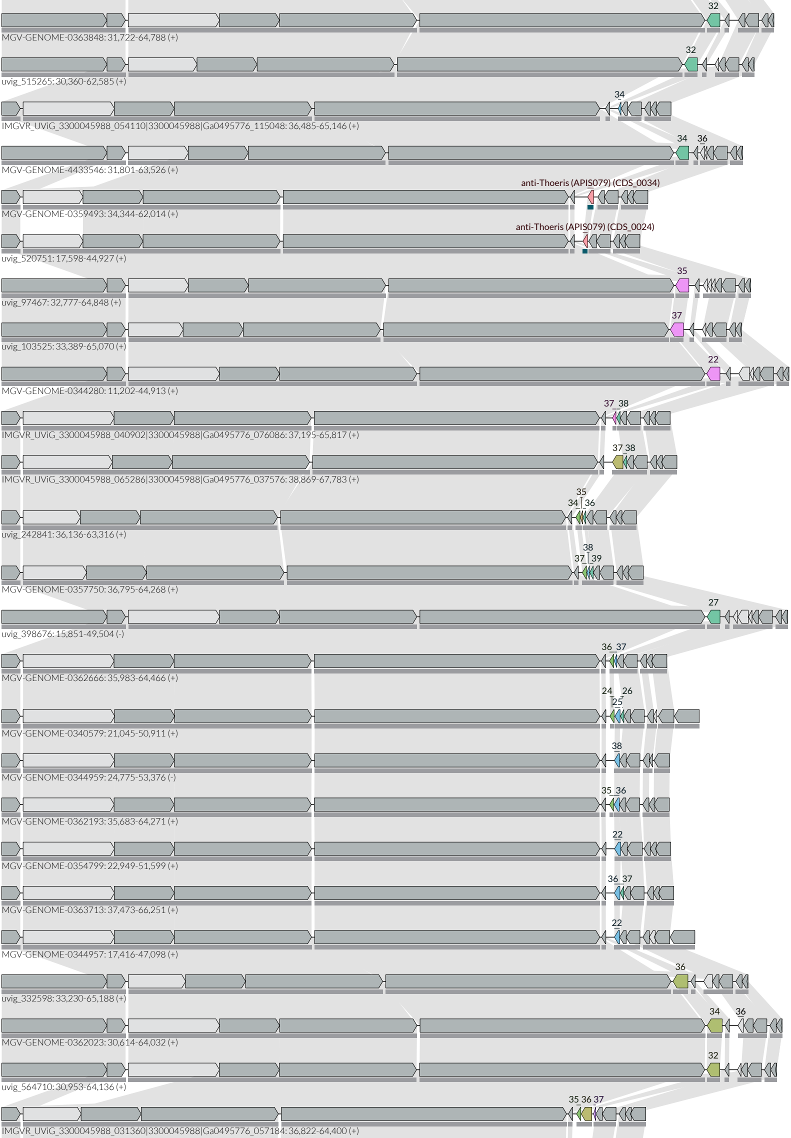
IMGVR_UViG_3300045988_040908|3300045988|Ga0495776_057118: 33,549-65,016 (+)
35
37
uvig_493557: 33,340-65,299 (+)
37
39
uvig_159809: 33,121-65,240 (+)
36
MGV-GENOME-0349574: 33,239-65,108 (+)
35
uvig_473557: 32,022-64,298 (+)
38
37
39
uvig_564353: 38,195-66,023 (+)
37
MGV-GENOME-0364151: 38,986-66,066 (+)
35
uvig_527994: 36,119-63,449 (+)
38
uvig_149881: 36,199-63,504 (+)
31
32
MGV-GENOME-0358986: 33,684-61,343 (+)
37
MGV-GENOME-0363645: 33,513-65,660 (+)
26
MGV-GENOME-0349147: 18,889-50,397 (+)
36
38
IMGVR_UViG_3300045988_067637|3300045988|Ga0495776_000199: 33,385-65,357 (+)
37
IMGVR_UViG_3300045988_071001|3300045988|Ga0495776_000155: 33,815-65,805 (+)
36
IMGVR_UViG_3300045988_022505|3300045988|Ga0495776_037600: 34,371-66,314 (+)
38
MGV-GENOME-0362215: 37,546-64,651 (+)
36
IMGVR_UViG_3300045988_029813|3300045988|Ga0495776_114809: 36,332-63,695 (+)
38
39
uvig_255410: 37,580-64,639 (+)
33
uvig_501148: 31,265-63,325 (+)
37
39
38
40
MGV-GENOME-0364289: 38,889-66,479 (+)


33
34
IMGVR_UViG_3300045988_065258|3300045988|Ga0495776_003037: 29,348-61,063 (+)
35
MGV-GENOME-0363833: 32,607-64,666 (+)
36
IMGVR_UViG_3300045988_064374|3300045988|Ga0495776_075877: 34,335-66,800 (+)
37
39
38
40
IMGVR_UViG_3300045988_058011|3300045988|Ga0495776_000552: 38,889-66,479 (+)
34
36
35
MGV-GENOME-0362109: 35,773-63,265 (+)
32
uvig_512026: 31,271-63,271 (+)
32
uvig_121496: 31,362-63,207 (+)
35
IMGVR_UViG_3300045988_065270|3300045988|Ga0495776_000223: 32,779-64,566 (+)
32
MGV-GENOME-0351713: 30,552-62,560 (+)
45
MGV-GENOME-0345035: 27,096-59,104 (-)
35
38
MGV-GENOME-0365377: 33,699-65,799 (+)
35
uvig_173314: 31,884-63,734 (+)
31
uvig_100118: 29,270-61,039 (+)
33
IMGVR_UViG_3300045988_039084|3300045988|Ga0495776_066017: 30,822-62,672 (+)
36
38
MGV-GENOME-0360373: 31,395-62,766 (+)
32
uvig_6973: 24,479-56,059 (+)
43
37
MGV-GENOME-0343729: 25,461-57,660 (-)
34
35
uvig_396259: 32,246-63,769 (+)
38
39
MGV-GENOME-0363137: 37,259-65,799 (+)
23
24
uvig_42163: 15,176-48,641 (+)
34
MGV-GENOME-0364713: 32,611-64,652 (+)
37
38
IMGVR_UViG_3300029566_000011|3300029566|Ga0244934_100173: 38,406-67,400 (+)
33
34
MGV-GENOME-0361461: 33,905-62,682 (+)
34
35
MGV-GENOME-0362596: 36,950-64,081 (+)
anti-Thoeris (APIS079) (CDS_0034)
35
MGV-GENOME-0362568: 31,362-62,835 (+)
33
uvig_541678: 31,390-63,234 (+)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MGV-GENOME-0363848: 31,722-64,788 (+)
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uvig_515265: 30,360-62,585 (+)
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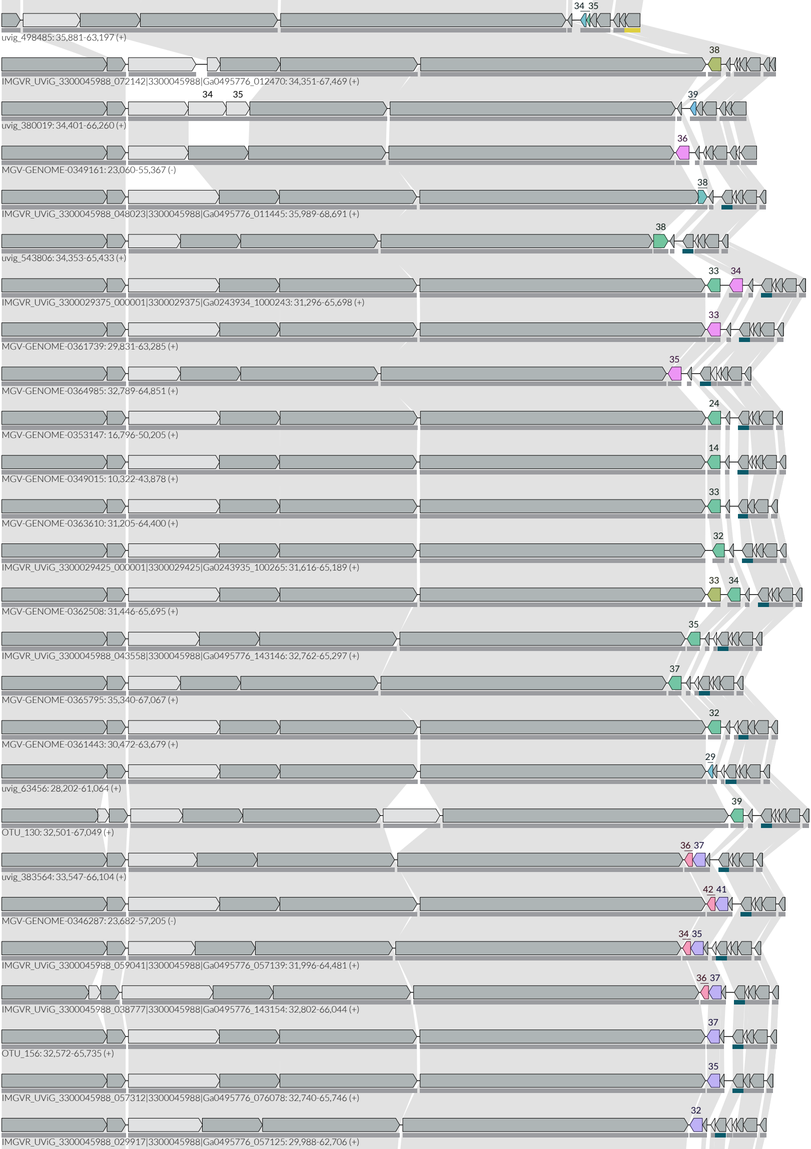
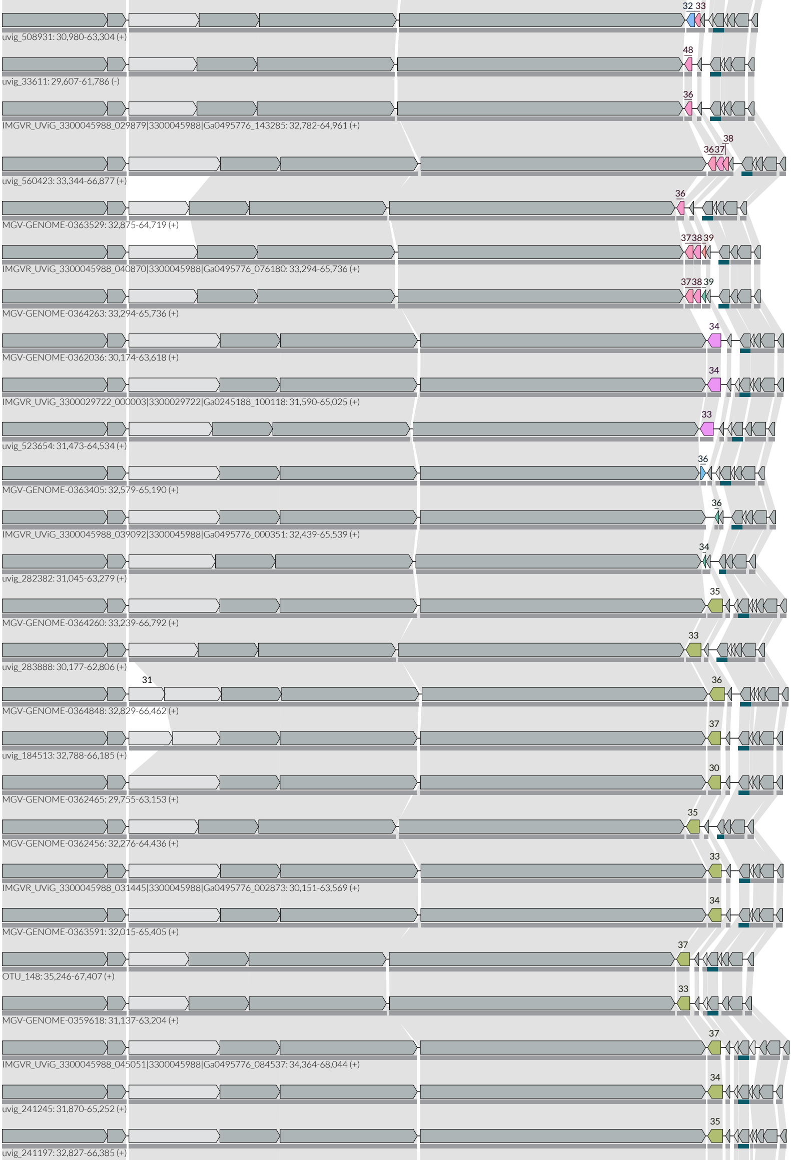
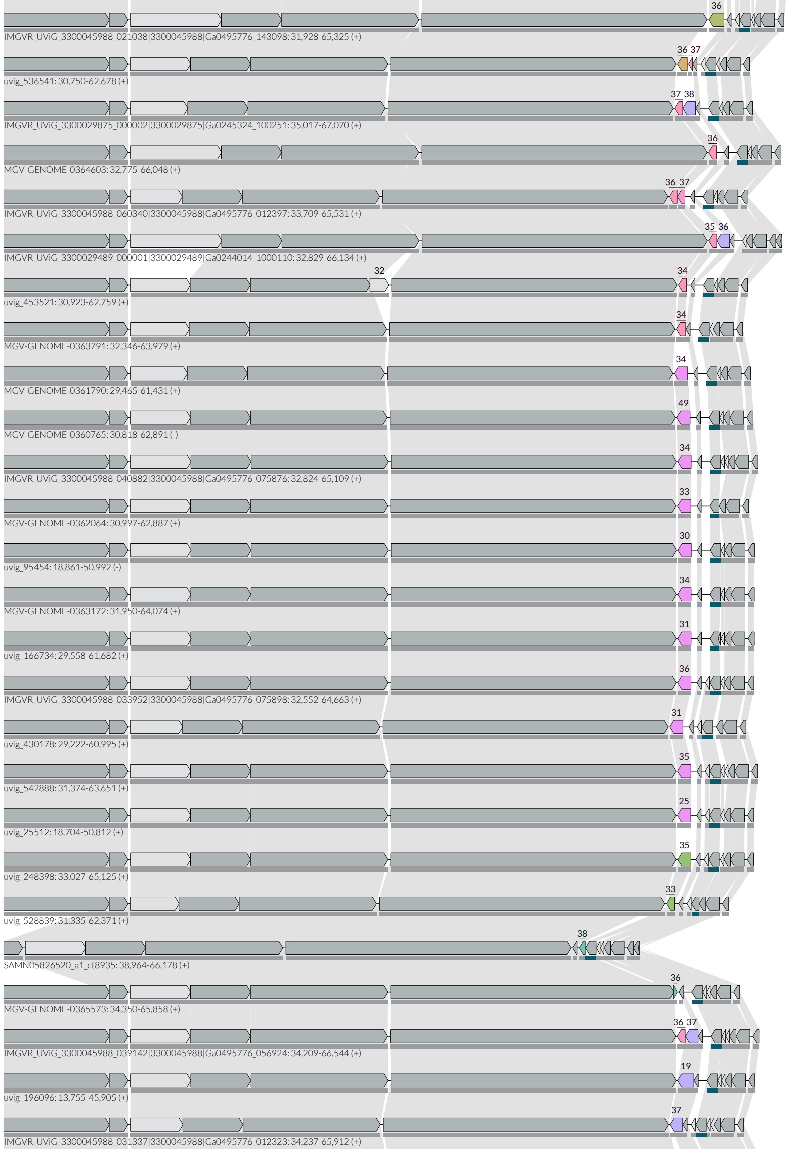
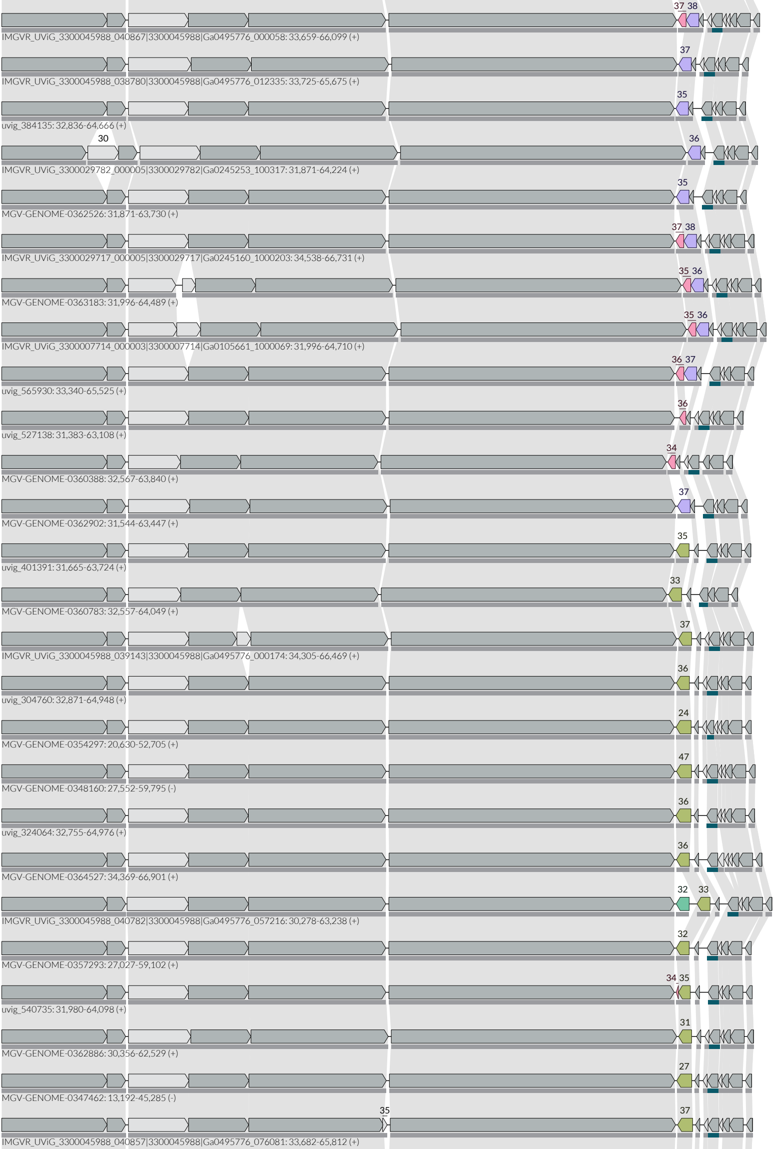
IMGVR_UViG_3300045988_054110|3300045988|Ga0495776_115048: 36,485-65,146 (+)
34
36
MGV-GENOME-4433546: 31,801-63,526 (+)
anti-Thoeris (APIS079) (CDS_0034)
MGV-GENOME-0359493: 34,344-62,014 (+)
anti-Thoeris (APIS079) (CDS_0024)
uvig_520751: 17,598-44,927 (+)
35
uvig_97467: 32,777-64,848 (+)
37
uvig_103525: 33,389-65,070 (+)
22
MGV-GENOME-0344280: 11,202-44,913 (+)
37
38
IMGVR_UViG_3300045988_040902|3300045988|Ga0495776_076086: 37,195-65,817 (+)
37
38
IMGVR_UViG_3300045988_065286|3300045988|Ga0495776_037576: 38,869-67,783 (+)
35
34
36
uvig_242841: 36,136-63,316 (+)
38
37
39
MGV-GENOME-0357750: 36,795-64,268 (+)
27
uvig_398676: 15,851-49,504 (-)
36
37
MGV-GENOME-0362666: 35,983-64,466 (+)
24
26
25
MGV-GENOME-0340579: 21,045-50,911 (+)
38
MGV-GENOME-0344959: 24,775-53,376 (-)
35
36
MGV-GENOME-0362193: 35,683-64,271 (+)
22
MGV-GENOME-0354799: 22,949-51,599 (+)
36
37
MGV-GENOME-0363713: 37,473-66,251 (+)
22
MGV-GENOME-0344957: 17,416-47,098 (+)
36
uvig_332598: 33,230-65,188 (+)
34
36
MGV-GENOME-0362023: 30,614-64,032 (+)
32
uvig_564710: 30,953-64,136 (+)
35
36
37
IMGVR_UViG_3300045988_031360|3300045988|Ga0495776_057184: 36,822-64,400 (+)

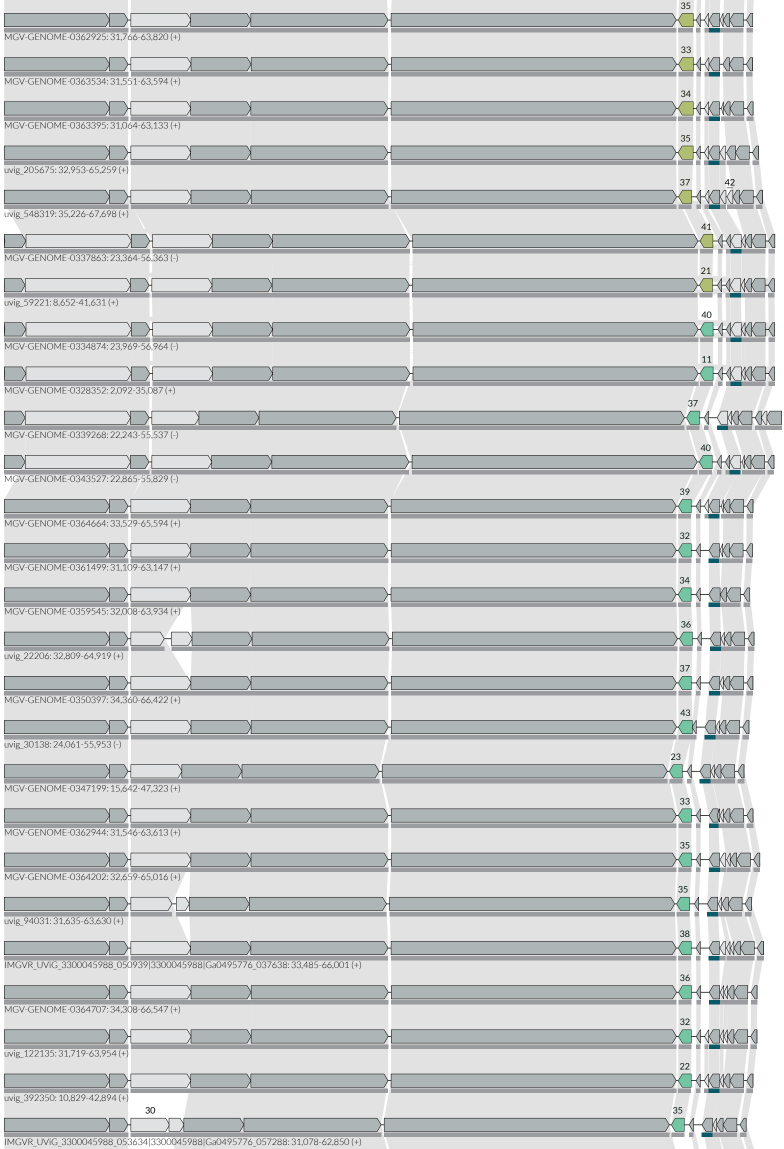

34
35
uvig_498485: 35,881-63,197 (+)
38
IMGVR_UViG_3300045988_072142|3300045988|Ga0495776_012470: 34,351-67,469 (+)
34
35
39
uvig_380019: 34,401-66,260 (+)
36
MGV-GENOME-0349161: 23,060-55,367 (-)
38
IMGVR_UViG_3300045988_048023|3300045988|Ga0495776_011445: 35,989-68,691 (+)
38
uvig_543806: 34,353-65,433 (+)
33
34
IMGVR_UViG_3300029375_000001|3300029375|Ga0243934_1000243: 31,296-65,698 (+)
33
MGV-GENOME-0361739: 29,831-63,285 (+)
35
MGV-GENOME-0364985: 32,789-64,851 (+)
24
MGV-GENOME-0353147: 16,796-50,205 (+)
14
MGV-GENOME-0349015: 10,322-43,878 (+)
33
MGV-GENOME-0363610: 31,205-64,400 (+)
32
IMGVR_UViG_3300029425_000001|3300029425|Ga0243935_100265: 31,616-65,189 (+)
33
34
MGV-GENOME-0362508: 31,446-65,695 (+)
35
IMGVR_UViG_3300045988_043558|3300045988|Ga0495776_143146: 32,762-65,297 (+)
37
MGV-GENOME-0365795: 35,340-67,067 (+)
32
MGV-GENOME-0361443: 30,472-63,679 (+)
29
uvig_63456: 28,202-61,064 (+)
39
OTU_130: 32,501-67,049 (+)
36
37
uvig_383564: 33,547-66,104 (+)
42
41
MGV-GENOME-0346287: 23,682-57,205 (-)
34
35
IMGVR_UViG_3300045988_059041|3300045988|Ga0495776_057139: 31,996-64,481 (+)
36
37
IMGVR_UViG_3300045988_038777|3300045988|Ga0495776_143154: 32,802-66,044 (+)
37
OTU_156: 32,572-65,735 (+)
35
IMGVR_UViG_3300045988_057312|3300045988|Ga0495776_076078: 32,740-65,746 (+)
32
IMGVR_UViG_3300045988_029917|3300045988|Ga0495776_057125: 29,988-62,706 (+)

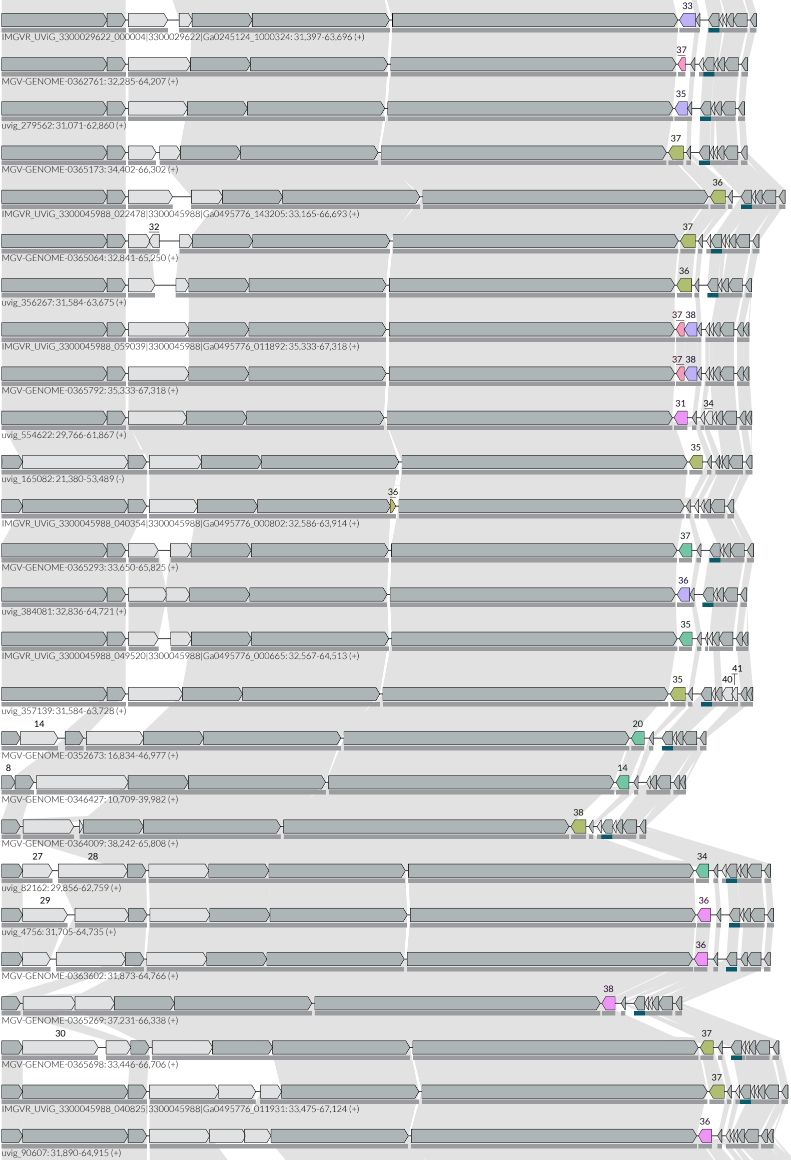

32
33
uvig_508931: 30,980-63,304 (+)
48
uvig_33611: 29,607-61,786 (-)
36
IMGVR_UViG_3300045988_029879|3300045988|Ga0495776_143285: 32,782-64,961 (+)
38
36
37
uvig_560423: 33,344-66,877 (+)
36
MGV-GENOME-0363529: 32,875-64,719 (+)
37
38
39
IMGVR_UViG_3300045988_040870|3300045988|Ga0495776_076180: 33,294-65,736 (+)
37
38
39
MGV-GENOME-0364263: 33,294-65,736 (+)
34
MGV-GENOME-0362036: 30,174-63,618 (+)
34
IMGVR_UViG_3300029722_000003|3300029722|Ga0245188_100118: 31,590-65,025 (+)
33
uvig_523654: 31,473-64,534 (+)
36
MGV-GENOME-0363405: 32,579-65,190 (+)
36
IMGVR_UViG_3300045988_039092|3300045988|Ga0495776_000351: 32,439-65,539 (+)
34
uvig_282382: 31,045-63,279 (+)
35
MGV-GENOME-0364260: 33,239-66,792 (+)
33
uvig_283888: 30,177-62,806 (+)
31
36
MGV-GENOME-0364848: 32,829-66,462 (+)
37
uvig_184513: 32,788-66,185 (+)
30
MGV-GENOME-0362465: 29,755-63,153 (+)
35
MGV-GENOME-0362456: 32,276-64,436 (+)
33
IMGVR_UViG_3300045988_031445|3300045988|Ga0495776_002873: 30,151-63,569 (+)
34
MGV-GENOME-0363591: 32,015-65,405 (+)
37
OTU_148: 35,246-67,407 (+)
33
MGV-GENOME-0359618: 31,137-63,204 (+)
37
IMGVR_UViG_3300045988_045051|3300045988|Ga0495776_084537: 34,364-68,044 (+)
34
uvig_241245: 31,870-65,252 (+)
35
uvig_241197: 32,827-66,385 (+)


36
IMGVR_UViG_3300045988_021038|3300045988|Ga0495776_143098: 31,928-65,325 (+)
36
37
uvig_536541: 30,750-62,678 (+)
37
38
IMGVR_UViG_3300029875_000002|3300029875|Ga0245324_100251: 35,017-67,070 (+)
36
MGV-GENOME-0364603: 32,775-66,048 (+)
36
37
IMGVR_UViG_3300045988_060340|3300045988|Ga0495776_012397: 33,709-65,531 (+)
35
36
IMGVR_UViG_3300029489_000001|3300029489|Ga0244014_1000110: 32,829-66,134 (+)
32
34
uvig_453521: 30,923-62,759 (+)
34
MGV-GENOME-0363791: 32,346-63,979 (+)
34
MGV-GENOME-0361790: 29,465-61,431 (+)
49
MGV-GENOME-0360765: 30,818-62,891 (-)
34
IMGVR_UViG_3300045988_040882|3300045988|Ga0495776_075876: 32,824-65,109 (+)
33
MGV-GENOME-0362064: 30,997-62,887 (+)
30
uvig_95454: 18,861-50,992 (-)
34
MGV-GENOME-0363172: 31,950-64,074 (+)
31
uvig_166734: 29,558-61,682 (+)
36
IMGVR_UViG_3300045988_033952|3300045988|Ga0495776_075898: 32,552-64,663 (+)
31
uvig_430178: 29,222-60,995 (+)
35
uvig_542888: 31,374-63,651 (+)
25
uvig_25512: 18,704-50,812 (+)
35
uvig_248398: 33,027-65,125 (+)
33
uvig_528839: 31,335-62,371 (+)
38
SAMN05826520_a1_ct8935: 38,964-66,178 (+)
36
MGV-GENOME-0365573: 34,350-65,858 (+)
36
37
IMGVR_UViG_3300045988_039142|3300045988|Ga0495776_056924: 34,209-66,544 (+)
19
uvig_196096: 13,755-45,905 (+)
37
IMGVR_UViG_3300045988_031337|3300045988|Ga0495776_012323: 34,237-65,912 (+)



37 38
IMGVR_UViG_3300045988_040867|3300045988|Ga0495776_000058: 33,659-66,099 (+)
37
IMGVR_UViG_3300045988_038780|3300045988|Ga0495776_012335: 33,725-65,675 (+)
35
uvig_384135: 32,836-64,666 (+)
30
36
IMGVR_UViG_3300029782_000005|3300029782|Ga0245253_100317: 31,871-64,224 (+)
35
MGV-GENOME-0362526: 31,871-63,730 (+)
37 38
IMGVR_UViG_3300029717_000005|3300029717|Ga0245160_1000203: 34,538-66,731 (+)
35 36
MGV-GENOME-0363183: 31,996-64,489 (+)
35 36
IMGVR_UViG_3300007714_000003|3300007714|Ga0105661_1000069: 31,996-64,710 (+)
36 37
uvig_565930: 33,340-65,525 (+)
36
uvig_527138: 31,383-63,108 (+)
34
MGV-GENOME-0360388: 32,567-63,840 (+)
37
MGV-GENOME-0362902: 31,544-63,447 (+)
35
uvig_401391: 31,665-63,724 (+)
33
MGV-GENOME-0360783: 32,557-64,049 (+)
37
IMGVR_UViG_3300045988_039143|3300045988|Ga0495776_000174: 34,305-66,469 (+)
36
uvig_304760: 32,871-64,948 (+)
24
MGV-GENOME-0354297: 20,630-52,705 (+)
47
MGV-GENOME-0348160: 27,552-59,795 (-)
36
uvig_324064: 32,755-64,976 (+)
36
MGV-GENOME-0364527: 34,369-66,901 (+)
32 33
IMGVR_UViG_3300045988_040782|3300045988|Ga0495776_057216: 30,278-63,238 (+)
32
MGV-GENOME-0357293: 27,027-59,102 (+)
34 35
uvig_540735: 31,980-64,098 (+)
31
MGV-GENOME-0362886: 30,356-62,529 (+)
27
MGV-GENOME-0347462: 13,192-45,285 (-)
35
37
IMGVR_UViG_3300045988_040857|3300045988|Ga0495776_076081: 33,682-65,812 (+)


35
MGV-GENOME-0362925: 31,766-63,820 (+)
33
MGV-GENOME-0363534: 31,551-63,594 (+)
34
MGV-GENOME-0363395: 31,064-63,133 (+)
35
uvig_205675: 32,953-65,259 (+)
37
42
uvig_548319: 35,226-67,698 (+)
41
MGV-GENOME-0337863: 23,364-56,363 (-)
21
uvig_59221: 8,652-41,631 (+)
40
MGV-GENOME-0334874: 23,969-56,964 (-)
11
MGV-GENOME-0328352: 2,092-35,087 (+)
37
MGV-GENOME-0339268: 22,243-55,537 (-)
40
MGV-GENOME-0343527: 22,865-55,829 (-)
39
MGV-GENOME-0364664: 33,529-65,594 (+)
32
MGV-GENOME-0361499: 31,109-63,147 (+)
34
MGV-GENOME-0359545: 32,008-63,934 (+)
36
uvig_22206: 32,809-64,919 (+)
37
MGV-GENOME-0350397: 34,360-66,422 (+)
43
uvig_30138: 24,061-55,953 (-)
23
MGV-GENOME-0347199: 15,642-47,323 (+)
33
MGV-GENOME-0362944: 31,546-63,613 (+)
35
MGV-GENOME-0364202: 32,659-65,016 (+)
35
uvig_94031: 31,635-63,630 (+)
38
IMGVR_UViG_3300045988_050939|3300045988|Ga0495776_037638: 33,485-66,001 (+)
36
MGV-GENOME-0364707: 34,308-66,547 (+)
32
uvig_122135: 31,719-63,954 (+)
22
uvig_392350: 10,829-42,894 (+)
30
35
IMGVR_UViG_3300045988_053634|3300045988|Ga0495776_057288: 31,078-62,850 (+)


33
IMGVR_UViG_3300029622_000004|3300029622|Ga0245124_1000324: 31,397-63,696 (+)
37
MGV-GENOME-0362761: 32,285-64,207 (+)
35
uvig_279562: 31,071-62,860 (+)
37
MGV-GENOME-0365173: 34,402-66,302 (+)
36
IMGVR_UViG_3300045988_022478|3300045988|Ga0495776_143205: 33,165-66,693 (+)
32
37
MGV-GENOME-0365064: 32,841-65,250 (+)
36
uvig_356267: 31,584-63,675 (+)
37
38
IMGVR_UViG_3300045988_059039|3300045988|Ga0495776_011892: 35,333-67,318 (+)
37
38
MGV-GENOME-0365792: 35,333-67,318 (+)
31
34
uvig_554622: 29,766-61,867 (+)
35
uvig_165082: 21,380-53,489 (-)
36
IMGVR_UViG_3300045988_040354|3300045988|Ga0495776_000802: 32,586-63,914 (+)
37
MGV-GENOME-0365293: 33,650-65,825 (+)
36
uvig_384081: 32,836-64,721 (+)
35
IMGVR_UViG_3300045988_049520|3300045988|Ga0495776_000665: 32,567-64,513 (+)
41
35
40
uvig_357139: 31,584-63,728 (+)
14
20
MGV-GENOME-0352673: 16,834-46,977 (+)
8
14
MGV-GENOME-0346427: 10,709-39,982 (+)
38
MGV-GENOME-0364009: 38,242-65,808 (+)
27
28
34
uvig_82162: 29,856-62,759 (+)
29
36
uvig_4756: 31,705-64,735 (+)
36
MGV-GENOME-0363602: 31,873-64,766 (+)
38
MGV-GENOME-0365269: 37,231-66,338 (+)
30
37
MGV-GENOME-0365698: 33,446-66,706 (+)
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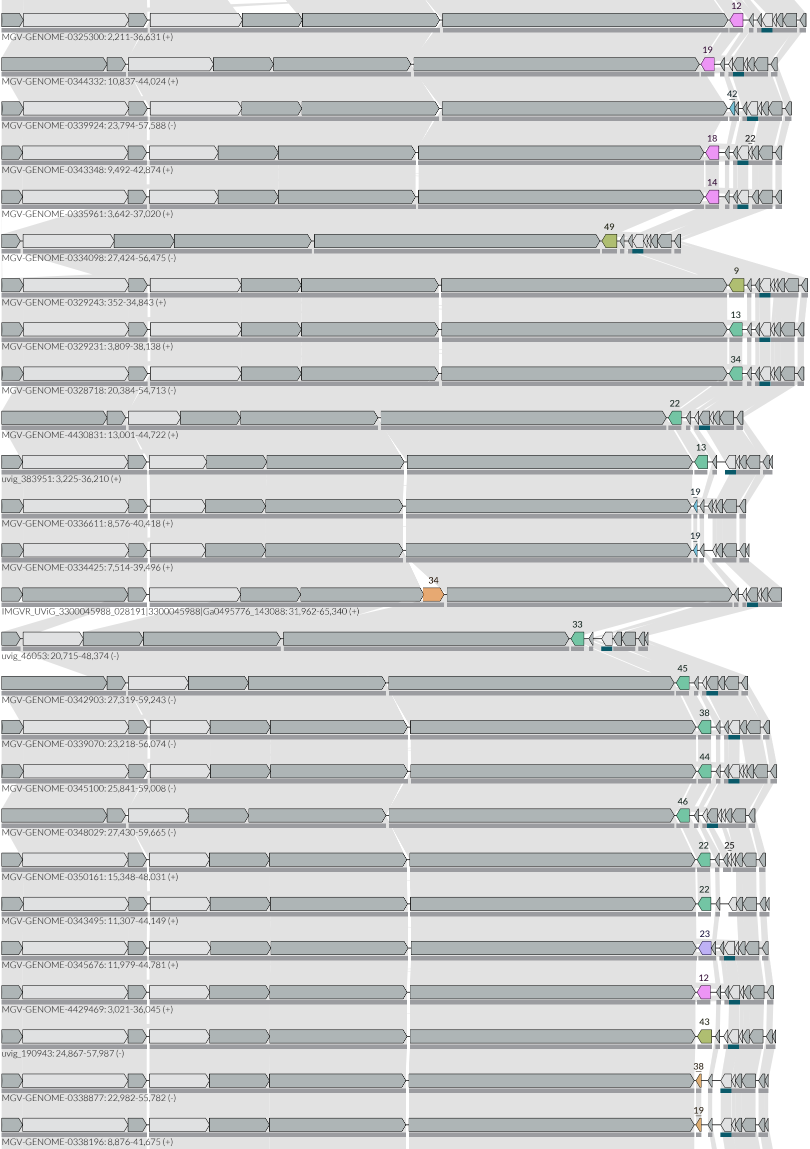
IMGVR_UViG_3300045988_040825|3300045988|Ga0495776_011931: 33,475-67,124 (+)
36
uvig_90607: 31,890-64,915 (+)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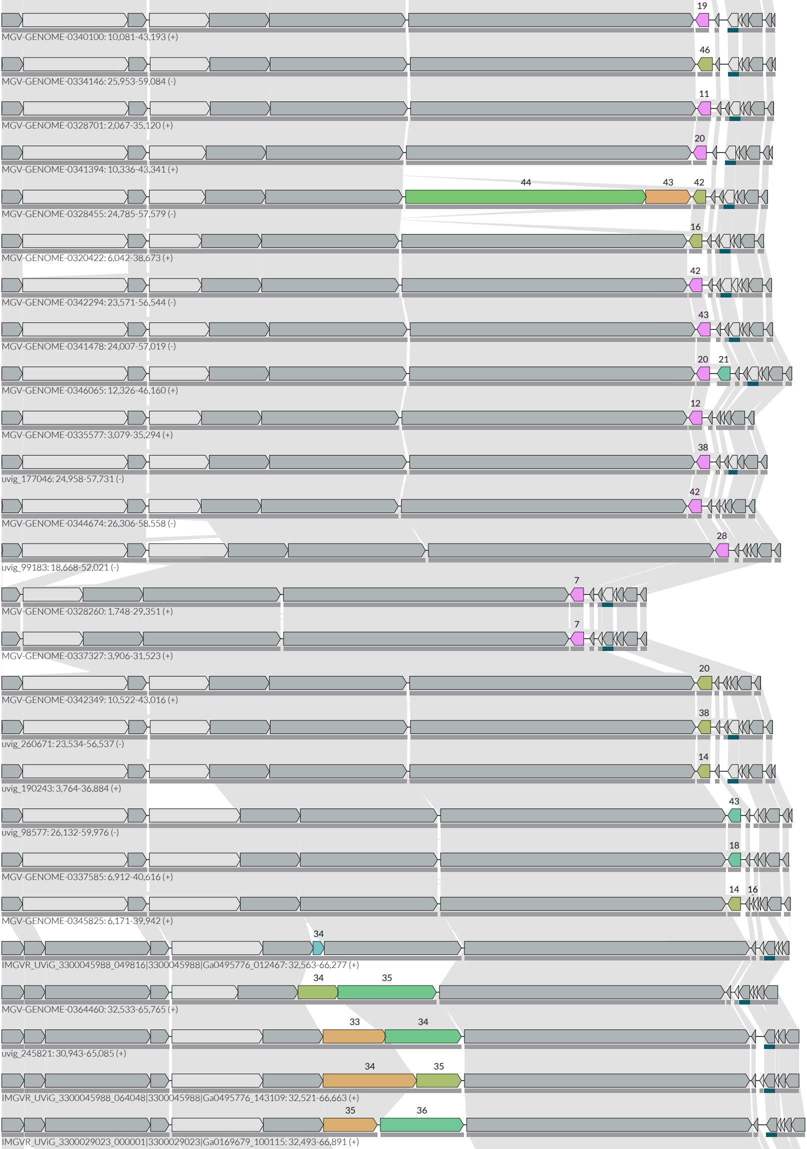
MGV-GENOME-0325300: 2,211-36,631 (+)
19
MGV-GENOME-0344332: 10,837-44,024 (+)
42
MGV-GENOME-0339924: 23,794-57,588 (-)
18
22
MGV-GENOME-0343348: 9,492-42,874 (+)
14
MGV-GENOME-0335961: 3,642-37,020 (+)
49
MGV-GENOME-0334098: 27,424-56,475 (-)
9
MGV-GENOME-0329243: 352-34,843 (+)
13
MGV-GENOME-0329231: 3,809-38,138 (+)
34
MGV-GENOME-0328718: 20,384-54,713 (-)
22
MGV-GENOME-4430831: 13,001-44,722 (+)
13
uvig_383951: 3,225-36,210 (+)
19
MGV-GENOME-0336611: 8,576-40,418 (+)
19
MGV-GENOME-0334425: 7,514-39,496 (+)
34
IMGVR_UViG_3300045988_028191|3300045988|Ga0495776_143088: 31,962-65,340 (+)
33
uvig_46053: 20,715-48,374 (-)
45
MGV-GENOME-0342903: 27,319-59,243 (-)
38
MGV-GENOME-0339070: 23,218-56,074 (-)
44
MGV-GENOME-0345100: 25,841-59,008 (-)
46
MGV-GENOME-0348029: 27,430-59,665 (-)
22
25
MGV-GENOME-0350161: 15,348-48,031 (+)
22
MGV-GENOME-0343495: 11,307-44,149 (+)
23
MGV-GENOME-0345676: 11,979-44,781 (+)
12
MGV-GENOME-4429469: 3,021-36,045 (+)
43
uvig_190943: 24,867-57,987 (-)
38
MGV-GENOME-0338877: 22,982-55,782 (-)
19
MGV-GENOME-0338196: 8,876-41,675 (+)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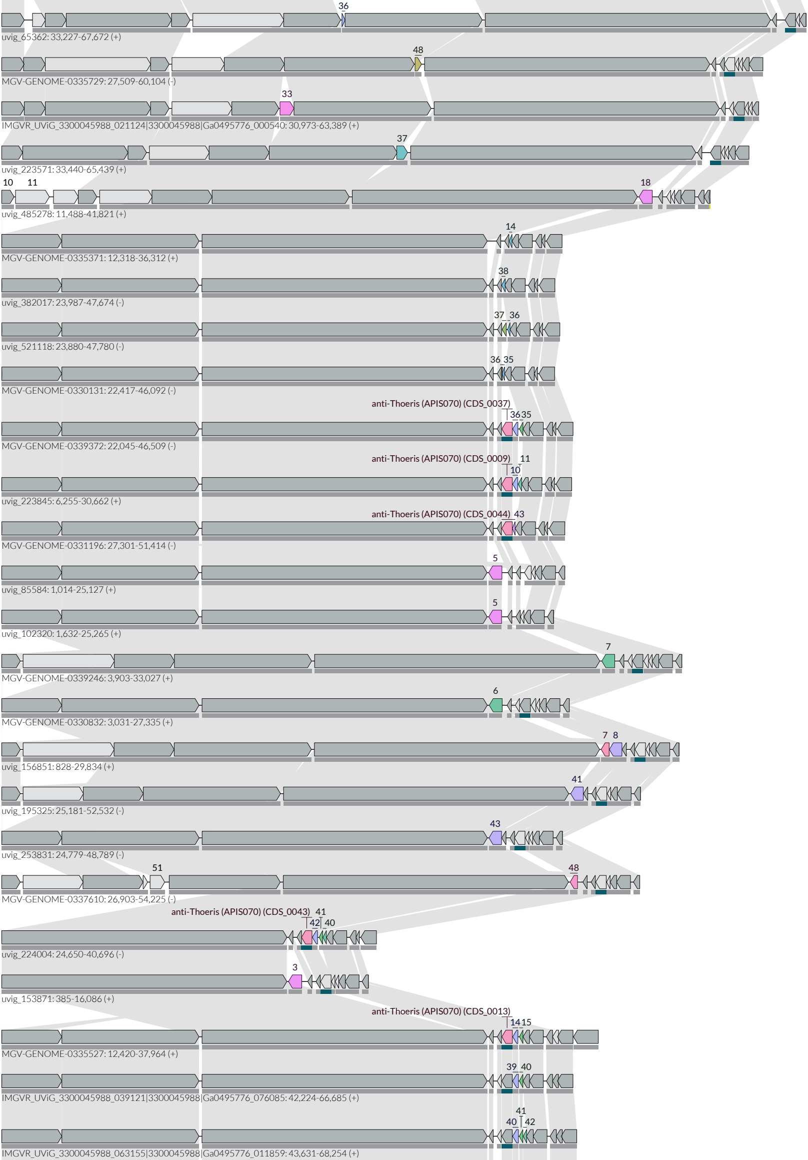
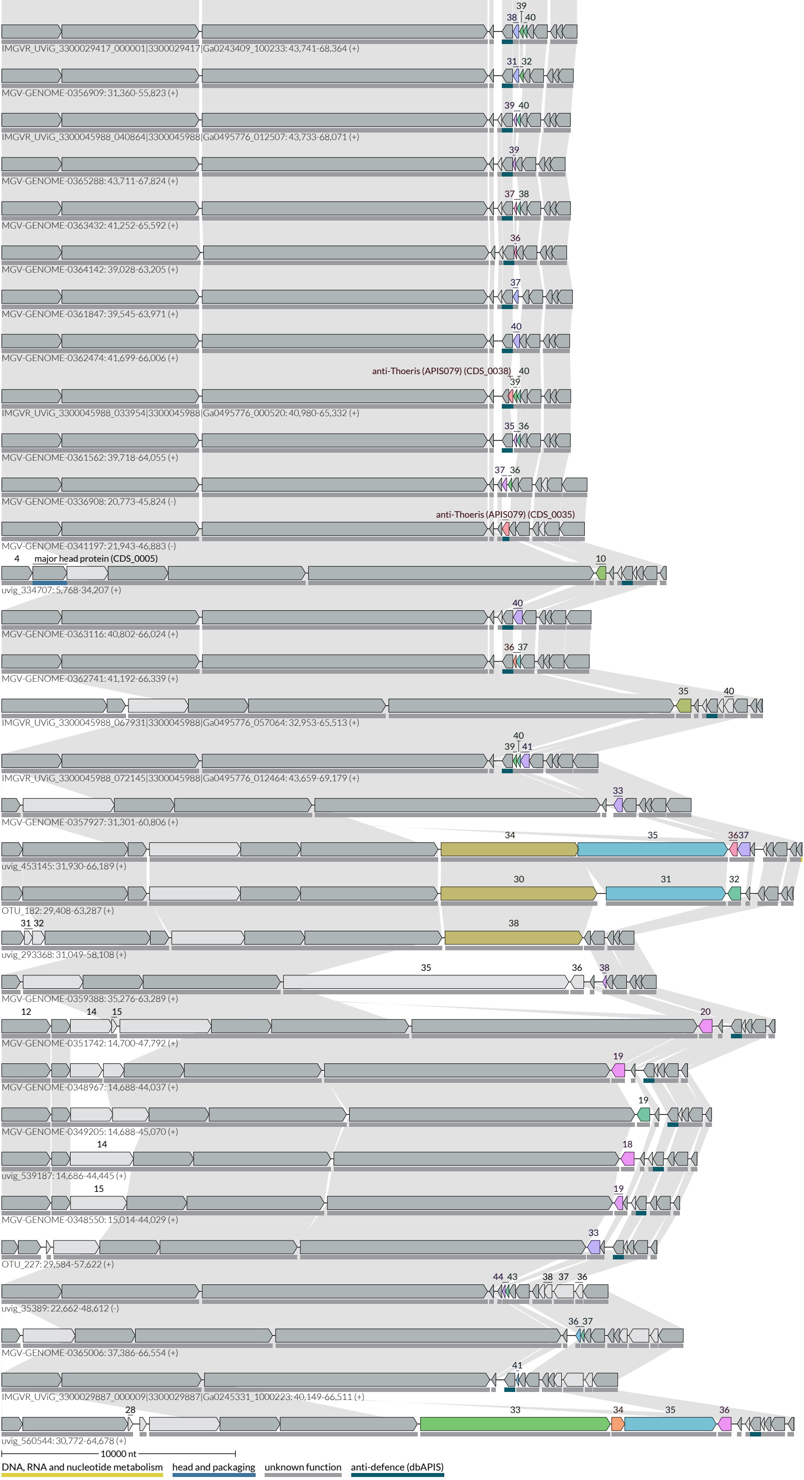
MGV-GENOME-0340100: 10,081-43,193 (+)
46
MGV-GENOME-0334146: 25,953-59,084 (-)
11
MGV-GENOME-0328701: 2,067-35,120 (+)
20
MGV-GENOME-0341394: 10,336-43,341 (+)
44
43
42
MGV-GENOME-0328455: 24,785-57,579 (-)
16
MGV-GENOME-0320422: 6,042-38,673 (+)
42
MGV-GENOME-0342294: 23,571-56,544 (-)
43
MGV-GENOME-0341478: 24,007-57,019 (-)
20
21
MGV-GENOME-0346065: 12,326-46,160 (+)
12
MGV-GENOME-0335577: 3,079-35,294 (+)
38
uvig_177046: 24,958-57,731 (-)
42
MGV-GENOME-0344674: 26,306-58,558 (-)
28
uvig_99183: 18,668-52,021 (-)
7
MGV-GENOME-0328260: 1,748-29,351 (+)
7
MGV-GENOME-0337327: 3,906-31,523 (+)
20
MGV-GENOME-0342349: 10,522-43,016 (+)
38
uvig_260671: 23,534-56,537 (-)
14
uvig_190243: 3,764-36,884 (+)
43
uvig_98577: 26,132-59,976 (-)
18
MGV-GENOME-0337585: 6,912-40,616 (+)
14
16
MGV-GENOME-0345825: 6,171-39,942 (+)
34
IMGVR_UViG_3300045988_049816|3300045988|Ga0495776_012467: 32,563-66,277 (+)
34
35
MGV-GENOME-0364460: 32,533-65,765 (+)
33
34
uvig_245821: 30,943-65,085 (+)
34
35
IMGVR_UViG_3300045988_064048|3300045988|Ga0495776_143109: 32,521-66,663 (+)
35
36
IMGVR_UViG_3300029023_000001|3300029023|Ga0169679_100115: 32,493-66,891 (+)


36
uvig_65362: 33,227-67,672 (+)
48
MGV-GENOME-0335729: 27,509-60,104 (-)
33
IMGVR_UViG_3300045988_021124|3300045988|Ga0495776_000540: 30,973-63,389 (+)
37
uvig_223571: 33,440-65,439 (+)
10
11
18
uvig_485278: 11,488-41,821 (+)
14
MGV-GENOME-0335371: 12,318-36,312 (+)
38
uvig_382017: 23,987-47,674 (-)
37
36
uvig_521118: 23,880-47,780 (-)
36
35
MGV-GENOME-0330131: 22,417-46,092 (-)
anti-Thoeris (APIS070) (CDS_0037)
36
35
MGV-GENOME-0339372: 22,045-46,509 (-)
anti-Thoeris (APIS070) (CDS_0009)
11
10
uvig_223845: 6,255-30,662 (+)
anti-Thoeris (APIS070) (CDS_0044)
43
MGV-GENOME-0331196: 27,301-51,414 (-)
5
uvig_85584: 1,014-25,127 (+)
5
uvig_102320: 1,632-25,265 (+)
7
MGV-GENOME-0339246: 3,903-33,027 (+)
6
MGV-GENOME-0330832: 3,031-27,335 (+)
7
8
uvig_156851: 828-29,834 (+)
41
uvig_195325: 25,181-52,532 (-)
43
uvig_253831: 24,779-48,789 (-)
51
48
MGV-GENOME-0337610: 26,903-54,225 (-)
anti-Thoeris (APIS070) (CDS_0043)
41
42
40
uvig_224004: 24,650-40,696 (-)
3
uvig_153871: 385-16,086 (+)
anti-Thoeris (APIS070) (CDS_0013)
14
15
MGV-GENOME-0335527: 12,420-37,964 (+)
39
40
IMGVR_UViG_3300045988_039121|3300045988|Ga0495776_076085: 42,224-66,685 (+)
41
40
42
IMGVR_UViG_3300045988_063155|3300045988|Ga0495776_011859: 43,631-68,254 (+)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38
40
IMGVR_UViG_3300029417_000001|3300029417|Ga0243409_100233: 43,741-68,364 (+)
31
32
MGV-GENOME-0356909: 31,360-55,823 (+)
39
40
IMGVR_UViG_3300045988_040864|3300045988|Ga0495776_012507: 43,733-68,071 (+)
39
MGV-GENOME-0365288: 43,711-67,824 (+)
37
38
MGV-GENOME-0363432: 41,252-65,592 (+)
36
MGV-GENOME-0364142: 39,028-63,205 (+)
37
MGV-GENOME-0361847: 39,545-63,971 (+)
40
MGV-GENOME-0362474: 41,699-66,006 (+)
anti-Thoeris (APIS079) (CDS_0038)
40
39
IMGVR_UViG_3300045988_033954|3300045988|Ga0495776_000520: 40,980-65,332 (+)
35
36
MGV-GENOME-0361562: 39,718-64,055 (+)
37
36
MGV-GENOME-0336908: 20,773-45,824 (-)
anti-Thoeris (APIS079) (CDS_0035)
MGV-GENOME-0341197: 21,943-46,883 (-)
4
major head protein (CDS_0005)
10
uvig_334707: 5,768-34,207 (+)
40
MGV-GENOME-0363116: 40,802-66,024 (+)
36
37
MGV-GENOME-0362741: 41,192-66,339 (+)
35
40
IMGVR_UViG_3300045988_067931|3300045988|Ga0495776_057064: 32,953-65,513 (+)
40
39
41
IMGVR_UViG_3300045988_072145|3300045988|Ga0495776_012464: 43,659-69,179 (+)
33
MGV-GENOME-0357927: 31,301-60,806 (+)
34
35
36
37
uvig_453145: 31,930-66,189 (+)
30
31
32
OTU_182: 29,408-63,287 (+)
31
32
38
uvig_293368: 31,049-58,108 (+)
35
36
38
MGV-GENOME-0359388: 35,276-63,289 (+)
12
14
15
20
MGV-GENOME-0351742: 14,700-47,792 (+)
19
MGV-GENOME-0348967: 14,688-44,037 (+)
19
MGV-GENOME-0349205: 14,688-45,070 (+)
14
18
uvig_539187: 14,686-44,445 (+)
15
19
MGV-GENOME-0348550: 15,014-44,029 (+)
33
OTU_227: 29,584-57,622 (+)
44
43
38
37
36
uvig_35389: 22,662-48,612 (-)
36
37
MGV-GENOME-0365006: 37,386-66,554 (+)
41
IMGVR_UViG_3300029887_000009|3300029887|Ga0245331_1000223: 40,149-66,511 (+)
28
33
34
35
36
uvig_560544: 30,772-64,678 (+)
10000 nt
DNA, RNA and nucleotide metabolism
head and packaging
unknown function
anti-defence (dbAPIS)