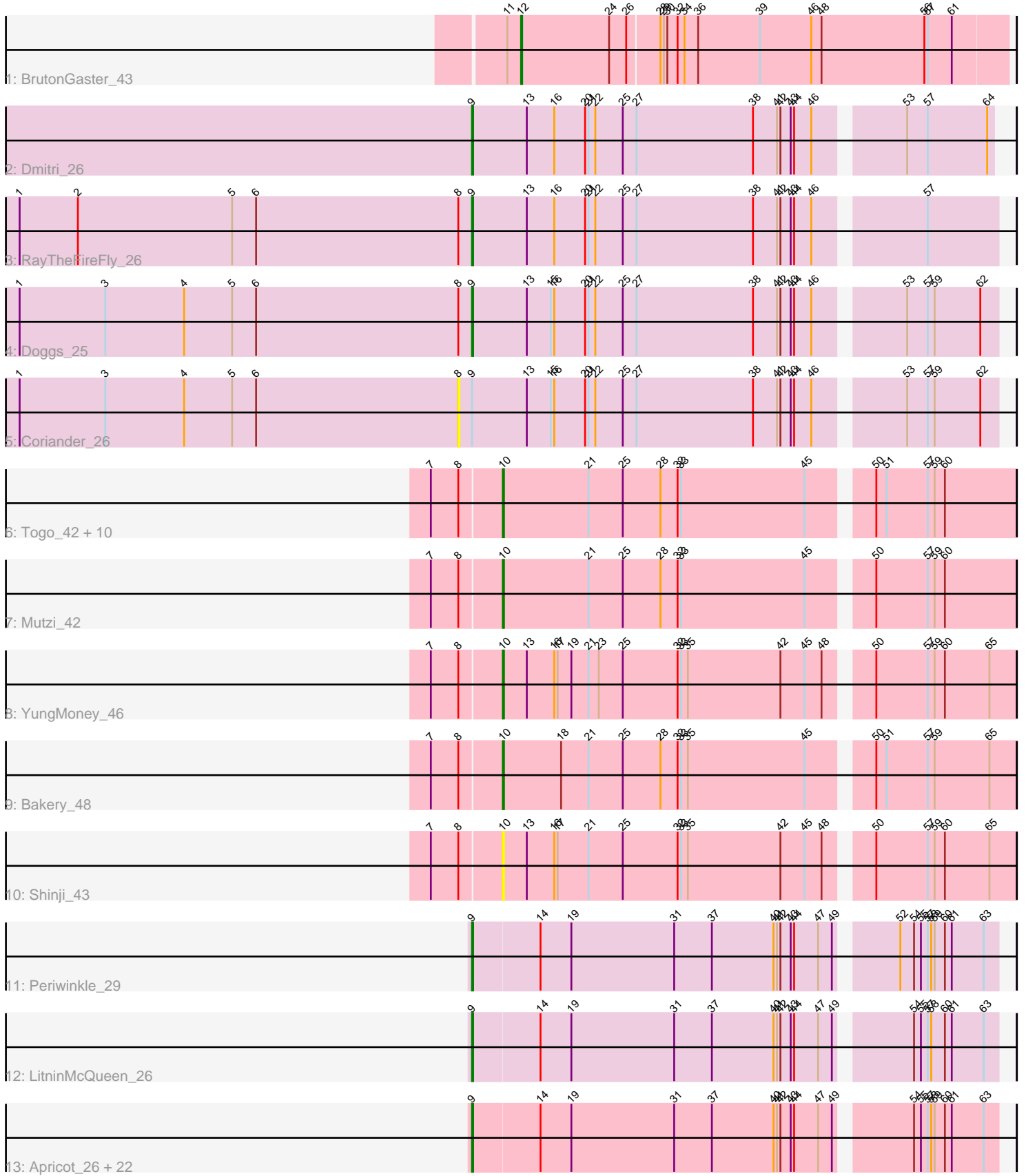


Pham 203056



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 203056 Report

This analysis was run 01/18/25 on database version 583.

Pham number 203056 has 45 members, 6 are drafts.

Phages represented in each track:

- Track 1 : BrutonGaster_43
- Track 2 : Dmitri_26
- Track 3 : RayTheFireFly_26
- Track 4 : Doggs_25
- Track 5 : Coriander_26
- Track 6 : Togo_42, Fireball_44, Barb_45, Phlop_42, Fugax_46, PullumCavea_42, ClamChowder_45, PinkCoffee_45, Nubi_43, TillyBobJoe_43, SmokingBunny_43
- Track 7 : Mutzi_42
- Track 8 : YungMoney_46
- Track 9 : Bakery_48
- Track 10 : Shinji_43
- Track 11 : Periwinkle_29
- Track 12 : LitninMcQueen_26
- Track 13 : Apricot_26, Budski_27, Leroy_27, Getalong_28, MortyNRick_26, Horus_27, Phistory_28, BotCity_28, Phabuloso_26, ShawBrad_27, BENtherdunthat_27, Lutum_27, CheeseTouch_27, Kamaru_27, Birdsong_26, Frickyeah_26, BearBQ_26, Kenna_26, Asapag_27, Whitney_28, Crater_25, Holliday_27, Kuwabara_26

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

The start number called the most often in the published annotations is 9, it was called in 24 of the 39 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Apricot_26, Asapag_27, BENtherdunthat_27, BearBQ_26, Birdsong_26, BotCity_28, Budski_27, CheeseTouch_27, Crater_25, Dmitri_26, Doggs_25, Frickyeah_26, Getalong_28, Holliday_27, Horus_27, Kamaru_27, Kenna_26, Kuwabara_26, Leroy_27, LitninMcQueen_26, Lutum_27, MortyNRick_26, Periwinkle_29, Phabuloso_26, Phistory_28, RayTheFireFly_26, ShawBrad_27, Whitney_28,

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

- Coriander_26,

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

• Bakery_48, Barb_45, BrutonGaster_43, ClamChowder_45, Fireball_44, Fugax_46, Mutzi_42, Nubi_43, Phlop_42, PinkCoffee_45, PullumCavea_42, Shinji_43, SmokingBunny_43, TillyBobJoe_43, Togo_42, YungMoney_46,

Summary by start number:

Start 8:

- Found in 18 of 45 (40.0%) of genes in pham
- No Manual Annotations of this start.
- Called 5.6% of time when present
- Phage (with cluster) where this start called: Coriander_26 (DB),

Start 9:

- Found in 29 of 45 (64.4%) of genes in pham
- Manual Annotations of this start: 24 of 39
- Called 96.6% of time when present
- Phage (with cluster) where this start called: Apricot_26 (DN3), Asapag_27 (DN1), BENTherdunthat_27 (DN1), BearBQ_26 (DN), Birdsong_26 (DN), BotCity_28 (DN), Budski_27 (DN), CheeseTouch_27 (DN1), Crater_25 (DN3), Dmitri_26 (DB), Doggs_25 (DB), Frickyeah_26 (DN1), Getalong_28 (DN1), Holliday_27 (DN1), Horus_27 (DN1), Kamaru_27 (DN1), Kenna_26 (DN1), Kuwabara_26 (DN4), Leroy_27 (DN1), LitninMcQueen_26 (DN1), Lutum_27 (DN1), MortyNRick_26 (DN), Periwinkle_29 (DN1), Phabuloso_26 (DN1), Phistory_28 (DN1), RayTheFireFly_26 (DB), ShawBrad_27 (DN1), Whitney_28 (DN1),

Start 10:

- Found in 15 of 45 (33.3%) of genes in pham
- Manual Annotations of this start: 14 of 39
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bakery_48 (DC1), Barb_45 (DC1), ClamChowder_45 (DC1), Fireball_44 (DC1), Fugax_46 (DC1), Mutzi_42 (DC1), Nubi_43 (DC1), Phlop_42 (DC1), PinkCoffee_45 (DC1), PullumCavea_42 (DC1), Shinji_43 (DC1), SmokingBunny_43 (DC1), TillyBobJoe_43 (DC1), Togo_42 (DC1), YungMoney_46 (DC1),

Start 12:

- Found in 1 of 45 (2.2%) of genes in pham
- Manual Annotations of this start: 1 of 39
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BrutonGaster_43 (CQ2),

Summary by clusters:

There are 7 clusters represented in this pham: DN, DB, DN4, DN1, DN3, CQ2, DC1,

Info for manual annotations of cluster CQ2:

- Start number 12 was manually annotated 1 time for cluster CQ2.

Info for manual annotations of cluster DB:

- Start number 9 was manually annotated 3 times for cluster DB.

Info for manual annotations of cluster DC1:

- Start number 10 was manually annotated 14 times for cluster DC1.

Info for manual annotations of cluster DN:

- Start number 9 was manually annotated 3 times for cluster DN.

Info for manual annotations of cluster DN1:

- Start number 9 was manually annotated 15 times for cluster DN1.

Info for manual annotations of cluster DN3:

- Start number 9 was manually annotated 2 times for cluster DN3.

Info for manual annotations of cluster DN4:

- Start number 9 was manually annotated 1 time for cluster DN4.

Gene Information:

Gene: Apricot_26 Start: 20622, Stop: 21062, Start Num: 9

Candidate Starts for Apricot_26:

(Start: 9 @20622 has 24 MA's), (14, 20679), (19, 20706), (31, 20796), (37, 20829), (40, 20883), (41, 20886), (42, 20889), (43, 20898), (44, 20901), (47, 20922), (49, 20934), (54, 20991), (55, 20997), (57, 21003), (58, 21006), (59, 21009), (60, 21018), (61, 21024), (63, 21051),

Gene: Asapag_27 Start: 21064, Stop: 21504, Start Num: 9

Candidate Starts for Asapag_27:

(Start: 9 @21064 has 24 MA's), (14, 21121), (19, 21148), (31, 21238), (37, 21271), (40, 21325), (41, 21328), (42, 21331), (43, 21340), (44, 21343), (47, 21364), (49, 21376), (54, 21433), (55, 21439), (57, 21445), (58, 21448), (59, 21451), (60, 21460), (61, 21466), (63, 21493),

Gene: BENtherdunthat_27 Start: 21061, Stop: 21501, Start Num: 9

Candidate Starts for BENtherdunthat_27:

(Start: 9 @21061 has 24 MA's), (14, 21118), (19, 21145), (31, 21235), (37, 21268), (40, 21322), (41, 21325), (42, 21328), (43, 21337), (44, 21340), (47, 21361), (49, 21373), (54, 21430), (55, 21436), (57, 21442), (58, 21445), (59, 21448), (60, 21457), (61, 21463), (63, 21490),

Gene: Bakery_48 Start: 37078, Stop: 37512, Start Num: 10

Candidate Starts for Bakery_48:

(7, 37018), (8, 37042), (Start: 10 @37078 has 14 MA's), (18, 37129), (21, 37153), (25, 37183), (28, 37216), (32, 37231), (33, 37234), (35, 37240), (45, 37342), (50, 37390), (51, 37399), (57, 37435), (59, 37441), (65, 37489),

Gene: Barb_45 Start: 36050, Stop: 36484, Start Num: 10

Candidate Starts for Barb_45:

(7, 35990), (8, 36014), (Start: 10 @36050 has 14 MA's), (21, 36125), (25, 36155), (28, 36188), (32, 36203), (33, 36206), (45, 36314), (50, 36362), (51, 36371), (57, 36407), (59, 36413), (60, 36422),

Gene: BearBQ_26 Start: 21901, Stop: 22341, Start Num: 9

Candidate Starts for BearBQ_26:

(Start: 9 @21901 has 24 MA's), (14, 21958), (19, 21985), (31, 22075), (37, 22108), (40, 22162), (41, 22165), (42, 22168), (43, 22177), (44, 22180), (47, 22201), (49, 22213), (54, 22270), (55, 22276), (57, 22282), (58, 22285), (59, 22288), (60, 22297), (61, 22303), (63, 22330),

Gene: Birdsong_26 Start: 20794, Stop: 21234, Start Num: 9

Candidate Starts for Birdsong_26:

(Start: 9 @20794 has 24 MA's), (14, 20851), (19, 20878), (31, 20968), (37, 21001), (40, 21055), (41, 21058), (42, 21061), (43, 21070), (44, 21073), (47, 21094), (49, 21106), (54, 21163), (55, 21169), (57, 21175), (58, 21178), (59, 21181), (60, 21190), (61, 21196), (63, 21223),

Gene: BotCity_28 Start: 21062, Stop: 21502, Start Num: 9

Candidate Starts for BotCity_28:

(Start: 9 @21062 has 24 MA's), (14, 21119), (19, 21146), (31, 21236), (37, 21269), (40, 21323), (41, 21326), (42, 21329), (43, 21338), (44, 21341), (47, 21362), (49, 21374), (54, 21431), (55, 21437), (57, 21443), (58, 21446), (59, 21449), (60, 21458), (61, 21464), (63, 21491),

Gene: BrutonGaster_43 Start: 30940, Stop: 31359, Start Num: 12

Candidate Starts for BrutonGaster_43:

(11, 30928), (Start: 12 @30940 has 1 MA's), (24, 31015), (26, 31030), (28, 31057), (29, 31060), (30, 31063), (32, 31072), (34, 31078), (36, 31090), (39, 31144), (46, 31189), (48, 31198), (56, 31288), (57, 31291), (61, 31312),

Gene: Budski_27 Start: 21169, Stop: 21609, Start Num: 9

Candidate Starts for Budski_27:

(Start: 9 @21169 has 24 MA's), (14, 21226), (19, 21253), (31, 21343), (37, 21376), (40, 21430), (41, 21433), (42, 21436), (43, 21445), (44, 21448), (47, 21469), (49, 21481), (54, 21538), (55, 21544), (57, 21550), (58, 21553), (59, 21556), (60, 21565), (61, 21571), (63, 21598),

Gene: CheeseTouch_27 Start: 21055, Stop: 21495, Start Num: 9

Candidate Starts for CheeseTouch_27:

(Start: 9 @21055 has 24 MA's), (14, 21112), (19, 21139), (31, 21229), (37, 21262), (40, 21316), (41, 21319), (42, 21322), (43, 21331), (44, 21334), (47, 21355), (49, 21367), (54, 21424), (55, 21430), (57, 21436), (58, 21439), (59, 21442), (60, 21451), (61, 21457), (63, 21484),

Gene: ClamChowder_45 Start: 36050, Stop: 36484, Start Num: 10

Candidate Starts for ClamChowder_45:

(7, 35990), (8, 36014), (Start: 10 @36050 has 14 MA's), (21, 36125), (25, 36155), (28, 36188), (32, 36203), (33, 36206), (45, 36314), (50, 36362), (51, 36371), (57, 36407), (59, 36413), (60, 36422),

Gene: Coriander_26 Start: 22086, Stop: 22541, Start Num: 8

Candidate Starts for Coriander_26:

(1, 21702), (3, 21777), (4, 21846), (5, 21888), (6, 21909), (8, 22086), (Start: 9 @22098 has 24 MA's), (13, 22146), (15, 22167), (16, 22170), (20, 22197), (21, 22200), (22, 22206), (25, 22230), (27, 22242), (38, 22344), (41, 22365), (42, 22368), (43, 22377), (44, 22380), (46, 22395), (53, 22464), (57, 22482), (59, 22488), (62, 22527),

Gene: Crater_25 Start: 20622, Stop: 21062, Start Num: 9

Candidate Starts for Crater_25:

(Start: 9 @20622 has 24 MA's), (14, 20679), (19, 20706), (31, 20796), (37, 20829), (40, 20883), (41, 20886), (42, 20889), (43, 20898), (44, 20901), (47, 20922), (49, 20934), (54, 20991), (55, 20997), (57, 21003), (58, 21006), (59, 21009), (60, 21018), (61, 21024), (63, 21051),

Gene: Dmitri_26 Start: 22153, Stop: 22593, Start Num: 9

Candidate Starts for Dmitri_26:

(Start: 9 @22153 has 24 MA's), (13, 22201), (16, 22225), (20, 22252), (21, 22255), (22, 22261), (25, 22285), (27, 22297), (38, 22399), (41, 22420), (42, 22423), (43, 22432), (44, 22435), (46, 22450), (53, 22519), (57, 22537), (64, 22588),

Gene: Doggs_25 Start: 21797, Stop: 22240, Start Num: 9

Candidate Starts for Doggs_25:

(1, 21401), (3, 21476), (4, 21545), (5, 21587), (6, 21608), (8, 21785), (Start: 9 @21797 has 24 MA's), (13, 21845), (15, 21866), (16, 21869), (20, 21896), (21, 21899), (22, 21905), (25, 21929), (27, 21941), (38, 22043), (41, 22064), (42, 22067), (43, 22076), (44, 22079), (46, 22094), (53, 22163), (57, 22181), (59, 22187), (62, 22226),

Gene: Fireball_44 Start: 35995, Stop: 36429, Start Num: 10

Candidate Starts for Fireball_44:

(7, 35935), (8, 35959), (Start: 10 @35995 has 14 MA's), (21, 36070), (25, 36100), (28, 36133), (32, 36148), (33, 36151), (45, 36259), (50, 36307), (51, 36316), (57, 36352), (59, 36358), (60, 36367),

Gene: Frickyeah_26 Start: 20827, Stop: 21267, Start Num: 9

Candidate Starts for Frickyeah_26:

(Start: 9 @20827 has 24 MA's), (14, 20884), (19, 20911), (31, 21001), (37, 21034), (40, 21088), (41, 21091), (42, 21094), (43, 21103), (44, 21106), (47, 21127), (49, 21139), (54, 21196), (55, 21202), (57, 21208), (58, 21211), (59, 21214), (60, 21223), (61, 21229), (63, 21256),

Gene: Fugax_46 Start: 36042, Stop: 36476, Start Num: 10

Candidate Starts for Fugax_46:

(7, 35982), (8, 36006), (Start: 10 @36042 has 14 MA's), (21, 36117), (25, 36147), (28, 36180), (32, 36195), (33, 36198), (45, 36306), (50, 36354), (51, 36363), (57, 36399), (59, 36405), (60, 36414),

Gene: Getalong_28 Start: 21864, Stop: 22304, Start Num: 9

Candidate Starts for Getalong_28:

(Start: 9 @21864 has 24 MA's), (14, 21921), (19, 21948), (31, 22038), (37, 22071), (40, 22125), (41, 22128), (42, 22131), (43, 22140), (44, 22143), (47, 22164), (49, 22176), (54, 22233), (55, 22239), (57, 22245), (58, 22248), (59, 22251), (60, 22260), (61, 22266), (63, 22293),

Gene: Holliday_27 Start: 21169, Stop: 21609, Start Num: 9

Candidate Starts for Holliday_27:

(Start: 9 @21169 has 24 MA's), (14, 21226), (19, 21253), (31, 21343), (37, 21376), (40, 21430), (41, 21433), (42, 21436), (43, 21445), (44, 21448), (47, 21469), (49, 21481), (54, 21538), (55, 21544), (57, 21550), (58, 21553), (59, 21556), (60, 21565), (61, 21571), (63, 21598),

Gene: Horus_27 Start: 21086, Stop: 21526, Start Num: 9

Candidate Starts for Horus_27:

(Start: 9 @21086 has 24 MA's), (14, 21143), (19, 21170), (31, 21260), (37, 21293), (40, 21347), (41, 21350), (42, 21353), (43, 21362), (44, 21365), (47, 21386), (49, 21398), (54, 21455), (55, 21461), (57, 21467), (58, 21470), (59, 21473), (60, 21482), (61, 21488), (63, 21515),

Gene: Kamaru_27 Start: 21169, Stop: 21609, Start Num: 9

Candidate Starts for Kamaru_27:

(Start: 9 @21169 has 24 MA's), (14, 21226), (19, 21253), (31, 21343), (37, 21376), (40, 21430), (41, 21433), (42, 21436), (43, 21445), (44, 21448), (47, 21469), (49, 21481), (54, 21538), (55, 21544), (57, 21550), (58, 21553), (59, 21556), (60, 21565), (61, 21571), (63, 21598),

Gene: Kenna_26 Start: 21062, Stop: 21502, Start Num: 9

Candidate Starts for Kenna_26:

(Start: 9 @21062 has 24 MA's), (14, 21119), (19, 21146), (31, 21236), (37, 21269), (40, 21323), (41, 21326), (42, 21329), (43, 21338), (44, 21341), (47, 21362), (49, 21374), (54, 21431), (55, 21437), (57, 21443), (58, 21446), (59, 21449), (60, 21458), (61, 21464), (63, 21491),

Gene: Kuwabara_26 Start: 20488, Stop: 20928, Start Num: 9

Candidate Starts for Kuwabara_26:

(Start: 9 @20488 has 24 MA's), (14, 20545), (19, 20572), (31, 20662), (37, 20695), (40, 20749), (41, 20752), (42, 20755), (43, 20764), (44, 20767), (47, 20788), (49, 20800), (54, 20857), (55, 20863), (57, 20869), (58, 20872), (59, 20875), (60, 20884), (61, 20890), (63, 20917),

Gene: Leroy_27 Start: 21087, Stop: 21527, Start Num: 9

Candidate Starts for Leroy_27:

(Start: 9 @21087 has 24 MA's), (14, 21144), (19, 21171), (31, 21261), (37, 21294), (40, 21348), (41, 21351), (42, 21354), (43, 21363), (44, 21366), (47, 21387), (49, 21399), (54, 21456), (55, 21462), (57, 21468), (58, 21471), (59, 21474), (60, 21483), (61, 21489), (63, 21516),

Gene: LitninMcQueen_26 Start: 20818, Stop: 21258, Start Num: 9

Candidate Starts for LitninMcQueen_26:

(Start: 9 @20818 has 24 MA's), (14, 20875), (19, 20902), (31, 20992), (37, 21025), (40, 21079), (41, 21082), (42, 21085), (43, 21094), (44, 21097), (47, 21118), (49, 21130), (54, 21187), (55, 21193), (57, 21199), (58, 21202), (60, 21214), (61, 21220), (63, 21247),

Gene: Lutum_27 Start: 21062, Stop: 21502, Start Num: 9

Candidate Starts for Lutum_27:

(Start: 9 @21062 has 24 MA's), (14, 21119), (19, 21146), (31, 21236), (37, 21269), (40, 21323), (41, 21326), (42, 21329), (43, 21338), (44, 21341), (47, 21362), (49, 21374), (54, 21431), (55, 21437), (57, 21443), (58, 21446), (59, 21449), (60, 21458), (61, 21464), (63, 21491),

Gene: MortyNRick_26 Start: 20794, Stop: 21234, Start Num: 9

Candidate Starts for MortyNRick_26:

(Start: 9 @20794 has 24 MA's), (14, 20851), (19, 20878), (31, 20968), (37, 21001), (40, 21055), (41, 21058), (42, 21061), (43, 21070), (44, 21073), (47, 21094), (49, 21106), (54, 21163), (55, 21169), (57, 21175), (58, 21178), (59, 21181), (60, 21190), (61, 21196), (63, 21223),

Gene: Mutzi_42 Start: 36730, Stop: 37164, Start Num: 10

Candidate Starts for Mutzi_42:

(7, 36670), (8, 36694), (Start: 10 @36730 has 14 MA's), (21, 36805), (25, 36835), (28, 36868), (32, 36883), (33, 36886), (45, 36994), (50, 37042), (57, 37087), (59, 37093), (60, 37102),

Gene: Nubi_43 Start: 35875, Stop: 36309, Start Num: 10

Candidate Starts for Nubi_43:

(7, 35815), (8, 35839), (Start: 10 @35875 has 14 MA's), (21, 35950), (25, 35980), (28, 36013), (32, 36028), (33, 36031), (45, 36139), (50, 36187), (51, 36196), (57, 36232), (59, 36238), (60, 36247),

Gene: Periwinkle_29 Start: 21531, Stop: 21971, Start Num: 9

Candidate Starts for Periwinkle_29:

(Start: 9 @21531 has 24 MA's), (14, 21588), (19, 21615), (31, 21705), (37, 21738), (40, 21792), (41, 21795), (42, 21798), (43, 21807), (44, 21810), (47, 21831), (49, 21843), (52, 21888), (54, 21900), (55, 21906), (57, 21912), (58, 21915), (59, 21918), (60, 21927), (61, 21933), (63, 21960),

Gene: Phabuloso_26 Start: 20818, Stop: 21258, Start Num: 9

Candidate Starts for Phabuloso_26:

(Start: 9 @20818 has 24 MA's), (14, 20875), (19, 20902), (31, 20992), (37, 21025), (40, 21079), (41, 21082), (42, 21085), (43, 21094), (44, 21097), (47, 21118), (49, 21130), (54, 21187), (55, 21193), (57, 21199), (58, 21202), (59, 21205), (60, 21214), (61, 21220), (63, 21247),

Gene: Phistory_28 Start: 21852, Stop: 22292, Start Num: 9

Candidate Starts for Phistory_28:

(Start: 9 @21852 has 24 MA's), (14, 21909), (19, 21936), (31, 22026), (37, 22059), (40, 22113), (41, 22116), (42, 22119), (43, 22128), (44, 22131), (47, 22152), (49, 22164), (54, 22221), (55, 22227), (57, 22233), (58, 22236), (59, 22239), (60, 22248), (61, 22254), (63, 22281),

Gene: Phlop_42 Start: 35956, Stop: 36390, Start Num: 10

Candidate Starts for Phlop_42:

(7, 35896), (8, 35920), (Start: 10 @35956 has 14 MA's), (21, 36031), (25, 36061), (28, 36094), (32, 36109), (33, 36112), (45, 36220), (50, 36268), (51, 36277), (57, 36313), (59, 36319), (60, 36328),

Gene: PinkCoffee_45 Start: 36059, Stop: 36493, Start Num: 10

Candidate Starts for PinkCoffee_45:

(7, 35999), (8, 36023), (Start: 10 @36059 has 14 MA's), (21, 36134), (25, 36164), (28, 36197), (32, 36212), (33, 36215), (45, 36323), (50, 36371), (51, 36380), (57, 36416), (59, 36422), (60, 36431),

Gene: PullumCavea_42 Start: 35956, Stop: 36390, Start Num: 10

Candidate Starts for PullumCavea_42:

(7, 35896), (8, 35920), (Start: 10 @35956 has 14 MA's), (21, 36031), (25, 36061), (28, 36094), (32, 36109), (33, 36112), (45, 36220), (50, 36268), (51, 36277), (57, 36313), (59, 36319), (60, 36328),

Gene: RayTheFireFly_26 Start: 22130, Stop: 22573, Start Num: 9

Candidate Starts for RayTheFireFly_26:

(1, 21734), (2, 21785), (5, 21920), (6, 21941), (8, 22118), (Start: 9 @22130 has 24 MA's), (13, 22178), (16, 22202), (20, 22229), (21, 22232), (22, 22238), (25, 22262), (27, 22274), (38, 22376), (41, 22397), (42, 22400), (43, 22409), (44, 22412), (46, 22427), (57, 22514),

Gene: ShawBrad_27 Start: 21074, Stop: 21514, Start Num: 9

Candidate Starts for ShawBrad_27:

(Start: 9 @21074 has 24 MA's), (14, 21131), (19, 21158), (31, 21248), (37, 21281), (40, 21335), (41, 21338), (42, 21341), (43, 21350), (44, 21353), (47, 21374), (49, 21386), (54, 21443), (55, 21449), (57, 21455), (58, 21458), (59, 21461), (60, 21470), (61, 21476), (63, 21503),

Gene: Shinji_43 Start: 35312, Stop: 35746, Start Num: 10

Candidate Starts for Shinji_43:

(7, 35252), (8, 35276), (Start: 10 @35312 has 14 MA's), (13, 35333), (16, 35357), (17, 35360), (21, 35387), (25, 35417), (32, 35465), (33, 35468), (35, 35474), (42, 35555), (45, 35576), (48, 35591), (50, 35624), (57, 35669), (59, 35675), (60, 35684), (65, 35723),

Gene: SmokingBunny_43 Start: 35861, Stop: 36295, Start Num: 10

Candidate Starts for SmokingBunny_43:

(7, 35801), (8, 35825), (Start: 10 @35861 has 14 MA's), (21, 35936), (25, 35966), (28, 35999), (32, 36014), (33, 36017), (45, 36125), (50, 36173), (51, 36182), (57, 36218), (59, 36224), (60, 36233),

Gene: TillyBobJoe_43 Start: 35665, Stop: 36099, Start Num: 10

Candidate Starts for TillyBobJoe_43:

(7, 35605), (8, 35629), (Start: 10 @35665 has 14 MA's), (21, 35740), (25, 35770), (28, 35803), (32, 35818), (33, 35821), (45, 35929), (50, 35977), (51, 35986), (57, 36022), (59, 36028), (60, 36037),

Gene: Togo_42 Start: 35861, Stop: 36295, Start Num: 10

Candidate Starts for Togo_42:

(7, 35801), (8, 35825), (Start: 10 @35861 has 14 MA's), (21, 35936), (25, 35966), (28, 35999), (32, 36014), (33, 36017), (45, 36125), (50, 36173), (51, 36182), (57, 36218), (59, 36224), (60, 36233),

Gene: Whitney_28 Start: 21973, Stop: 22413, Start Num: 9

Candidate Starts for Whitney_28:

(Start: 9 @21973 has 24 MA's), (14, 22030), (19, 22057), (31, 22147), (37, 22180), (40, 22234), (41, 22237), (42, 22240), (43, 22249), (44, 22252), (47, 22273), (49, 22285), (54, 22342), (55, 22348), (57, 22354), (58, 22357), (59, 22360), (60, 22369), (61, 22375), (63, 22402),

Gene: YungMoney_46 Start: 38304, Stop: 38738, Start Num: 10

Candidate Starts for YungMoney_46:

(7, 38244), (8, 38268), (Start: 10 @38304 has 14 MA's), (13, 38325), (16, 38349), (17, 38352), (19, 38364), (21, 38379), (23, 38388), (25, 38409), (32, 38457), (33, 38460), (35, 38466), (42, 38547), (45, 38568), (48, 38583), (50, 38616), (57, 38661), (59, 38667), (60, 38676), (65, 38715),