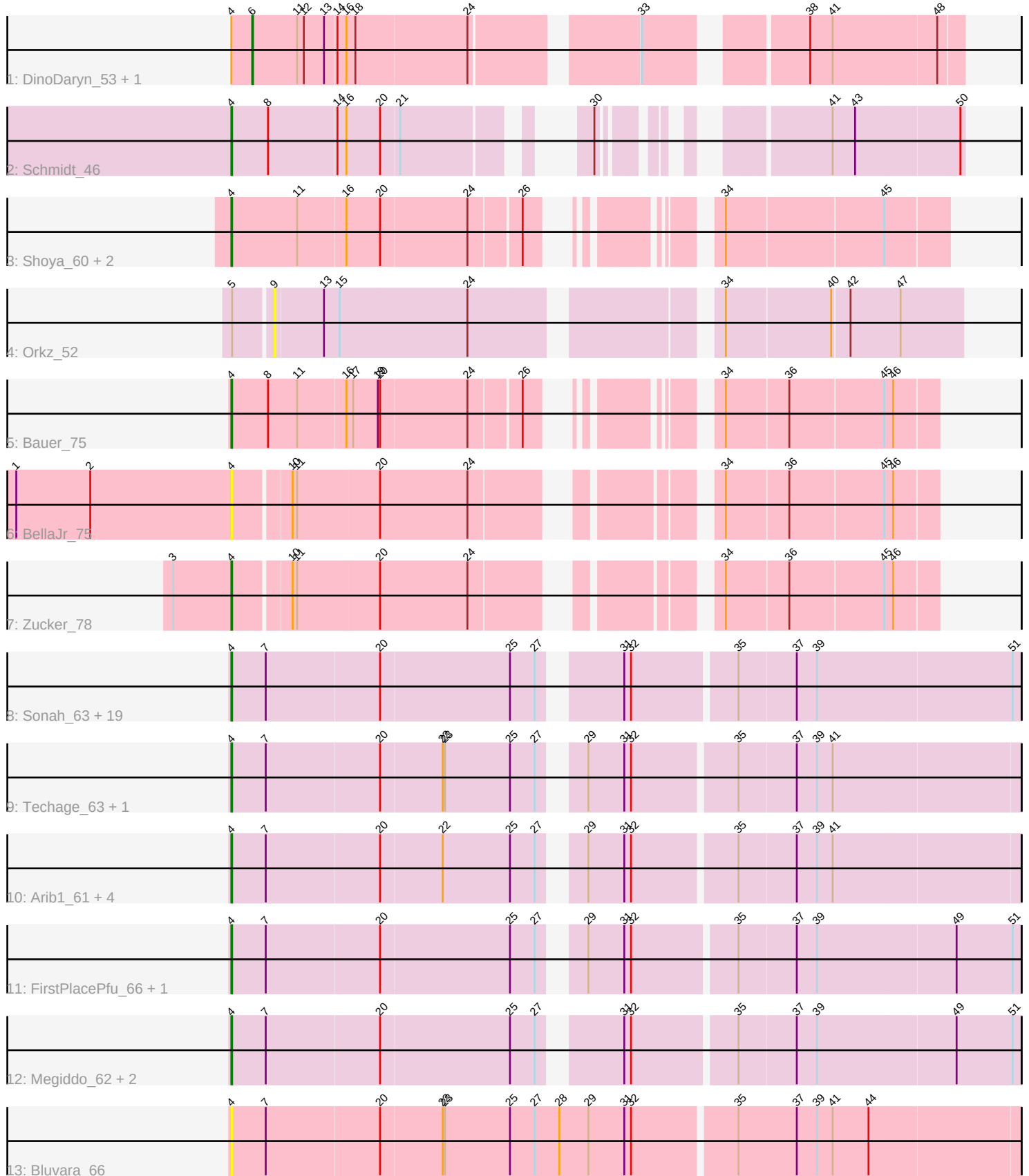


Pham 280591



Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. If this default region is judged to be packed too tightly with annotated starts, the track will be further scaled to only show that region of the ORF with annotated starts. This action will be indicated by adding "Zoomed" to the title. For starts, yellow indicates the location of called starts comprised solely of Glimmer/GeneMark auto-annotations, green indicates the location of called starts with at least 1 manual gene annotation.

Pham 280591 Report

This analysis was run 02/07/26 on database version 634.

Pham number 280591 has 43 members, 8 are drafts.

Phages represented in each track:

- Track 1 : DinoDaryn_53, Huffy_53
- Track 2 : Schmidt_46
- Track 3 : Shoya_60, BrayBeast_60, JeanClaude_59
- Track 4 : Orkz_52
- Track 5 : Bauer_75
- Track 6 : BellaJr_75
- Track 7 : Zucker_78
- Track 8 : Sonah_63, Juniormint_60, Jung_63, Polkaroo_64, Atcoo_64, Zilizebeth_68, Vidya_61, Shipwreck_65, StevieRay_67, Jebeks_63, Necropolis_60, Bogie_65, Dynamo_62, Brusacoram_64, Thespis_64, HUHilltop_65, Pygmy_66, Camster_63, Phineas_63, Malithi_62
- Track 9 : Techage_63, Xula_58
- Track 10 : Arib1_61, Venti_60, GaloreK_63, QueenHazel_59, Bartholomew_58
- Track 11 : FirstPlacePfu_66, GreaseLightnin_67
- Track 12 : Megiddo_62, PeanutPie_67, Bhagsy_68
- Track 13 : Bluvara_66

Summary of Final Annotations (See graph section above for start numbers):

The start number called the most often in the published annotations is 4, it was called in 33 of the 35 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Arib1_61, Atcoo_64, Bartholomew_58, Bauer_75, BellaJr_75, Bhagsy_68, Bluvara_66, Bogie_65, BrayBeast_60, Brusacoram_64, Camster_63, Dynamo_62, FirstPlacePfu_66, GaloreK_63, GreaseLightnin_67, HUHilltop_65, JeanClaude_59, Jebeks_63, Jung_63, Juniormint_60, Malithi_62, Megiddo_62, Necropolis_60, PeanutPie_67, Phineas_63, Polkaroo_64, Pygmy_66, QueenHazel_59, Schmidt_46, Shipwreck_65, Shoya_60, Sonah_63, StevieRay_67, Techage_63, Thespis_64, Venti_60, Vidya_61, Xula_58, Zilizebeth_68, Zucker_78,

Genes that have the "Most Annotated" start but do not call it:

- DinoDaryn_53, Huffy_53,

Genes that do not have the "Most Annotated" start:

- Orkz_52,

Summary by start number:

Start 4:

- Found in 42 of 43 (97.7%) of genes in pham
- Manual Annotations of this start: 33 of 35
- Called 95.2% of time when present
- Phage (with cluster) where this start called: Arib1_61 (P1), Atcoo_64 (P1), Bartholomew_58 (P1), Bauer_75 (FN), BellaJr_75 (FN), Bhagsy_68 (P1), Bluvara_66 (UNK), Bogie_65 (P1), BrayBeast_60 (FB), Brusacoram_64 (P1), Camster_63 (P1), Dynamo_62 (P1), FirstPlacePfu_66 (P1), GaloreK_63 (P1), GreaseLightnin_67 (P1), HUHilltop_65 (P1), JeanClaude_59 (FB), Jebeks_63 (P1), Jung_63 (P1), Juniormint_60 (P1), Malithi_62 (P1), Megiddo_62 (P1), Necropolis_60 (P1), PeanutPie_67 (P1), Phineas_63 (P1), Polkaro_64 (P1), Pygmy_66 (P1), QueenHazel_59 (I1), Schmidt_46 (CU4), Shipwreck_65 (P1), Shoya_60 (FB), Sonah_63 (P1), StevieRay_67 (P1), Techage_63 (P1), Thespis_64 (P1), Venti_60 (P1), Vidya_61 (P1), Xula_58 (I1), Zilizebeth_68 (P1), Zucker_78 (FN),

Start 6:

- Found in 2 of 43 (4.7%) of genes in pham
- Manual Annotations of this start: 2 of 35
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DinoDaryn_53 (CU1), Huffy_53 (CU1),

Start 9:

- Found in 1 of 43 (2.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Orkz_52 (FL),

Summary by clusters:

There are 8 clusters represented in this pham: CU4, CU1, I1, FB, P1, UNK, FL, FN,

Info for manual annotations of cluster CU1:

- Start number 6 was manually annotated 2 times for cluster CU1.

Info for manual annotations of cluster CU4:

- Start number 4 was manually annotated 1 time for cluster CU4.

Info for manual annotations of cluster FB:

- Start number 4 was manually annotated 2 times for cluster FB.

Info for manual annotations of cluster FN:

- Start number 4 was manually annotated 2 times for cluster FN.

Info for manual annotations of cluster I1:

- Start number 4 was manually annotated 2 times for cluster I1.

Info for manual annotations of cluster P1:

- Start number 4 was manually annotated 26 times for cluster P1.

Gene Information:

Gene: Arib1_61 Start: 39295, Stop: 40290, Start Num: 4

Candidate Starts for Arib1_61:

(Start: 4 @39295 has 33 MA's), (7, 39340), (20, 39490), (22, 39571), (25, 39661), (27, 39694), (29, 39733), (31, 39781), (32, 39790), (35, 39922), (37, 39997), (39, 40024), (41, 40045),

Gene: Atcoo_64 Start: 42672, Stop: 43670, Start Num: 4

Candidate Starts for Atcoo_64:

(Start: 4 @42672 has 33 MA's), (7, 42717), (20, 42867), (25, 43038), (27, 43071), (31, 43158), (32, 43167), (35, 43299), (37, 43374), (39, 43401), (51, 43659),

Gene: Bartholomew_58 Start: 38622, Stop: 39617, Start Num: 4

Candidate Starts for Bartholomew_58:

(Start: 4 @38622 has 33 MA's), (7, 38667), (20, 38817), (22, 38898), (25, 38988), (27, 39021), (29, 39060), (31, 39108), (32, 39117), (35, 39249), (37, 39324), (39, 39351), (41, 39372),

Gene: Bauer_75 Start: 42042, Stop: 42833, Start Num: 4

Candidate Starts for Bauer_75:

(Start: 4 @42042 has 33 MA's), (8, 42090), (11, 42129), (16, 42192), (17, 42201), (19, 42234), (20, 42237), (24, 42351), (26, 42414), (34, 42564), (36, 42645), (45, 42765), (46, 42777),

Gene: BellaJr_75 Start: 44689, Stop: 45504, Start Num: 4

Candidate Starts for BellaJr_75:

(1, 44401), (2, 44500), (Start: 4 @44689 has 33 MA's), (10, 44758), (11, 44764), (20, 44872), (24, 44989), (34, 45235), (36, 45316), (45, 45436), (46, 45448),

Gene: Bhagsy_68 Start: 41777, Stop: 42787, Start Num: 4

Candidate Starts for Bhagsy_68:

(Start: 4 @41777 has 33 MA's), (7, 41822), (20, 41972), (25, 42143), (27, 42176), (31, 42263), (32, 42272), (35, 42416), (37, 42491), (39, 42518), (49, 42701), (51, 42776),

Gene: Bluvara_66 Start: 43290, Stop: 44321, Start Num: 4

Candidate Starts for Bluvara_66:

(Start: 4 @43290 has 33 MA's), (7, 43335), (20, 43485), (22, 43566), (23, 43569), (25, 43656), (27, 43689), (28, 43722), (29, 43761), (31, 43809), (32, 43818), (35, 43950), (37, 44028), (39, 44055), (41, 44076), (44, 44124),

Gene: Bogie_65 Start: 41654, Stop: 42652, Start Num: 4

Candidate Starts for Bogie_65:

(Start: 4 @41654 has 33 MA's), (7, 41699), (20, 41849), (25, 42020), (27, 42053), (31, 42140), (32, 42149), (35, 42281), (37, 42356), (39, 42383), (51, 42641),

Gene: BrayBeast_60 Start: 34355, Stop: 35161, Start Num: 4

Candidate Starts for BrayBeast_60:

(Start: 4 @34355 has 33 MA's), (11, 34442), (16, 34505), (20, 34550), (24, 34664), (26, 34727), (34, 34877), (45, 35078),

Gene: Brusacoram_64 Start: 41215, Stop: 42213, Start Num: 4

Candidate Starts for Brusacoram_64:

(Start: 4 @41215 has 33 MA's), (7, 41260), (20, 41410), (25, 41581), (27, 41614), (31, 41701), (32, 41710), (35, 41842), (37, 41917), (39, 41944), (51, 42202),

Gene: Camster_63 Start: 40115, Stop: 41113, Start Num: 4

Candidate Starts for Camster_63:

(Start: 4 @40115 has 33 MA's), (7, 40160), (20, 40310), (25, 40481), (27, 40514), (31, 40601), (32, 40610), (35, 40742), (37, 40817), (39, 40844), (51, 41102),

Gene: DinoDaryn_53 Start: 33407, Stop: 34255, Start Num: 6

Candidate Starts for DinoDaryn_53:

(Start: 4 @33380 has 33 MA's), (Start: 6 @33407 has 2 MA's), (11, 33467), (12, 33476), (13, 33503), (14, 33518), (16, 33530), (18, 33542), (24, 33689), (33, 33881), (38, 34058), (41, 34088), (48, 34223),

Gene: Dynamo_62 Start: 39688, Stop: 40686, Start Num: 4

Candidate Starts for Dynamo_62:

(Start: 4 @39688 has 33 MA's), (7, 39733), (20, 39883), (25, 40054), (27, 40087), (31, 40174), (32, 40183), (35, 40315), (37, 40390), (39, 40417), (51, 40675),

Gene: FirstPlacePfu_66 Start: 39281, Stop: 40279, Start Num: 4

Candidate Starts for FirstPlacePfu_66:

(Start: 4 @39281 has 33 MA's), (7, 39326), (20, 39476), (25, 39647), (27, 39680), (29, 39719), (31, 39767), (32, 39776), (35, 39908), (37, 39983), (39, 40010), (49, 40193), (51, 40268),

Gene: GaloreK_63 Start: 40740, Stop: 41744, Start Num: 4

Candidate Starts for GaloreK_63:

(Start: 4 @40740 has 33 MA's), (7, 40785), (20, 40935), (22, 41016), (25, 41106), (27, 41139), (29, 41178), (31, 41226), (32, 41235), (35, 41379), (37, 41454), (39, 41481), (41, 41502),

Gene: GreaseLightnin_67 Start: 42069, Stop: 43067, Start Num: 4

Candidate Starts for GreaseLightnin_67:

(Start: 4 @42069 has 33 MA's), (7, 42114), (20, 42264), (25, 42435), (27, 42468), (29, 42507), (31, 42555), (32, 42564), (35, 42696), (37, 42771), (39, 42798), (49, 42981), (51, 43056),

Gene: HUHilltop_65 Start: 39911, Stop: 40909, Start Num: 4

Candidate Starts for HUHilltop_65:

(Start: 4 @39911 has 33 MA's), (7, 39956), (20, 40106), (25, 40277), (27, 40310), (31, 40397), (32, 40406), (35, 40538), (37, 40613), (39, 40640), (51, 40898),

Gene: Huffy_53 Start: 33407, Stop: 34255, Start Num: 6

Candidate Starts for Huffy_53:

(Start: 4 @33380 has 33 MA's), (Start: 6 @33407 has 2 MA's), (11, 33467), (12, 33476), (13, 33503), (14, 33518), (16, 33530), (18, 33542), (24, 33689), (33, 33881), (38, 34058), (41, 34088), (48, 34223),

Gene: JeanClaude_59 Start: 32720, Stop: 33526, Start Num: 4

Candidate Starts for JeanClaude_59:

(Start: 4 @32720 has 33 MA's), (11, 32807), (16, 32870), (20, 32915), (24, 33029), (26, 33092), (34, 33242), (45, 33443),

Gene: Jebeks_63 Start: 39208, Stop: 40206, Start Num: 4

Candidate Starts for Jebeks_63:

(Start: 4 @39208 has 33 MA's), (7, 39253), (20, 39403), (25, 39574), (27, 39607), (31, 39694), (32, 39703), (35, 39835), (37, 39910), (39, 39937), (51, 40195),

Gene: Jung_63 Start: 40211, Stop: 41209, Start Num: 4

Candidate Starts for Jung_63:

(Start: 4 @40211 has 33 MA's), (7, 40256), (20, 40406), (25, 40577), (27, 40610), (31, 40697), (32, 40706), (35, 40838), (37, 40913), (39, 40940), (51, 41198),

Gene: Juniormint_60 Start: 38664, Stop: 39662, Start Num: 4

Candidate Starts for Juniormint_60:

(Start: 4 @38664 has 33 MA's), (7, 38709), (20, 38859), (25, 39030), (27, 39063), (31, 39150), (32, 39159), (35, 39291), (37, 39366), (39, 39393), (51, 39651),

Gene: Malithi_62 Start: 39826, Stop: 40836, Start Num: 4

Candidate Starts for Malithi_62:

(Start: 4 @39826 has 33 MA's), (7, 39871), (20, 40021), (25, 40192), (27, 40225), (31, 40312), (32, 40321), (35, 40465), (37, 40540), (39, 40567), (51, 40825),

Gene: Megiddo_62 Start: 41848, Stop: 42846, Start Num: 4

Candidate Starts for Megiddo_62:

(Start: 4 @41848 has 33 MA's), (7, 41893), (20, 42043), (25, 42214), (27, 42247), (31, 42334), (32, 42343), (35, 42475), (37, 42550), (39, 42577), (49, 42760), (51, 42835),

Gene: Necropolis_60 Start: 39277, Stop: 40275, Start Num: 4

Candidate Starts for Necropolis_60:

(Start: 4 @39277 has 33 MA's), (7, 39322), (20, 39472), (25, 39643), (27, 39676), (31, 39763), (32, 39772), (35, 39904), (37, 39979), (39, 40006), (51, 40264),

Gene: Orkz_52 Start: 33628, Stop: 34467, Start Num: 9

Candidate Starts for Orkz_52:

(5, 33580), (9, 33628), (13, 33691), (15, 33712), (24, 33880), (34, 34162), (40, 34297), (42, 34318), (47, 34384),

Gene: PeanutPie_67 Start: 41780, Stop: 42790, Start Num: 4

Candidate Starts for PeanutPie_67:

(Start: 4 @41780 has 33 MA's), (7, 41825), (20, 41975), (25, 42146), (27, 42179), (31, 42266), (32, 42275), (35, 42419), (37, 42494), (39, 42521), (49, 42704), (51, 42779),

Gene: Phineas_63 Start: 40246, Stop: 41244, Start Num: 4

Candidate Starts for Phineas_63:

(Start: 4 @40246 has 33 MA's), (7, 40291), (20, 40441), (25, 40612), (27, 40645), (31, 40732), (32, 40741), (35, 40873), (37, 40948), (39, 40975), (51, 41233),

Gene: Polkaroo_64 Start: 41992, Stop: 42990, Start Num: 4

Candidate Starts for Polkaroo_64:

(Start: 4 @41992 has 33 MA's), (7, 42037), (20, 42187), (25, 42358), (27, 42391), (31, 42478), (32, 42487), (35, 42619), (37, 42694), (39, 42721), (51, 42979),

Gene: Pygmy_66 Start: 41710, Stop: 42708, Start Num: 4

Candidate Starts for Pygmy_66:

(Start: 4 @41710 has 33 MA's), (7, 41755), (20, 41905), (25, 42076), (27, 42109), (31, 42196), (32, 42205), (35, 42337), (37, 42412), (39, 42439), (51, 42697),

Gene: QueenHazel_59 Start: 39831, Stop: 40829, Start Num: 4

Candidate Starts for QueenHazel_59:

(Start: 4 @39831 has 33 MA's), (7, 39876), (20, 40026), (22, 40107), (25, 40197), (27, 40230), (29, 40269), (31, 40317), (32, 40326), (35, 40458), (37, 40536), (39, 40563), (41, 40584),

Gene: Schmidt_46 Start: 30686, Stop: 31453, Start Num: 4

Candidate Starts for Schmidt_46:

(Start: 4 @30686 has 33 MA's), (8, 30734), (14, 30824), (16, 30836), (20, 30881), (21, 30905), (30, 31073), (41, 31283), (43, 31313), (50, 31448),

Gene: Shipwreck_65 Start: 41685, Stop: 42683, Start Num: 4

Candidate Starts for Shipwreck_65:

(Start: 4 @41685 has 33 MA's), (7, 41730), (20, 41880), (25, 42051), (27, 42084), (31, 42171), (32, 42180), (35, 42312), (37, 42387), (39, 42414), (51, 42672),

Gene: Shoya_60 Start: 34184, Stop: 34990, Start Num: 4

Candidate Starts for Shoya_60:

(Start: 4 @34184 has 33 MA's), (11, 34271), (16, 34334), (20, 34379), (24, 34493), (26, 34556), (34, 34706), (45, 34907),

Gene: Sonah_63 Start: 39382, Stop: 40380, Start Num: 4

Candidate Starts for Sonah_63:

(Start: 4 @39382 has 33 MA's), (7, 39427), (20, 39577), (25, 39748), (27, 39781), (31, 39868), (32, 39877), (35, 40009), (37, 40084), (39, 40111), (51, 40369),

Gene: StevieRay_67 Start: 42449, Stop: 43447, Start Num: 4

Candidate Starts for StevieRay_67:

(Start: 4 @42449 has 33 MA's), (7, 42494), (20, 42644), (25, 42815), (27, 42848), (31, 42935), (32, 42944), (35, 43076), (37, 43151), (39, 43178), (51, 43436),

Gene: Techage_63 Start: 40250, Stop: 41245, Start Num: 4

Candidate Starts for Techage_63:

(Start: 4 @40250 has 33 MA's), (7, 40295), (20, 40445), (22, 40526), (23, 40529), (25, 40616), (27, 40649), (29, 40688), (31, 40736), (32, 40745), (35, 40877), (37, 40952), (39, 40979), (41, 41000),

Gene: Thespis_64 Start: 41215, Stop: 42213, Start Num: 4

Candidate Starts for Thespis_64:

(Start: 4 @41215 has 33 MA's), (7, 41260), (20, 41410), (25, 41581), (27, 41614), (31, 41701), (32, 41710), (35, 41842), (37, 41917), (39, 41944), (51, 42202),

Gene: Venti_60 Start: 38622, Stop: 39617, Start Num: 4

Candidate Starts for Venti_60:

(Start: 4 @38622 has 33 MA's), (7, 38667), (20, 38817), (22, 38898), (25, 38988), (27, 39021), (29, 39060), (31, 39108), (32, 39117), (35, 39249), (37, 39324), (39, 39351), (41, 39372),

Gene: Vidya_61 Start: 39503, Stop: 40501, Start Num: 4

Candidate Starts for Vidya_61:

(Start: 4 @39503 has 33 MA's), (7, 39548), (20, 39698), (25, 39869), (27, 39902), (31, 39989), (32, 39998), (35, 40130), (37, 40205), (39, 40232), (51, 40490),

Gene: Xula_58 Start: 39452, Stop: 40450, Start Num: 4

Candidate Starts for Xula_58:

(Start: 4 @39452 has 33 MA's), (7, 39497), (20, 39647), (22, 39728), (23, 39731), (25, 39818), (27, 39851), (29, 39890), (31, 39938), (32, 39947), (35, 40079), (37, 40157), (39, 40184), (41, 40205),

Gene: Zilizebeth_68 Start: 41024, Stop: 42022, Start Num: 4

Candidate Starts for Zilizebeth_68:

(Start: 4 @41024 has 33 MA's), (7, 41069), (20, 41219), (25, 41390), (27, 41423), (31, 41510), (32, 41519), (35, 41651), (37, 41726), (39, 41753), (51, 42011),

Gene: Zucker_78 Start: 46620, Stop: 47435, Start Num: 4

Candidate Starts for Zucker_78:

(3, 46542), (Start: 4 @46620 has 33 MA's), (10, 46689), (11, 46695), (20, 46803), (24, 46920), (34, 47166), (36, 47247), (45, 47367), (46, 47379),