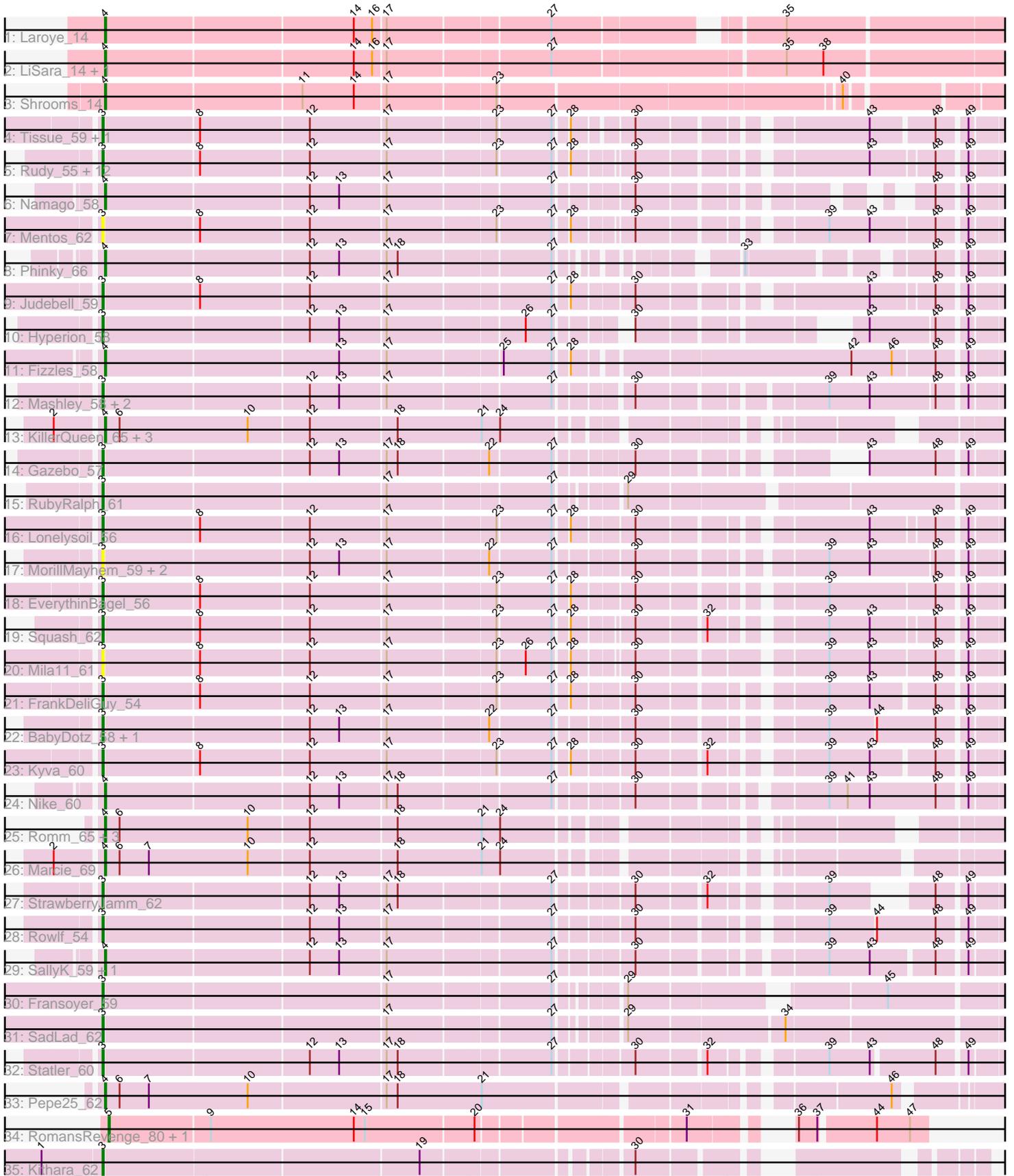


Pham 291172



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 291172 Report

This analysis was run 03/28/26 on database version 641.

Pham number 291172 has 62 members, 8 are drafts.

Phages represented in each track:

- Track 1 : Laroye_14
- Track 2 : LiSara_14, Salgado_14
- Track 3 : Shrooms_14
- Track 4 : Tissue_59, Grassboy_60
- Track 5 : Rudy_55, Quammi_55, DonaldDuck_57, Wheelie_57, Viceroy_56, Casend_58, Llemily_57, Wayne3_59, Phabia_57, Jehoshaphat_59, Zhafia_60, Sillytadpoles_58, Teehee_58
- Track 6 : Namago_58
- Track 7 : Mentos_62
- Track 8 : Phinky_66
- Track 9 : Judebell_59
- Track 10 : Hyperion_58
- Track 11 : Fizzles_58
- Track 12 : Mashley_58, AluminumJesus_55, Blab_56
- Track 13 : KillerQueen_65, Tempo_64, Kelcole_62, Fregley_64
- Track 14 : Gazebo_57
- Track 15 : RubyRalph_61
- Track 16 : Lonelysoil_56
- Track 17 : MorillMayhem_59, WheelerS25_65, BaconCheese_61
- Track 18 : EverythinBagel_56
- Track 19 : Squash_62
- Track 20 : Mila11_61
- Track 21 : FrankDeliGuy_54
- Track 22 : BabyDotz_58, SlySloth_60
- Track 23 : Kyva_60
- Track 24 : Nike_60
- Track 25 : Romm_65, OneinaGillian_63, RobinRose_65, CandC_62
- Track 26 : Marcie_69
- Track 27 : StrawberryJamm_62
- Track 28 : Rowlf_54
- Track 29 : SallyK_59, Zagie_58
- Track 30 : Fransoyer_59
- Track 31 : SadLad_62
- Track 32 : Statler_60
- Track 33 : Pepe25_62
- Track 34 : RomansRevenge_80, Boise_78
- Track 35 : Kithara_62

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

The start number called the most often in the published annotations is 3, it was called in 34 of the 54 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AluminumJesus_55, BabyDotz_58, BaconCheese_61, Blab_56, Casend_58, DonaldDuck_57, EverythinBagel_56, FrankDeliGuy_54, Fransoyer_59, Gazebo_57, Grassboy_60, Hyperion_58, Jehoshaphat_59, Judebell_59, Kithara_62, Kyva_60, Llemily_57, Lonelysoil_56, Mashley_58, Mentos_62, Mila11_61, MorillMayhem_59, Phabia_57, Quammi_55, Rowlf_54, RubyRalph_61, Rudy_55, SadLad_62, Sillytadpoles_58, SlySloth_60, Squash_62, Statler_60, StrawberryJamm_62, Teehee_58, Tissue_59, Viceroy_56, Wayne3_59, WheelerS25_65, Wheelie_57, Zhafia_60,

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

-

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

- Boise_78, CandC_62, Fizzles_58, Fregley_64, Kelcole_62, KillerQueen_65, Laroye_14, LiSara_14, Marcie_69, Namago_58, Nike_60, OneinaGillian_63, Pepe25_62, Phinky_66, RobinRose_65, RomansRevenge_80, Romm_65, Salgado_14, SallyK_59, Shrooms_14, Tempo_64, Zagie_58,

Summary by start number:

Start 3:

- Found in 40 of 62 (64.5%) of genes in pham
- Manual Annotations of this start: 34 of 54
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AluminumJesus_55 (EG), BabyDotz_58 (EG), BaconCheese_61 (EG), Blab_56 (EG), Casend_58 (EG), DonaldDuck_57 (EG), EverythinBagel_56 (EG), FrankDeliGuy_54 (EG), Fransoyer_59 (EG), Gazebo_57 (EG), Grassboy_60 (EG), Hyperion_58 (EG), Jehoshaphat_59 (EG), Judebell_59 (EG), Kithara_62 (singleton), Kyva_60 (EG), Llemily_57 (EG), Lonelysoil_56 (EG), Mashley_58 (EG), Mentos_62 (EG), Mila11_61 (EG), MorillMayhem_59 (EG), Phabia_57 (EG), Quammi_55 (EG), Rowlf_54 (EG), RubyRalph_61 (EG), Rudy_55 (EG), SadLad_62 (EG), Sillytadpoles_58 (EG), SlySloth_60 (EG), Squash_62 (EG), Statler_60 (EG), StrawberryJamm_62 (EG), Teehee_58 (EG), Tissue_59 (EG), Viceroy_56 (EG), Wayne3_59 (EG), WheelerS25_65 (EG), Wheelie_57 (EG), Zhafia_60 (EG),

Start 4:

- Found in 20 of 62 (32.3%) of genes in pham
- Manual Annotations of this start: 19 of 54
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CandC_62 (EG), Fizzles_58 (EG), Fregley_64 (EG), Kelcole_62 (EG), KillerQueen_65 (EG), Laroye_14 (AL), LiSara_14 (AL), Marcie_69 (EG), Namago_58 (EG), Nike_60 (EG), OneinaGillian_63 (EG),

Pepe25_62 (EG), Phinky_66 (EG), RobinRose_65 (EG), Romm_65 (EG), Salgado_14 (AL), SallyK_59 (EG), Shrooms_14 (AL), Tempo_64 (EG), Zagie_58 (EG),

Start 5:

- Found in 2 of 62 (3.2%) of genes in pham
- Manual Annotations of this start: 1 of 54
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Boise_78 (FT), RomansRevenge_80 (FT),

Summary by clusters:

There are 4 clusters represented in this pham: EG, FT, singleton, AL,

Info for manual annotations of cluster AL:

- Start number 4 was manually annotated 4 times for cluster AL.

Info for manual annotations of cluster EG:

- Start number 3 was manually annotated 33 times for cluster EG.
- Start number 4 was manually annotated 15 times for cluster EG.

Info for manual annotations of cluster FT:

- Start number 5 was manually annotated 1 time for cluster FT.

Gene Information:

Gene: AluminumJesus_55 Start: 42828, Stop: 42118, Start Num: 3

Candidate Starts for AluminumJesus_55:

(Start: 3 @42828 has 34 MA's), (12, 42666), (13, 42642), (17, 42606), (27, 42480), (30, 42423), (39, 42297), (43, 42264), (48, 42210), (49, 42189),

Gene: BabyDotz_58 Start: 44301, Stop: 43588, Start Num: 3

Candidate Starts for BabyDotz_58:

(Start: 3 @44301 has 34 MA's), (12, 44139), (13, 44115), (17, 44079), (22, 44001), (27, 43953), (30, 43899), (39, 43773), (44, 43737), (48, 43689), (49, 43668),

Gene: BaconCheese_61 Start: 44757, Stop: 44053, Start Num: 3

Candidate Starts for BaconCheese_61:

(Start: 3 @44757 has 34 MA's), (12, 44595), (13, 44571), (17, 44535), (22, 44457), (27, 44409), (30, 44361), (39, 44229), (43, 44196), (48, 44145), (49, 44124),

Gene: Blab_56 Start: 43444, Stop: 42740, Start Num: 3

Candidate Starts for Blab_56:

(Start: 3 @43444 has 34 MA's), (12, 43282), (13, 43258), (17, 43222), (27, 43096), (30, 43042), (39, 42916), (43, 42883), (48, 42829), (49, 42808),

Gene: Boise_78 Start: 53384, Stop: 52791, Start Num: 5

Candidate Starts for Boise_78:

(Start: 5 @53384 has 1 MA's), (9, 53303), (14, 53186), (15, 53177), (20, 53090), (31, 52940), (36, 52889), (37, 52874), (44, 52832), (47, 52805),

Gene: CandC_62 Start: 42994, Stop: 42269, Start Num: 4

Candidate Starts for CandC_62:

(Start: 4 @42994 has 19 MA's), (6, 42982), (10, 42877), (12, 42829), (18, 42760), (21, 42691), (24, 42676),

Gene: Casend_58 Start: 43670, Stop: 42972, Start Num: 3

Candidate Starts for Casend_58:

(Start: 3 @43670 has 34 MA's), (8, 43595), (12, 43508), (17, 43448), (23, 43364), (27, 43322), (28, 43313), (30, 43271), (43, 43112), (48, 43064), (49, 43043),

Gene: DonaldDuck_57 Start: 43019, Stop: 42321, Start Num: 3

Candidate Starts for DonaldDuck_57:

(Start: 3 @43019 has 34 MA's), (8, 42944), (12, 42857), (17, 42797), (23, 42713), (27, 42671), (28, 42662), (30, 42620), (43, 42461), (48, 42413), (49, 42392),

Gene: EverythinBagel_56 Start: 43393, Stop: 42680, Start Num: 3

Candidate Starts for EverythinBagel_56:

(Start: 3 @43393 has 34 MA's), (8, 43318), (12, 43231), (17, 43171), (23, 43087), (27, 43045), (28, 43036), (30, 42991), (39, 42865), (48, 42781), (49, 42760),

Gene: Fizzles_58 Start: 43354, Stop: 42620, Start Num: 4

Candidate Starts for Fizzles_58:

(Start: 4 @43354 has 19 MA's), (13, 43168), (17, 43132), (25, 43045), (27, 43006), (28, 42997), (42, 42787), (46, 42754), (48, 42721), (49, 42700),

Gene: FrankDeliGuy_54 Start: 43007, Stop: 42297, Start Num: 3

Candidate Starts for FrankDeliGuy_54:

(Start: 3 @43007 has 34 MA's), (8, 42932), (12, 42845), (17, 42785), (23, 42701), (27, 42659), (28, 42650), (30, 42605), (39, 42479), (43, 42446), (48, 42398), (49, 42377),

Gene: Fransoyer_59 Start: 45054, Stop: 44338, Start Num: 3

Candidate Starts for Fransoyer_59:

(Start: 3 @45054 has 34 MA's), (17, 44832), (27, 44706), (29, 44664), (45, 44484),

Gene: Fregley_64 Start: 43164, Stop: 42451, Start Num: 4

Candidate Starts for Fregley_64:

(2, 43200), (Start: 4 @43164 has 19 MA's), (6, 43152), (10, 43047), (12, 42999), (18, 42930), (21, 42861), (24, 42846),

Gene: Gazebo_57 Start: 43512, Stop: 42829, Start Num: 3

Candidate Starts for Gazebo_57:

(Start: 3 @43512 has 34 MA's), (12, 43350), (13, 43326), (17, 43290), (18, 43281), (22, 43212), (27, 43164), (30, 43110), (43, 42984), (48, 42930), (49, 42909),

Gene: Grassboy_60 Start: 43901, Stop: 43191, Start Num: 3

Candidate Starts for Grassboy_60:

(Start: 3 @43901 has 34 MA's), (8, 43826), (12, 43739), (17, 43679), (23, 43595), (27, 43553), (28, 43544), (30, 43499), (43, 43340), (48, 43292), (49, 43271),

Gene: Hyperion_58 Start: 43687, Stop: 43004, Start Num: 3

Candidate Starts for Hyperion_58:

(Start: 3 @43687 has 34 MA's), (12, 43525), (13, 43501), (17, 43465), (26, 43360), (27, 43339), (30, 43297), (43, 43156), (48, 43105), (49, 43084),

Gene: Jehoshaphat_59 Start: 43938, Stop: 43240, Start Num: 3

Candidate Starts for Jehoshaphat_59:

(Start: 3 @43938 has 34 MA's), (8, 43863), (12, 43776), (17, 43716), (23, 43632), (27, 43590), (28, 43581), (30, 43539), (43, 43380), (48, 43332), (49, 43311),

Gene: Judebell_59 Start: 43387, Stop: 42686, Start Num: 3

Candidate Starts for Judebell_59:

(Start: 3 @43387 has 34 MA's), (8, 43312), (12, 43225), (17, 43165), (27, 43039), (28, 43030), (30, 42985), (43, 42826), (48, 42778), (49, 42757),

Gene: Kelcole_62 Start: 43226, Stop: 42510, Start Num: 4

Candidate Starts for Kelcole_62:

(2, 43262), (Start: 4 @43226 has 19 MA's), (6, 43214), (10, 43109), (12, 43061), (18, 42992), (21, 42923), (24, 42908),

Gene: KillerQueen_65 Start: 43461, Stop: 42760, Start Num: 4

Candidate Starts for KillerQueen_65:

(2, 43497), (Start: 4 @43461 has 19 MA's), (6, 43449), (10, 43344), (12, 43296), (18, 43227), (21, 43158), (24, 43143),

Gene: Kithara_62 Start: 46071, Stop: 45460, Start Num: 3

Candidate Starts for Kithara_62:

(1, 46119), (Start: 3 @46071 has 34 MA's), (19, 45822), (30, 45675),

Gene: Kyva_60 Start: 43924, Stop: 43214, Start Num: 3

Candidate Starts for Kyva_60:

(Start: 3 @43924 has 34 MA's), (8, 43849), (12, 43762), (17, 43702), (23, 43618), (27, 43576), (28, 43567), (30, 43522), (32, 43471), (39, 43396), (43, 43363), (48, 43315), (49, 43294),

Gene: Laroye_14 Start: 9623, Stop: 10354, Start Num: 4

Candidate Starts for Laroye_14:

(Start: 4 @9623 has 19 MA's), (14, 9821), (16, 9836), (17, 9845), (27, 9971), (35, 10127),

Gene: LiSara_14 Start: 9657, Stop: 10409, Start Num: 4

Candidate Starts for LiSara_14:

(Start: 4 @9657 has 19 MA's), (14, 9855), (16, 9870), (17, 9879), (27, 10005), (35, 10182), (38, 10212),

Gene: Llemily_57 Start: 42714, Stop: 42016, Start Num: 3

Candidate Starts for Llemily_57:

(Start: 3 @42714 has 34 MA's), (8, 42639), (12, 42552), (17, 42492), (23, 42408), (27, 42366), (28, 42357), (30, 42315), (43, 42156), (48, 42108), (49, 42087),

Gene: Lonelysoil_56 Start: 42870, Stop: 42169, Start Num: 3

Candidate Starts for Lonelysoil_56:

(Start: 3 @42870 has 34 MA's), (8, 42795), (12, 42708), (17, 42648), (23, 42564), (27, 42522), (28, 42513), (30, 42468), (43, 42309), (48, 42261), (49, 42240),

Gene: Marcie_69 Start: 44119, Stop: 43409, Start Num: 4

Candidate Starts for Marcie_69:

(2, 44155), (Start: 4 @44119 has 19 MA's), (6, 44107), (7, 44083), (10, 44002), (12, 43954), (18, 43885), (21, 43816), (24, 43801),

Gene: Mashley_58 Start: 43499, Stop: 42783, Start Num: 3

Candidate Starts for Mashley_58:

(Start: 3 @43499 has 34 MA's), (12, 43337), (13, 43313), (17, 43277), (27, 43151), (30, 43100), (39, 42968), (43, 42935), (48, 42884), (49, 42863),

Gene: Mentos_62 Start: 44690, Stop: 43980, Start Num: 3

Candidate Starts for Mentos_62:

(Start: 3 @44690 has 34 MA's), (8, 44615), (12, 44528), (17, 44468), (23, 44384), (27, 44342), (28, 44333), (30, 44291), (39, 44165), (43, 44132), (48, 44081), (49, 44060),

Gene: Mila11_61 Start: 44949, Stop: 44242, Start Num: 3

Candidate Starts for Mila11_61:

(Start: 3 @44949 has 34 MA's), (8, 44874), (12, 44787), (17, 44727), (23, 44643), (26, 44622), (27, 44601), (28, 44592), (30, 44550), (39, 44418), (43, 44385), (48, 44334), (49, 44313),

Gene: MorillMayhem_59 Start: 43826, Stop: 43119, Start Num: 3

Candidate Starts for MorillMayhem_59:

(Start: 3 @43826 has 34 MA's), (12, 43664), (13, 43640), (17, 43604), (22, 43526), (27, 43478), (30, 43424), (39, 43295), (43, 43262), (48, 43211), (49, 43190),

Gene: Namago_58 Start: 42834, Stop: 42160, Start Num: 4

Candidate Starts for Namago_58:

(Start: 4 @42834 has 19 MA's), (12, 42672), (13, 42648), (17, 42612), (27, 42486), (30, 42432), (48, 42261), (49, 42240),

Gene: Nike_60 Start: 44258, Stop: 43542, Start Num: 4

Candidate Starts for Nike_60:

(Start: 4 @44258 has 19 MA's), (12, 44096), (13, 44072), (17, 44036), (18, 44027), (27, 43910), (30, 43856), (39, 43730), (41, 43715), (43, 43697), (48, 43643), (49, 43622),

Gene: OneinaGillian_63 Start: 43119, Stop: 42412, Start Num: 4

Candidate Starts for OneinaGillian_63:

(Start: 4 @43119 has 19 MA's), (6, 43107), (10, 43002), (12, 42954), (18, 42885), (21, 42816), (24, 42801),

Gene: Pepe25_62 Start: 42678, Stop: 41956, Start Num: 4

Candidate Starts for Pepe25_62:

(Start: 4 @42678 has 19 MA's), (6, 42666), (7, 42642), (10, 42561), (17, 42453), (18, 42444), (21, 42375), (46, 42087),

Gene: Phabia_57 Start: 43129, Stop: 42431, Start Num: 3

Candidate Starts for Phabia_57:

(Start: 3 @43129 has 34 MA's), (8, 43054), (12, 42967), (17, 42907), (23, 42823), (27, 42781), (28, 42772), (30, 42730), (43, 42571), (48, 42523), (49, 42502),

Gene: Phinky_66 Start: 45167, Stop: 44487, Start Num: 4

Candidate Starts for Phinky_66:

(Start: 4 @45167 has 19 MA's), (12, 45005), (13, 44981), (17, 44945), (18, 44936), (27, 44819), (33, 44714), (48, 44588), (49, 44567),

Gene: Quammi_55 Start: 42829, Stop: 42131, Start Num: 3

Candidate Starts for Quammi_55:

(Start: 3 @42829 has 34 MA's), (8, 42754), (12, 42667), (17, 42607), (23, 42523), (27, 42481), (28, 42472), (30, 42430), (43, 42271), (48, 42223), (49, 42202),

Gene: RobinRose_65 Start: 43625, Stop: 42924, Start Num: 4

Candidate Starts for RobinRose_65:

(Start: 4 @43625 has 19 MA's), (6, 43613), (10, 43508), (12, 43460), (18, 43391), (21, 43322), (24, 43307),

Gene: RomansRevenge_80 Start: 53660, Stop: 53067, Start Num: 5

Candidate Starts for RomansRevenge_80:

(Start: 5 @53660 has 1 MA's), (9, 53579), (14, 53462), (15, 53453), (20, 53366), (31, 53216), (36, 53165), (37, 53150), (44, 53108), (47, 53081),

Gene: Romm_65 Start: 43622, Stop: 42921, Start Num: 4

Candidate Starts for Romm_65:

(Start: 4 @43622 has 19 MA's), (6, 43610), (10, 43505), (12, 43457), (18, 43388), (21, 43319), (24, 43304),

Gene: Rowlf_54 Start: 42772, Stop: 42059, Start Num: 3

Candidate Starts for Rowlf_54:

(Start: 3 @42772 has 34 MA's), (12, 42610), (13, 42586), (17, 42550), (27, 42424), (30, 42370), (39, 42244), (44, 42208), (48, 42160), (49, 42139),

Gene: RubyRalph_61 Start: 45401, Stop: 44676, Start Num: 3

Candidate Starts for RubyRalph_61:

(Start: 3 @45401 has 34 MA's), (17, 45179), (27, 45053), (29, 45011),

Gene: Rudy_55 Start: 42865, Stop: 42167, Start Num: 3

Candidate Starts for Rudy_55:

(Start: 3 @42865 has 34 MA's), (8, 42790), (12, 42703), (17, 42643), (23, 42559), (27, 42517), (28, 42508), (30, 42466), (43, 42307), (48, 42259), (49, 42238),

Gene: SadLad_62 Start: 46174, Stop: 45440, Start Num: 3

Candidate Starts for SadLad_62:

(Start: 3 @46174 has 34 MA's), (17, 45952), (27, 45826), (29, 45784), (34, 45664),

Gene: Salgado_14 Start: 9631, Stop: 10362, Start Num: 4

Candidate Starts for Salgado_14:

(Start: 4 @9631 has 19 MA's), (14, 9829), (16, 9844), (17, 9853), (27, 9979), (35, 10135), (38, 10165),

Gene: SallyK_59 Start: 44086, Stop: 43373, Start Num: 4

Candidate Starts for SallyK_59:

(Start: 4 @44086 has 19 MA's), (12, 43924), (13, 43900), (17, 43864), (27, 43738), (30, 43684), (39, 43555), (43, 43522), (48, 43474), (49, 43453),

Gene: Shrooms_14 Start: 9704, Stop: 10450, Start Num: 4

Candidate Starts for Shrooms_14:

(Start: 4 @9704 has 19 MA's), (11, 9860), (14, 9902), (17, 9926), (23, 10010), (40, 10271),

Gene: Sillytadpoles_58 Start: 42702, Stop: 42004, Start Num: 3

Candidate Starts for Sillytadpoles_58:

(Start: 3 @42702 has 34 MA's), (8, 42627), (12, 42540), (17, 42480), (23, 42396), (27, 42354), (28, 42345), (30, 42303), (43, 42144), (48, 42096), (49, 42075),

Gene: SlySloth_60 Start: 43419, Stop: 42703, Start Num: 3

Candidate Starts for SlySloth_60:

(Start: 3 @43419 has 34 MA's), (12, 43257), (13, 43233), (17, 43197), (22, 43119), (27, 43071), (30, 43017), (39, 42891), (44, 42852), (48, 42804), (49, 42783),

Gene: Squash_62 Start: 44406, Stop: 43699, Start Num: 3

Candidate Starts for Squash_62:

(Start: 3 @44406 has 34 MA's), (8, 44331), (12, 44244), (17, 44184), (23, 44100), (27, 44058), (28, 44049), (30, 44007), (32, 43956), (39, 43881), (43, 43848), (48, 43800), (49, 43779),

Gene: Statler_60 Start: 43488, Stop: 42778, Start Num: 3

Candidate Starts for Statler_60:

(Start: 3 @43488 has 34 MA's), (12, 43326), (13, 43302), (17, 43266), (18, 43257), (27, 43140), (30, 43086), (32, 43035), (39, 42960), (43, 42927), (48, 42879), (49, 42858),

Gene: StrawberryJamm_62 Start: 43175, Stop: 42492, Start Num: 3

Candidate Starts for StrawberryJamm_62:

(Start: 3 @43175 has 34 MA's), (12, 43013), (13, 42989), (17, 42953), (18, 42944), (27, 42827), (30, 42773), (32, 42722), (39, 42647), (48, 42593), (49, 42572),

Gene: Teehee_58 Start: 43935, Stop: 43237, Start Num: 3

Candidate Starts for Teehee_58:

(Start: 3 @43935 has 34 MA's), (8, 43860), (12, 43773), (17, 43713), (23, 43629), (27, 43587), (28, 43578), (30, 43536), (43, 43377), (48, 43329), (49, 43308),

Gene: Tempo_64 Start: 43508, Stop: 42789, Start Num: 4

Candidate Starts for Tempo_64:

(2, 43544), (Start: 4 @43508 has 19 MA's), (6, 43496), (10, 43391), (12, 43343), (18, 43274), (21, 43205), (24, 43190),

Gene: Tissue_59 Start: 43778, Stop: 43071, Start Num: 3

Candidate Starts for Tissue_59:

(Start: 3 @43778 has 34 MA's), (8, 43703), (12, 43616), (17, 43556), (23, 43472), (27, 43430), (28, 43421), (30, 43379), (43, 43220), (48, 43172), (49, 43151),

Gene: Viceroy_56 Start: 42835, Stop: 42137, Start Num: 3

Candidate Starts for Viceroy_56:

(Start: 3 @42835 has 34 MA's), (8, 42760), (12, 42673), (17, 42613), (23, 42529), (27, 42487), (28, 42478), (30, 42436), (43, 42277), (48, 42229), (49, 42208),

Gene: Wayne3_59 Start: 43698, Stop: 43000, Start Num: 3

Candidate Starts for Wayne3_59:

(Start: 3 @43698 has 34 MA's), (8, 43623), (12, 43536), (17, 43476), (23, 43392), (27, 43350), (28, 43341), (30, 43299), (43, 43140), (48, 43092), (49, 43071),

Gene: WheelerS25_65 Start: 44864, Stop: 44154, Start Num: 3

Candidate Starts for WheelerS25_65:

(Start: 3 @44864 has 34 MA's), (12, 44702), (13, 44678), (17, 44642), (22, 44564), (27, 44516), (30, 44462), (39, 44336), (43, 44303), (48, 44255), (49, 44234),

Gene: Wheelie_57 Start: 43019, Stop: 42321, Start Num: 3

Candidate Starts for Wheelie_57:

(Start: 3 @43019 has 34 MA's), (8, 42944), (12, 42857), (17, 42797), (23, 42713), (27, 42671), (28, 42662), (30, 42620), (43, 42461), (48, 42413), (49, 42392),

Gene: Zagie_58 Start: 43363, Stop: 42659, Start Num: 4

Candidate Starts for Zagie_58:

(Start: 4 @43363 has 19 MA's), (12, 43201), (13, 43177), (17, 43141), (27, 43015), (30, 42961), (39, 42832), (43, 42799), (48, 42751), (49, 42730),

Gene: Zhafia_60 Start: 43499, Stop: 42801, Start Num: 3

Candidate Starts for Zhafia_60:

(Start: 3 @43499 has 34 MA's), (8, 43424), (12, 43337), (17, 43277), (23, 43193), (27, 43151), (28, 43142), (30, 43100), (43, 42941), (48, 42893), (49, 42872),