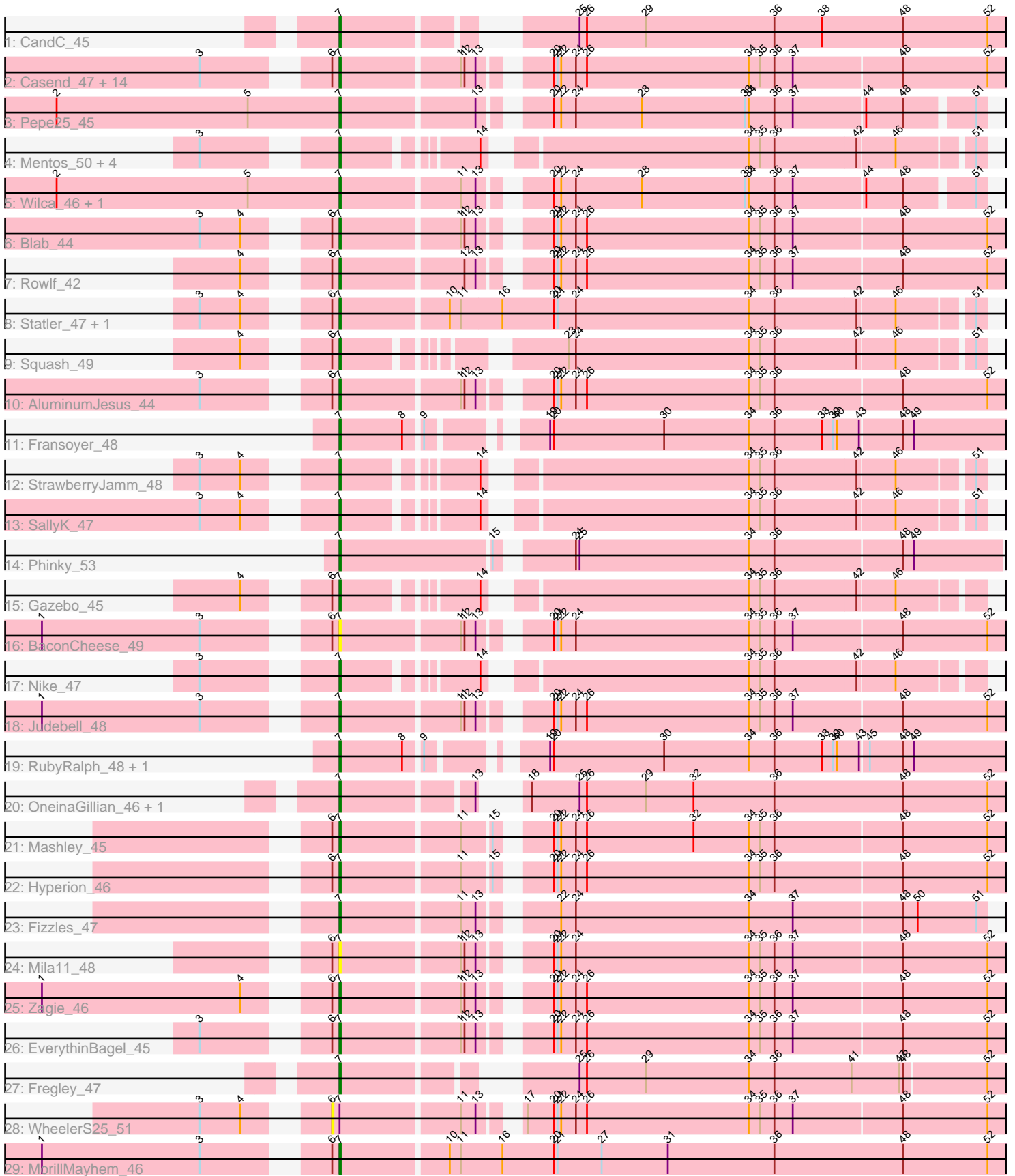


Pham 303437



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 303437 Report

This analysis was run 06/08/26 on database version 649.

Pham number 303437 has 51 members, 4 are drafts.

Phages represented in each track:

- Track 1 : CandC_45
- Track 2 : Casend_47, Wayne3_48, Wheelie_46, Sillytadpoles_47, FrankDeliGuy_43, Llemily_46, Quammi_44, Teehee_47, DonaldDuck_46, Jehoshaphat_48, Viceroy_45, Zhafia_49, Rudy_44, Lonelysoil_45, Phabia_46
- Track 3 : Pepe25_45
- Track 4 : Mentos_50, Kyva_48, Grassboy_47, Tissue_47, Namago_46
- Track 5 : Wilca_46, BirdInFrench_46
- Track 6 : Blab_44
- Track 7 : Rowlf_42
- Track 8 : Statler_47, BabyDotz_45
- Track 9 : Squash_49
- Track 10 : AluminumJesus_44
- Track 11 : Fransoyer_48
- Track 12 : StrawberryJamm_48
- Track 13 : SallyK_47
- Track 14 : Phinky_53
- Track 15 : Gazebo_45
- Track 16 : BaconCheese_49
- Track 17 : Nike_47
- Track 18 : Judebell_48
- Track 19 : RubyRalph_48, SadLad_50
- Track 20 : OneinaGillian_46, Tempo_46
- Track 21 : Mashley_45
- Track 22 : Hyperion_46
- Track 23 : Fizzles_47
- Track 24 : Mila11_48
- Track 25 : Zagie_46
- Track 26 : EverythinBagel_45
- Track 27 : Fregley_47
- Track 28 : WheelerS25_51
- Track 29 : MorillMayhem_46

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

The start number called the most often in the published annotations is 7, it was called in 47 of the 47 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AluminumJesus_44, BabyDotz_45, BaconCheese_49, BirdInFrench_46, Blab_44, CandC_45, Casend_47, DonaldDuck_46, EverythinBagel_45, Fizzles_47, FrankDeliGuy_43, Fransoyer_48, Fregley_47, Gazebo_45, Grassboy_47, Hyperion_46, Jehoshaphat_48, Judebell_48, Kyva_48, Llemily_46, Lonelysoil_45, Mashley_45, Mentos_50, Mila11_48, MorillMayhem_46, Namago_46, Nike_47, OneinaGillian_46, Pepe25_45, Phabia_46, Phinky_53, Quammi_44, Rowlf_42, RubyRalph_48, Rudy_44, SadLad_50, SallyK_47, Sillytadpoles_47, Squash_49, Statler_47, StrawberryJamm_48, Teehee_47, Tempo_46, Tissue_47, Viceroy_45, Wayne3_48, Wheelie_46, Wilca_46, Zagie_46, Zhafia_49,

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

- WheelerS25_51,

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

-

Summary by start number:

Start 6:

- Found in 30 of 51 (58.8%) of genes in pham
- No Manual Annotations of this start.
- Called 3.3% of time when present
- Phage (with cluster) where this start called: WheelerS25_51 (EG),

Start 7:

- Found in 51 of 51 (100.0%) of genes in pham
- Manual Annotations of this start: 47 of 47
- Called 98.0% of time when present
- Phage (with cluster) where this start called: AluminumJesus_44 (EG), BabyDotz_45 (EG), BaconCheese_49 (EG), BirdInFrench_46 (EG), Blab_44 (EG), CandC_45 (EG), Casend_47 (EG), DonaldDuck_46 (EG), EverythinBagel_45 (EG), Fizzles_47 (EG), FrankDeliGuy_43 (EG), Fransoyer_48 (EG), Fregley_47 (EG), Gazebo_45 (EG), Grassboy_47 (EG), Hyperion_46 (EG), Jehoshaphat_48 (EG), Judebell_48 (EG), Kyva_48 (EG), Llemily_46 (EG), Lonelysoil_45 (EG), Mashley_45 (EG), Mentos_50 (EG), Mila11_48 (EG), MorillMayhem_46 (EG), Namago_46 (EG), Nike_47 (EG), OneinaGillian_46 (EG), Pepe25_45 (EG), Phabia_46 (EG), Phinky_53 (EG), Quammi_44 (EG), Rowlf_42 (EG), RubyRalph_48 (EG), Rudy_44 (EG), SadLad_50 (EG), SallyK_47 (EG), Sillytadpoles_47 (EG), Squash_49 (EG), Statler_47 (EG), StrawberryJamm_48 (EG), Teehee_47 (EG), Tempo_46 (EG), Tissue_47 (EG), Viceroy_45 (EG), Wayne3_48 (EG), Wheelie_46 (EG), Wilca_46 (EG), Zagie_46 (EG), Zhafia_49 (EG),

Summary by clusters:

There is one cluster represented in this pham: EG

Info for manual annotations of cluster EG:

- Start number 7 was manually annotated 47 times for cluster EG.

Gene Information:

Gene: AluminumJesus_44 Start: 35756, Stop: 35244, Start Num: 7

Candidate Starts for AluminumJesus_44:

(3, 35843), (6, 35762), (Start: 7 @35756 has 47 MA's), (11, 35663), (12, 35660), (13, 35651), (20, 35609), (21, 35606), (22, 35603), (24, 35591), (26, 35582), (34, 35450), (35, 35441), (36, 35429), (48, 35327), (52, 35258),

Gene: BabyDotz_45 Start: 36547, Stop: 36038, Start Num: 7

Candidate Starts for BabyDotz_45:

(3, 36634), (4, 36601), (6, 36553), (Start: 7 @36547 has 47 MA's), (10, 36463), (11, 36454), (16, 36421), (20, 36379), (21, 36376), (24, 36361), (34, 36220), (36, 36199), (42, 36133), (46, 36103), (51, 36046),

Gene: BaconCheese_49 Start: 37141, Stop: 36629, Start Num: 7

Candidate Starts for BaconCheese_49:

(1, 37357), (3, 37228), (6, 37147), (Start: 7 @37141 has 47 MA's), (11, 37048), (12, 37045), (13, 37036), (20, 36994), (21, 36991), (22, 36988), (24, 36976), (34, 36835), (35, 36826), (36, 36814), (37, 36799), (48, 36712), (52, 36643),

Gene: BirdInFrench_46 Start: 34338, Stop: 33850, Start Num: 7

Candidate Starts for BirdInFrench_46:

(2, 34569), (5, 34413), (Start: 7 @34338 has 47 MA's), (11, 34245), (13, 34233), (20, 34191), (22, 34185), (24, 34173), (28, 34119), (33, 34035), (34, 34032), (36, 34011), (37, 33996), (44, 33939), (48, 33909), (51, 33858),

Gene: Blab_44 Start: 35669, Stop: 35157, Start Num: 7

Candidate Starts for Blab_44:

(3, 35756), (4, 35723), (6, 35675), (Start: 7 @35669 has 47 MA's), (11, 35576), (12, 35573), (13, 35564), (20, 35522), (21, 35519), (22, 35516), (24, 35504), (26, 35495), (34, 35363), (35, 35354), (36, 35342), (37, 35327), (48, 35240), (52, 35171),

Gene: CandC_45 Start: 34693, Stop: 34199, Start Num: 7

Candidate Starts for CandC_45:

(Start: 7 @34693 has 47 MA's), (25, 34546), (26, 34540), (29, 34492), (36, 34387), (38, 34348), (48, 34282), (52, 34213),

Gene: Casend_47 Start: 36305, Stop: 35793, Start Num: 7

Candidate Starts for Casend_47:

(3, 36392), (6, 36311), (Start: 7 @36305 has 47 MA's), (11, 36212), (12, 36209), (13, 36200), (20, 36158), (21, 36155), (22, 36152), (24, 36140), (26, 36131), (34, 35999), (35, 35990), (36, 35978), (37, 35963), (48, 35876), (52, 35807),

Gene: DonaldDuck_46 Start: 35654, Stop: 35142, Start Num: 7

Candidate Starts for DonaldDuck_46:

(3, 35741), (6, 35660), (Start: 7 @35654 has 47 MA's), (11, 35561), (12, 35558), (13, 35549), (20, 35507), (21, 35504), (22, 35501), (24, 35489), (26, 35480), (34, 35348), (35, 35339), (36, 35327), (37, 35312), (48, 35225), (52, 35156),

Gene: EverythinBagel_45 Start: 36042, Stop: 35530, Start Num: 7

Candidate Starts for EverythinBagel_45:

(3, 36129), (6, 36048), (Start: 7 @36042 has 47 MA's), (11, 35949), (12, 35946), (13, 35937), (20, 35895), (21, 35892), (22, 35889), (24, 35877), (26, 35868), (34, 35736), (35, 35727), (36, 35715), (37, 35700), (48, 35613), (52, 35544),

Gene: Fizzles_47 Start: 35256, Stop: 34759, Start Num: 7

Candidate Starts for Fizzles_47:

(Start: 7 @35256 has 47 MA's), (11, 35163), (13, 35151), (22, 35103), (24, 35091), (34, 34950), (37, 34914), (48, 34827), (50, 34815), (51, 34767),

Gene: FrankDeliGuy_43 Start: 35605, Stop: 35093, Start Num: 7

Candidate Starts for FrankDeliGuy_43:

(3, 35692), (6, 35611), (Start: 7 @35605 has 47 MA's), (11, 35512), (12, 35509), (13, 35500), (20, 35458), (21, 35455), (22, 35452), (24, 35440), (26, 35431), (34, 35299), (35, 35290), (36, 35278), (37, 35263), (48, 35176), (52, 35107),

Gene: Fransoyer_48 Start: 37942, Stop: 37439, Start Num: 7

Candidate Starts for Fransoyer_48:

(Start: 7 @37942 has 47 MA's), (8, 37891), (9, 37879), (19, 37807), (20, 37804), (30, 37714), (34, 37645), (36, 37624), (38, 37585), (39, 37576), (40, 37573), (43, 37555), (48, 37522), (49, 37513),

Gene: Fregley_47 Start: 35263, Stop: 34772, Start Num: 7

Candidate Starts for Fregley_47:

(Start: 7 @35263 has 47 MA's), (25, 35116), (26, 35110), (29, 35062), (34, 34978), (36, 34957), (41, 34894), (47, 34855), (48, 34852), (52, 34786),

Gene: Gazebo_45 Start: 36176, Stop: 35709, Start Num: 7

Candidate Starts for Gazebo_45:

(4, 36230), (6, 36182), (Start: 7 @36176 has 47 MA's), (14, 36083), (34, 35891), (35, 35882), (36, 35870), (42, 35804), (46, 35774),

Gene: Grassboy_47 Start: 36228, Stop: 35761, Start Num: 7

Candidate Starts for Grassboy_47:

(3, 36315), (Start: 7 @36228 has 47 MA's), (14, 36135), (34, 35943), (35, 35934), (36, 35922), (42, 35856), (46, 35826), (51, 35769),

Gene: Hyperion_46 Start: 36174, Stop: 35662, Start Num: 7

Candidate Starts for Hyperion_46:

(6, 36180), (Start: 7 @36174 has 47 MA's), (11, 36081), (15, 36060), (20, 36027), (21, 36024), (22, 36021), (24, 36009), (26, 36000), (34, 35868), (35, 35859), (36, 35847), (48, 35745), (52, 35676),

Gene: Jehoshaphat_48 Start: 36573, Stop: 36061, Start Num: 7

Candidate Starts for Jehoshaphat_48:

(3, 36660), (6, 36579), (Start: 7 @36573 has 47 MA's), (11, 36480), (12, 36477), (13, 36468), (20, 36426), (21, 36423), (22, 36420), (24, 36408), (26, 36399), (34, 36267), (35, 36258), (36, 36246), (37, 36231), (48, 36144), (52, 36075),

Gene: Judebell_48 Start: 36070, Stop: 35558, Start Num: 7

Candidate Starts for Judebell_48:

(1, 36286), (3, 36157), (Start: 7 @36070 has 47 MA's), (11, 35977), (12, 35974), (13, 35965), (20, 35923), (21, 35920), (22, 35917), (24, 35905), (26, 35896), (34, 35764), (35, 35755), (36, 35743), (37, 35728), (48, 35641), (52, 35572),

Gene: Kyva_48 Start: 36263, Stop: 35796, Start Num: 7

Candidate Starts for Kyva_48:

(3, 36350), (Start: 7 @36263 has 47 MA's), (14, 36170), (34, 35978), (35, 35969), (36, 35957), (42, 35891), (46, 35861), (51, 35804),

Gene: Llemily_46 Start: 35349, Stop: 34837, Start Num: 7

Candidate Starts for Llemily_46:

(3, 35436), (6, 35355), (Start: 7 @35349 has 47 MA's), (11, 35256), (12, 35253), (13, 35244), (20, 35202), (21, 35199), (22, 35196), (24, 35184), (26, 35175), (34, 35043), (35, 35034), (36, 35022), (37, 35007), (48, 34920), (52, 34851),

Gene: Lonelysoil_45 Start: 35591, Stop: 35079, Start Num: 7

Candidate Starts for Lonelysoil_45:

(3, 35678), (6, 35597), (Start: 7 @35591 has 47 MA's), (11, 35498), (12, 35495), (13, 35486), (20, 35444), (21, 35441), (22, 35438), (24, 35426), (26, 35417), (34, 35285), (35, 35276), (36, 35264), (37, 35249), (48, 35162), (52, 35093),

Gene: Mashley_45 Start: 35989, Stop: 35477, Start Num: 7

Candidate Starts for Mashley_45:

(6, 35995), (Start: 7 @35989 has 47 MA's), (11, 35896), (15, 35875), (20, 35842), (21, 35839), (22, 35836), (24, 35824), (26, 35815), (32, 35728), (34, 35683), (35, 35674), (36, 35662), (48, 35560), (52, 35491),

Gene: Mentos_50 Start: 37044, Stop: 36577, Start Num: 7

Candidate Starts for Mentos_50:

(3, 37131), (Start: 7 @37044 has 47 MA's), (14, 36951), (34, 36759), (35, 36750), (36, 36738), (42, 36672), (46, 36642), (51, 36585),

Gene: Mila11_48 Start: 36956, Stop: 36444, Start Num: 7

Candidate Starts for Mila11_48:

(6, 36962), (Start: 7 @36956 has 47 MA's), (11, 36863), (12, 36860), (13, 36851), (20, 36809), (21, 36806), (22, 36803), (24, 36791), (34, 36650), (35, 36641), (36, 36629), (37, 36614), (48, 36527), (52, 36458),

Gene: MorillMayhem_46 Start: 35887, Stop: 35351, Start Num: 7

Candidate Starts for MorillMayhem_46:

(1, 36103), (3, 35974), (6, 35893), (Start: 7 @35887 has 47 MA's), (10, 35803), (11, 35794), (16, 35761), (20, 35719), (21, 35716), (27, 35680), (31, 35626), (36, 35539), (48, 35434), (52, 35365),

Gene: Namago_46 Start: 35393, Stop: 34926, Start Num: 7

Candidate Starts for Namago_46:

(3, 35480), (Start: 7 @35393 has 47 MA's), (14, 35300), (34, 35108), (35, 35099), (36, 35087), (42, 35021), (46, 34991), (51, 34934),

Gene: Nike_47 Start: 36348, Stop: 35881, Start Num: 7

Candidate Starts for Nike_47:

(3, 36435), (Start: 7 @36348 has 47 MA's), (14, 36255), (34, 36063), (35, 36054), (36, 36042), (42, 35976), (46, 35946),

Gene: OneinaGillian_46 Start: 34799, Stop: 34305, Start Num: 7

Candidate Starts for OneinaGillian_46:

(Start: 7 @34799 has 47 MA's), (13, 34700), (18, 34691), (25, 34652), (26, 34646), (29, 34598), (32, 34559), (36, 34493), (48, 34388), (52, 34319),

Gene: Pepe25_45 Start: 34344, Stop: 33856, Start Num: 7

Candidate Starts for Pepe25_45:

(2, 34575), (5, 34419), (Start: 7 @34344 has 47 MA's), (13, 34239), (20, 34197), (22, 34191), (24, 34179), (28, 34125), (33, 34041), (34, 34038), (36, 34017), (37, 34002), (44, 33945), (48, 33915), (51, 33864),

Gene: Phabia_46 Start: 35764, Stop: 35252, Start Num: 7

Candidate Starts for Phabia_46:

(3, 35851), (6, 35770), (Start: 7 @35764 has 47 MA's), (11, 35671), (12, 35668), (13, 35659), (20, 35617), (21, 35614), (22, 35611), (24, 35599), (26, 35590), (34, 35458), (35, 35449), (36, 35437), (37, 35422), (48, 35335), (52, 35266),

Gene: Phinky_53 Start: 37581, Stop: 37066, Start Num: 7

Candidate Starts for Phinky_53:

(Start: 7 @37581 has 47 MA's), (15, 37461), (24, 37410), (25, 37407), (34, 37269), (36, 37248), (48, 37146), (49, 37137),

Gene: Quammi_44 Start: 35464, Stop: 34952, Start Num: 7

Candidate Starts for Quammi_44:

(3, 35551), (6, 35470), (Start: 7 @35464 has 47 MA's), (11, 35371), (12, 35368), (13, 35359), (20, 35317), (21, 35314), (22, 35311), (24, 35299), (26, 35290), (34, 35158), (35, 35149), (36, 35137), (37, 35122), (48, 35035), (52, 34966),

Gene: Rowlf_42 Start: 35437, Stop: 34925, Start Num: 7

Candidate Starts for Rowlf_42:

(4, 35491), (6, 35443), (Start: 7 @35437 has 47 MA's), (12, 35341), (13, 35332), (20, 35290), (21, 35287), (22, 35284), (24, 35272), (26, 35263), (34, 35131), (35, 35122), (36, 35110), (37, 35095), (48, 35008), (52, 34939),

Gene: RubyRalph_48 Start: 37871, Stop: 37368, Start Num: 7

Candidate Starts for RubyRalph_48:

(Start: 7 @37871 has 47 MA's), (8, 37820), (9, 37808), (19, 37736), (20, 37733), (30, 37643), (34, 37574), (36, 37553), (38, 37514), (39, 37505), (40, 37502), (43, 37484), (45, 37478), (48, 37451), (49, 37442),

Gene: Rudy_44 Start: 35497, Stop: 34985, Start Num: 7

Candidate Starts for Rudy_44:

(3, 35584), (6, 35503), (Start: 7 @35497 has 47 MA's), (11, 35404), (12, 35401), (13, 35392), (20, 35350), (21, 35347), (22, 35344), (24, 35332), (26, 35323), (34, 35191), (35, 35182), (36, 35170), (37, 35155), (48, 35068), (52, 34999),

Gene: SadLad_50 Start: 38814, Stop: 38311, Start Num: 7

Candidate Starts for SadLad_50:

(Start: 7 @38814 has 47 MA's), (8, 38763), (9, 38751), (19, 38679), (20, 38676), (30, 38586), (34, 38517), (36, 38496), (38, 38457), (39, 38448), (40, 38445), (43, 38427), (45, 38421), (48, 38394), (49, 38385),

Gene: SallyK_47 Start: 36407, Stop: 35940, Start Num: 7

Candidate Starts for SallyK_47:

(3, 36494), (4, 36461), (Start: 7 @36407 has 47 MA's), (14, 36314), (34, 36122), (35, 36113), (36, 36101), (42, 36035), (46, 36005), (51, 35948),

Gene: Sillytadpoles_47 Start: 35337, Stop: 34825, Start Num: 7

Candidate Starts for Sillytadpoles_47:

(3, 35424), (6, 35343), (Start: 7 @35337 has 47 MA's), (11, 35244), (12, 35241), (13, 35232), (20, 35190), (21, 35187), (22, 35184), (24, 35172), (26, 35163), (34, 35031), (35, 35022), (36, 35010), (37, 34995), (48, 34908), (52, 34839),

Gene: Squash_49 Start: 36359, Stop: 35892, Start Num: 7

Candidate Starts for Squash_49:

(4, 36413), (6, 36365), (Start: 7 @36359 has 47 MA's), (23, 36221), (24, 36215), (34, 36074), (35, 36065), (36, 36053), (42, 35987), (46, 35957), (51, 35900),

Gene: Statler_47 Start: 36255, Stop: 35746, Start Num: 7

Candidate Starts for Statler_47:

(3, 36342), (4, 36309), (6, 36261), (Start: 7 @36255 has 47 MA's), (10, 36171), (11, 36162), (16, 36129), (20, 36087), (21, 36084), (24, 36069), (34, 35928), (36, 35907), (42, 35841), (46, 35811), (51, 35754),

Gene: StrawberryJamm_48 Start: 35661, Stop: 35194, Start Num: 7

Candidate Starts for StrawberryJamm_48:

(3, 35748), (4, 35715), (Start: 7 @35661 has 47 MA's), (14, 35568), (34, 35376), (35, 35367), (36, 35355), (42, 35289), (46, 35259), (51, 35202),

Gene: Teehee_47 Start: 36570, Stop: 36058, Start Num: 7

Candidate Starts for Teehee_47:

(3, 36657), (6, 36576), (Start: 7 @36570 has 47 MA's), (11, 36477), (12, 36474), (13, 36465), (20, 36423), (21, 36420), (22, 36417), (24, 36405), (26, 36396), (34, 36264), (35, 36255), (36, 36243), (37, 36228), (48, 36141), (52, 36072),

Gene: Tempo_46 Start: 35178, Stop: 34684, Start Num: 7

Candidate Starts for Tempo_46:

(Start: 7 @35178 has 47 MA's), (13, 35079), (18, 35070), (25, 35031), (26, 35025), (29, 34977), (32, 34938), (36, 34872), (48, 34767), (52, 34698),

Gene: Tissue_47 Start: 36036, Stop: 35569, Start Num: 7

Candidate Starts for Tissue_47:

(3, 36123), (Start: 7 @36036 has 47 MA's), (14, 35943), (34, 35751), (35, 35742), (36, 35730), (42, 35664), (46, 35634), (51, 35577),

Gene: Viceroy_45 Start: 35467, Stop: 34955, Start Num: 7

Candidate Starts for Viceroy_45:

(3, 35554), (6, 35473), (Start: 7 @35467 has 47 MA's), (11, 35374), (12, 35371), (13, 35362), (20, 35320), (21, 35317), (22, 35314), (24, 35302), (26, 35293), (34, 35161), (35, 35152), (36, 35140), (37, 35125), (48, 35038), (52, 34969),

Gene: Wayne3_48 Start: 36333, Stop: 35821, Start Num: 7

Candidate Starts for Wayne3_48:

(3, 36420), (6, 36339), (Start: 7 @36333 has 47 MA's), (11, 36240), (12, 36237), (13, 36228), (20, 36186), (21, 36183), (22, 36180), (24, 36168), (26, 36159), (34, 36027), (35, 36018), (36, 36006), (37, 35991), (48, 35904), (52, 35835),

Gene: WheelerS25_51 Start: 36903, Stop: 36385, Start Num: 6

Candidate Starts for WheelerS25_51:

(3, 36984), (4, 36951), (6, 36903), (Start: 7 @36897 has 47 MA's), (11, 36804), (13, 36792), (17, 36771), (20, 36750), (21, 36747), (22, 36744), (24, 36732), (26, 36723), (34, 36591), (35, 36582), (36,

36570), (37, 36555), (48, 36468), (52, 36399),

Gene: Wheelie_46 Start: 35654, Stop: 35142, Start Num: 7

Candidate Starts for Wheelie_46:

(3, 35741), (6, 35660), (Start: 7 @35654 has 47 MA's), (11, 35561), (12, 35558), (13, 35549), (20, 35507), (21, 35504), (22, 35501), (24, 35489), (26, 35480), (34, 35348), (35, 35339), (36, 35327), (37, 35312), (48, 35225), (52, 35156),

Gene: Wilca_46 Start: 34338, Stop: 33850, Start Num: 7

Candidate Starts for Wilca_46:

(2, 34569), (5, 34413), (Start: 7 @34338 has 47 MA's), (11, 34245), (13, 34233), (20, 34191), (22, 34185), (24, 34173), (28, 34119), (33, 34035), (34, 34032), (36, 34011), (37, 33996), (44, 33939), (48, 33909), (51, 33858),

Gene: Zagie_46 Start: 35902, Stop: 35390, Start Num: 7

Candidate Starts for Zagie_46:

(1, 36118), (4, 35956), (6, 35908), (Start: 7 @35902 has 47 MA's), (11, 35809), (12, 35806), (13, 35797), (20, 35755), (21, 35752), (22, 35749), (24, 35737), (26, 35728), (34, 35596), (35, 35587), (36, 35575), (37, 35560), (48, 35473), (52, 35404),

Gene: Zhafia_49 Start: 36134, Stop: 35622, Start Num: 7

Candidate Starts for Zhafia_49:

(3, 36221), (6, 36140), (Start: 7 @36134 has 47 MA's), (11, 36041), (12, 36038), (13, 36029), (20, 35987), (21, 35984), (22, 35981), (24, 35969), (26, 35960), (34, 35828), (35, 35819), (36, 35807), (37, 35792), (48, 35705), (52, 35636),