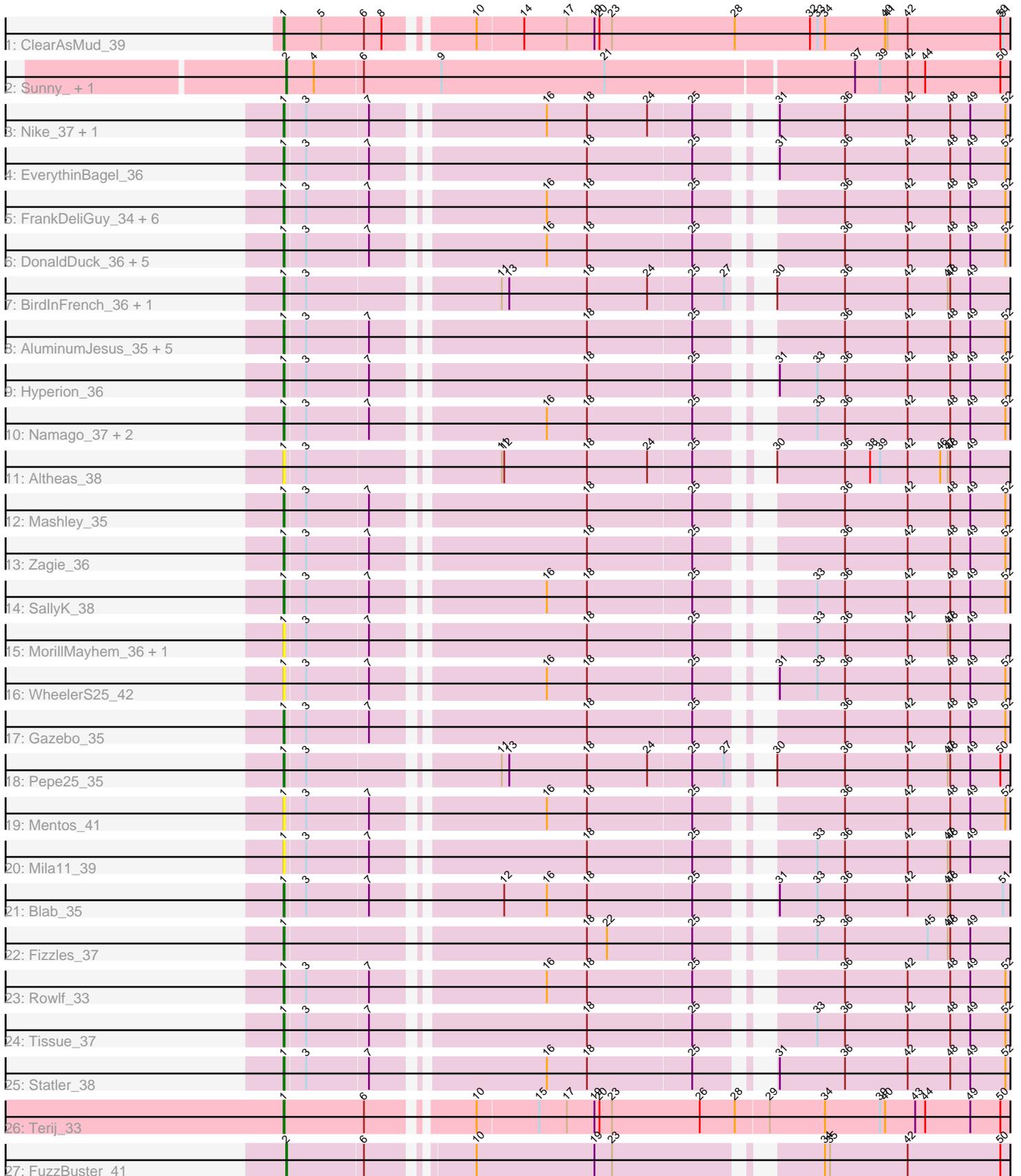Zoomed Pham 283906

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 283906 Report

This analysis was run 02/23/26 on database version 636.

Pham number 283906 has 49 members, 7 are drafts.

Phages represented in each track:
• Track 1 : ClearAsMud_39
• Track 2 : Sunny_, Merry_
• Track 3 : Nike_37, Squash_39
• Track 4 : EverythinBagel_36
• Track 5 : FrankDeliGuy_34, Judebell_39, Phabia_37, Casend_38, Lonelysoil_36, Wayne3_38, Teehee_38
• Track 6 : DonaldDuck_36, Wheelie_36, Sillytadpoles_37, Jehoshaphat_39, Llemily_36, Zhafia_39
• Track 7 : BirdInFrench_36, Wilca_36
• Track 8 : AluminumJesus_35, SlySloth_39, Quammi_35, Rudy_35, Viceroy_35, StrawberryJamm_39
• Track 9 : Hyperion_36
• Track 10 : Namago_37, Kyva_39, Grassboy_38
• Track 11 : Altheas_38
• Track 12 : Mashley_35
• Track 13 : Zagie_36
• Track 14 : SallyK_38
• Track 15 : MorillMayhem_36, BaconCheese_40
• Track 16 : WheelerS25_42
• Track 17 : Gazebo_35
• Track 18 : Pepe25_35
• Track 19 : Mentos_41
• Track 20 : Mila11_39
• Track 21 : Blab_35
• Track 22 : Fizzles_37
• Track 23 : Rowlf_33
• Track 24 : Tissue_37
• Track 25 : Statler_38
• Track 26 : Terij_33
• Track 27 : FuzzBuster_41

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

The start number called the most often in the published annotations is 1, it was called in 39 of the 42 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Altheas_38, AluminumJesus_35, BaconCheese_40, BirdInFrench_36, Blab_35, Casend_38, ClearAsMud_39, DonaldDuck_36, EverythinBagel_36, Fizzles_37, FrankDeliGuy_34, Gazebo_35, Grassboy_38, Hyperion_36, Jehoshaphat_39, Judebell_39, Kyva_39, Llemily_36, Lonelysoil_36, Mashley_35, Mentos_41, Mila11_39, MorillMayhem_36, Namago_37, Nike_37, Pepe25_35, Phabia_37, Quammi_35, Rowlf_33, Rudy_35, SallyK_38, Sillytadpoles_37, SlySloth_39, Squash_39, Statler_38, StrawberryJamm_39, Teehee_38, Terij_33, Tissue_37, Viceroy_35, Wayne3_38, WheelerS25_42, Wheelie_36, Wilca_36, Zagie_36, Zhafia_39,

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

Genes that do not have the "Most Annotated" start:
• FuzzBuster_41, Merry_, Sunny_,

Summary by start number:

Start 1:
• Found in 46 of 49 (93.9%) of genes in pham
• Manual Annotations of this start: 39 of 42
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Altheas_38 (EG), AluminumJesus_35 (EG), BaconCheese_40 (EG), BirdInFrench_36 (EG), Blab_35 (EG), Casend_38 (EG), ClearAsMud_39 (EC), DonaldDuck_36 (EG), EverythinBagel_36 (EG), Fizzles_37 (EG), FrankDeliGuy_34 (EG), Gazebo_35 (EG), Grassboy_38 (EG), Hyperion_36 (EG), Jehoshaphat_39 (EG), Judebell_39 (EG), Kyva_39 (EG), Llemily_36 (EG), Lonelysoil_36 (EG), Mashley_35 (EG), Mentos_41 (EG), Mila11_39 (EG), MorillMayhem_36 (EG), Namago_37 (EG), Nike_37 (EG), Pepe25_35 (EG), Phabia_37 (EG), Quammi_35 (EG), Rowlf_33 (EG), Rudy_35 (EG), SallyK_38 (EG), Sillytadpoles_37 (EG), SlySloth_39 (EG), Squash_39 (EG), Statler_38 (EG), StrawberryJamm_39 (EG), Teehee_38 (EG), Terij_33 (EI), Tissue_37 (EG), Viceroy_35 (EG), Wayne3_38 (EG), WheelerS25_42 (EG), Wheelie_36 (EG), Wilca_36 (EG), Zagie_36 (EG), Zhafia_39 (EG),

Start 2:
• Found in 3 of 49 (6.1%) of genes in pham
• Manual Annotations of this start: 3 of 42
• Called 100.0% of time when present
• Phage (with cluster) where this start called: FuzzBuster_41 (singleton), Merry_ (EC), Sunny_ (EC),

Summary by clusters:

There are 4 clusters represented in this pham: EG, EI, singleton, EC,

Info for manual annotations of cluster EC:
•Start number 1 was manually annotated 1 time for cluster EC.
•Start number 2 was manually annotated 2 times for cluster EC.

Info for manual annotations of cluster EG:
•Start number 1 was manually annotated 37 times for cluster EG.

Info for manual annotations of cluster EI:
•Start number 1 was manually annotated 1 time for cluster EI.

Gene Information:

Gene: Altheas_38 Start: 26739, Stop: 28082, Start Num: 1
Candidate Starts for Altheas_38:
(Start: 1 @26739 has 39 MA's), (3, 26763), (11, 26964), (12, 26967), (18, 27066), (24, 27138), (25, 27189), (30, 27240), (36, 27321), (38, 27351), (39, 27363), (42, 27396), (46, 27435), (47, 27444), (48, 27447), (49, 27471), (54, 27543), (58, 27585), (63, 27645), (66, 27711), (80, 27843), (84, 27891), (86, 27900), (91, 27954), (97, 28068),

Gene: AluminumJesus_35 Start: 26345, Stop: 27685, Start Num: 1
Candidate Starts for AluminumJesus_35:
(Start: 1 @26345 has 39 MA's), (3, 26369), (7, 26441), (18, 26672), (25, 26795), (36, 26927), (42, 27002), (48, 27053), (49, 27077), (52, 27119), (72, 27383), (75, 27401), (79, 27431), (92, 27578), (93, 27584), (97, 27671),

Gene: BaconCheese_40 Start: 27731, Stop: 29074, Start Num: 1
Candidate Starts for BaconCheese_40:
(Start: 1 @27731 has 39 MA's), (3, 27755), (7, 27827), (18, 28058), (25, 28181), (33, 28280), (36, 28313), (42, 28388), (47, 28436), (48, 28439), (49, 28463), (55, 28541), (70, 28745), (72, 28769), (75, 28787), (91, 28946), (92, 28967), (95, 28991), (97, 29060),

Gene: BirdInFrench_36 Start: 24913, Stop: 26256, Start Num: 1
Candidate Starts for BirdInFrench_36:
(Start: 1 @24913 has 39 MA's), (3, 24937), (11, 25138), (13, 25147), (18, 25240), (24, 25312), (25, 25363), (27, 25399), (30, 25414), (36, 25495), (42, 25570), (47, 25618), (48, 25621), (49, 25645), (54, 25717), (58, 25759), (63, 25819), (66, 25885), (80, 26017), (84, 26065), (86, 26074), (91, 26128), (97, 26242),

Gene: Blab_35 Start: 26270, Stop: 27604, Start Num: 1
Candidate Starts for Blab_35:
(Start: 1 @26270 has 39 MA's), (3, 26294), (7, 26366), (12, 26498), (16, 26549), (18, 26597), (25, 26720), (31, 26774), (33, 26819), (36, 26852), (42, 26927), (47, 26975), (48, 26978), (51, 27041), (63, 27176), (72, 27305), (80, 27362), (83, 27410), (93, 27503), (94, 27512), (97, 27590),

Gene: Casend_38 Start: 26891, Stop: 28231, Start Num: 1
Candidate Starts for Casend_38:
(Start: 1 @26891 has 39 MA's), (3, 26915), (7, 26987), (16, 27170), (18, 27218), (25, 27341), (36, 27473), (42, 27548), (48, 27599), (49, 27623), (52, 27665), (53, 27683), (54, 27695), (72, 27929), (75, 27947), (78, 27974), (79, 27977), (92, 28124), (93, 28130), (95, 28148), (97, 28217),

Gene: ClearAsMud_39 Start: 24222, Stop: 25577, Start Num: 1
Candidate Starts for ClearAsMud_39:
(Start: 1 @24222 has 39 MA's), (5, 24267), (6, 24318), (8, 24339), (10, 24426), (14, 24480), (17, 24531), (19, 24564), (20, 24570), (23, 24585), (28, 24732), (32, 24822), (33, 24831), (34, 24840), (40,

24912), (41, 24915), (42, 24939), (50, 25050), (51, 25053), (54, 25086), (57, 25116), (65, 25239), (74, 25323), (89, 25449), (92, 25485), (93, 25491), (98, 25569),

Gene: DonaldDuck_36 Start: 26237, Stop: 27580, Start Num: 1
Candidate Starts for DonaldDuck_36:
(Start: 1 @26237 has 39 MA's), (3, 26261), (7, 26333), (16, 26516), (18, 26564), (25, 26687), (36, 26819), (42, 26894), (48, 26945), (49, 26969), (52, 27011), (55, 27047), (70, 27251), (75, 27293), (91, 27452), (92, 27473), (95, 27497), (97, 27566),

Gene: EverythinBagel_36 Start: 26625, Stop: 27968, Start Num: 1
Candidate Starts for EverythinBagel_36:
(Start: 1 @26625 has 39 MA's), (3, 26649), (7, 26721), (18, 26952), (25, 27075), (31, 27129), (36, 27207), (42, 27282), (48, 27333), (49, 27357), (52, 27399), (55, 27435), (70, 27639), (72, 27663), (75, 27681), (91, 27840), (92, 27861), (95, 27885), (97, 27954),

Gene: Fizzles_37 Start: 25850, Stop: 27190, Start Num: 1
Candidate Starts for Fizzles_37:
(Start: 1 @25850 has 39 MA's), (18, 26177), (22, 26201), (25, 26300), (33, 26399), (36, 26432), (45, 26531), (47, 26555), (48, 26558), (49, 26582), (54, 26654), (63, 26756), (64, 26807), (67, 26828), (73, 26900), (80, 26951), (84, 26999), (91, 27062), (92, 27083), (94, 27098), (97, 27176),

Gene: FrankDeliGuy_34 Start: 26197, Stop: 27537, Start Num: 1
Candidate Starts for FrankDeliGuy_34:
(Start: 1 @26197 has 39 MA's), (3, 26221), (7, 26293), (16, 26476), (18, 26524), (25, 26647), (36, 26779), (42, 26854), (48, 26905), (49, 26929), (52, 26971), (53, 26989), (54, 27001), (72, 27235), (75, 27253), (78, 27280), (79, 27283), (92, 27430), (93, 27436), (95, 27454), (97, 27523),

Gene: FuzzBuster_41 Start: 23513, Stop: 24814, Start Num: 2
Candidate Starts for FuzzBuster_41:
(Start: 2 @23513 has 3 MA's), (6, 23603), (10, 23708), (19, 23849), (23, 23870), (34, 24074), (35, 24080), (42, 24173), (50, 24284), (59, 24362), (60, 24380), (62, 24398), (68, 24497), (76, 24563), (77, 24578), (82, 24632), (89, 24686), (93, 24728), (96, 24770), (98, 24806),

Gene: Gazebo_35 Start: 26808, Stop: 28148, Start Num: 1
Candidate Starts for Gazebo_35:
(Start: 1 @26808 has 39 MA's), (3, 26832), (7, 26904), (18, 27135), (25, 27258), (36, 27390), (42, 27465), (48, 27516), (49, 27540), (52, 27582), (72, 27846), (75, 27864), (78, 27891), (79, 27894), (92, 28041), (93, 28047), (97, 28134),

Gene: Grassboy_38 Start: 26866, Stop: 28209, Start Num: 1
Candidate Starts for Grassboy_38:
(Start: 1 @26866 has 39 MA's), (3, 26890), (7, 26962), (16, 27145), (18, 27193), (25, 27316), (33, 27415), (36, 27448), (42, 27523), (48, 27574), (49, 27598), (52, 27640), (73, 27919), (78, 27952), (79, 27955), (84, 28018), (97, 28195),

Gene: Hyperion_36 Start: 26764, Stop: 28104, Start Num: 1
Candidate Starts for Hyperion_36:
(Start: 1 @26764 has 39 MA's), (3, 26788), (7, 26860), (18, 27091), (25, 27214), (31, 27268), (33, 27313), (36, 27346), (42, 27421), (48, 27472), (49, 27496), (52, 27538), (72, 27802), (75, 27820), (79, 27850), (92, 27997), (93, 28003), (97, 28090),

Gene: Jehoshaphat_39 Start: 27156, Stop: 28499, Start Num: 1
Candidate Starts for Jehoshaphat_39:

(Start: 1 @27156 has 39 MA's), (3, 27180), (7, 27252), (16, 27435), (18, 27483), (25, 27606), (36, 27738), (42, 27813), (48, 27864), (49, 27888), (52, 27930), (55, 27966), (70, 28170), (75, 28212), (91, 28371), (92, 28392), (95, 28416), (97, 28485),

Gene: Judebell_39 Start: 26662, Stop: 28002, Start Num: 1
Candidate Starts for Judebell_39:
(Start: 1 @26662 has 39 MA's), (3, 26686), (7, 26758), (16, 26941), (18, 26989), (25, 27112), (36, 27244), (42, 27319), (48, 27370), (49, 27394), (52, 27436), (53, 27454), (54, 27466), (72, 27700), (75, 27718), (78, 27745), (79, 27748), (92, 27895), (93, 27901), (95, 27919), (97, 27988),

Gene: Kyva_39 Start: 26901, Stop: 28244, Start Num: 1
Candidate Starts for Kyva_39:
(Start: 1 @26901 has 39 MA's), (3, 26925), (7, 26997), (16, 27180), (18, 27228), (25, 27351), (33, 27450), (36, 27483), (42, 27558), (48, 27609), (49, 27633), (52, 27675), (73, 27954), (78, 27987), (79, 27990), (84, 28053), (97, 28230),

Gene: Llemily_36 Start: 25932, Stop: 27275, Start Num: 1
Candidate Starts for Llemily_36:
(Start: 1 @25932 has 39 MA's), (3, 25956), (7, 26028), (16, 26211), (18, 26259), (25, 26382), (36, 26514), (42, 26589), (48, 26640), (49, 26664), (52, 26706), (55, 26742), (70, 26946), (75, 26988), (91, 27147), (92, 27168), (95, 27192), (97, 27261),

Gene: Lonelysoil_36 Start: 26177, Stop: 27517, Start Num: 1
Candidate Starts for Lonelysoil_36:
(Start: 1 @26177 has 39 MA's), (3, 26201), (7, 26273), (16, 26456), (18, 26504), (25, 26627), (36, 26759), (42, 26834), (48, 26885), (49, 26909), (52, 26951), (53, 26969), (54, 26981), (72, 27215), (75, 27233), (78, 27260), (79, 27263), (92, 27410), (93, 27416), (95, 27434), (97, 27503),

Gene: Mashley_35 Start: 26580, Stop: 27920, Start Num: 1
Candidate Starts for Mashley_35:
(Start: 1 @26580 has 39 MA's), (3, 26604), (7, 26676), (18, 26907), (25, 27030), (36, 27162), (42, 27237), (48, 27288), (49, 27312), (52, 27354), (72, 27618), (75, 27636), (78, 27663), (79, 27666), (92, 27813), (93, 27819), (95, 27837), (97, 27906),

Gene: Mentos_41 Start: 27667, Stop: 29010, Start Num: 1
Candidate Starts for Mentos_41:
(Start: 1 @27667 has 39 MA's), (3, 27691), (7, 27763), (16, 27946), (18, 27994), (25, 28117), (36, 28249), (42, 28324), (48, 28375), (49, 28399), (52, 28441), (55, 28477), (70, 28681), (72, 28705), (75, 28723), (91, 28882), (92, 28903), (95, 28927), (97, 28996),

Gene: Merry_ Start: 25560, Stop: 26966, Start Num: 2
Candidate Starts for Merry_:
(Start: 2 @25560 has 3 MA's), (4, 25593), (6, 25650), (9, 25743), (21, 25938), (37, 26226), (39, 26256), (42, 26289), (44, 26310), (50, 26400), (62, 26523), (68, 26628), (71, 26667), (81, 26736), (85, 26784), (93, 26865), (97, 26952),

Gene: Mila11_39 Start: 27552, Stop: 28892, Start Num: 1
Candidate Starts for Mila11_39:
(Start: 1 @27552 has 39 MA's), (3, 27576), (7, 27648), (18, 27879), (25, 28002), (33, 28101), (36, 28134), (42, 28209), (47, 28257), (48, 28260), (49, 28284), (54, 28356), (72, 28590), (75, 28608), (78, 28635), (79, 28638), (92, 28785), (93, 28791), (95, 28809), (97, 28878),

Gene: MorillMayhem_36 Start: 26447, Stop: 27790, Start Num: 1

Candidate Starts for MorillMayhem_36:
(Start: 1 @26447 has 39 MA's), (3, 26471), (7, 26543), (18, 26774), (25, 26897), (33, 26996), (36, 27029), (42, 27104), (47, 27152), (48, 27155), (49, 27179), (55, 27257), (70, 27461), (72, 27485), (75, 27503), (91, 27662), (92, 27683), (95, 27707), (97, 27776),

Gene: Namago_37 Start: 26031, Stop: 27374, Start Num: 1
Candidate Starts for Namago_37:
(Start: 1 @26031 has 39 MA's), (3, 26055), (7, 26127), (16, 26310), (18, 26358), (25, 26481), (33, 26580), (36, 26613), (42, 26688), (48, 26739), (49, 26763), (52, 26805), (73, 27084), (78, 27117), (79, 27120), (84, 27183), (97, 27360),

Gene: Nike_37 Start: 26983, Stop: 28329, Start Num: 1
Candidate Starts for Nike_37:
(Start: 1 @26983 has 39 MA's), (3, 27007), (7, 27079), (16, 27262), (18, 27310), (24, 27382), (25, 27433), (31, 27487), (36, 27565), (42, 27640), (48, 27691), (49, 27715), (52, 27757), (61, 27856), (63, 27889), (72, 28024), (90, 28186), (97, 28315),

Gene: Pepe25_35 Start: 24930, Stop: 26273, Start Num: 1
Candidate Starts for Pepe25_35:
(Start: 1 @24930 has 39 MA's), (3, 24954), (11, 25155), (13, 25164), (18, 25257), (24, 25329), (25, 25380), (27, 25416), (30, 25431), (36, 25512), (42, 25587), (47, 25635), (48, 25638), (49, 25662), (50, 25698), (66, 25902), (80, 26034), (97, 26259),

Gene: Phabia_37 Start: 26350, Stop: 27690, Start Num: 1
Candidate Starts for Phabia_37:
(Start: 1 @26350 has 39 MA's), (3, 26374), (7, 26446), (16, 26629), (18, 26677), (25, 26800), (36, 26932), (42, 27007), (48, 27058), (49, 27082), (52, 27124), (53, 27142), (54, 27154), (72, 27388), (75, 27406), (78, 27433), (79, 27436), (92, 27583), (93, 27589), (95, 27607), (97, 27676),

Gene: Quammi_35 Start: 26053, Stop: 27393, Start Num: 1
Candidate Starts for Quammi_35:
(Start: 1 @26053 has 39 MA's), (3, 26077), (7, 26149), (18, 26380), (25, 26503), (36, 26635), (42, 26710), (48, 26761), (49, 26785), (52, 26827), (72, 27091), (75, 27109), (79, 27139), (92, 27286), (93, 27292), (97, 27379),

Gene: Rowlf_33 Start: 26228, Stop: 27568, Start Num: 1
Candidate Starts for Rowlf_33:
(Start: 1 @26228 has 39 MA's), (3, 26252), (7, 26324), (16, 26507), (18, 26555), (25, 26678), (36, 26810), (42, 26885), (48, 26936), (49, 26960), (52, 27002), (72, 27266), (75, 27284), (79, 27314), (92, 27461), (93, 27467), (97, 27554),

Gene: Rudy_35 Start: 26086, Stop: 27426, Start Num: 1
Candidate Starts for Rudy_35:
(Start: 1 @26086 has 39 MA's), (3, 26110), (7, 26182), (18, 26413), (25, 26536), (36, 26668), (42, 26743), (48, 26794), (49, 26818), (52, 26860), (72, 27124), (75, 27142), (79, 27172), (92, 27319), (93, 27325), (97, 27412),

Gene: SallyK_38 Start: 27030, Stop: 28373, Start Num: 1
Candidate Starts for SallyK_38:
(Start: 1 @27030 has 39 MA's), (3, 27054), (7, 27126), (16, 27309), (18, 27357), (25, 27480), (33, 27579), (36, 27612), (42, 27687), (48, 27738), (49, 27762), (52, 27804), (55, 27840), (70, 28044), (75, 28086), (91, 28245), (92, 28266), (95, 28290), (97, 28359),

Gene: Sillytadpoles_37 Start: 25920, Stop: 27263, Start Num: 1
Candidate Starts for Sillytadpoles_37:
(Start: 1 @25920 has 39 MA's), (3, 25944), (7, 26016), (16, 26199), (18, 26247), (25, 26370), (36, 26502), (42, 26577), (48, 26628), (49, 26652), (52, 26694), (55, 26730), (70, 26934), (75, 26976), (91, 27135), (92, 27156), (95, 27180), (97, 27249),

Gene: SlySloth_39 Start: 26925, Stop: 28265, Start Num: 1
Candidate Starts for SlySloth_39:
(Start: 1 @26925 has 39 MA's), (3, 26949), (7, 27021), (18, 27252), (25, 27375), (36, 27507), (42, 27582), (48, 27633), (49, 27657), (52, 27699), (72, 27963), (75, 27981), (79, 28011), (92, 28158), (93, 28164), (97, 28251),

Gene: Squash_39 Start: 26994, Stop: 28340, Start Num: 1
Candidate Starts for Squash_39:
(Start: 1 @26994 has 39 MA's), (3, 27018), (7, 27090), (16, 27273), (18, 27321), (24, 27393), (25, 27444), (31, 27498), (36, 27576), (42, 27651), (48, 27702), (49, 27726), (52, 27768), (61, 27867), (63, 27900), (72, 28035), (90, 28197), (97, 28326),

Gene: Statler_38 Start: 26839, Stop: 28179, Start Num: 1
Candidate Starts for Statler_38:
(Start: 1 @26839 has 39 MA's), (3, 26863), (7, 26935), (16, 27118), (18, 27166), (25, 27289), (31, 27343), (36, 27421), (42, 27496), (48, 27547), (49, 27571), (52, 27613), (72, 27877), (75, 27895), (78, 27922), (79, 27925), (92, 28072), (93, 28078), (95, 28096), (97, 28165),

Gene: StrawberryJamm_39 Start: 26290, Stop: 27630, Start Num: 1
Candidate Starts for StrawberryJamm_39:
(Start: 1 @26290 has 39 MA's), (3, 26314), (7, 26386), (18, 26617), (25, 26740), (36, 26872), (42, 26947), (48, 26998), (49, 27022), (52, 27064), (72, 27328), (75, 27346), (79, 27376), (92, 27523), (93, 27529), (97, 27616),

Gene: Sunny_ Start: 25562, Stop: 26968, Start Num: 2
Candidate Starts for Sunny_:
(Start: 2 @25562 has 3 MA's), (4, 25595), (6, 25652), (9, 25745), (21, 25940), (37, 26228), (39, 26258), (42, 26291), (44, 26312), (50, 26402), (62, 26525), (68, 26630), (71, 26669), (81, 26738), (85, 26786), (93, 26867), (97, 26954),

Gene: Teehee_38 Start: 27156, Stop: 28496, Start Num: 1
Candidate Starts for Teehee_38:
(Start: 1 @27156 has 39 MA's), (3, 27180), (7, 27252), (16, 27435), (18, 27483), (25, 27606), (36, 27738), (42, 27813), (48, 27864), (49, 27888), (52, 27930), (53, 27948), (54, 27960), (72, 28194), (75, 28212), (78, 28239), (79, 28242), (92, 28389), (93, 28395), (95, 28413), (97, 28482),

Gene: Terij_33 Start: 22891, Stop: 24228, Start Num: 1
Candidate Starts for Terij_33:
(Start: 1 @22891 has 39 MA's), (6, 22987), (10, 23095), (15, 23167), (17, 23200), (19, 23233), (20, 23239), (23, 23254), (26, 23359), (28, 23398), (29, 23437), (34, 23503), (39, 23569), (40, 23575), (43, 23611), (44, 23623), (49, 23677), (50, 23713), (56, 23776), (63, 23842), (72, 23959), (77, 23995), (87, 24073), (88, 24079), (92, 24136), (95, 24160), (97, 24214), (98, 24220),

Gene: Tissue_37 Start: 26673, Stop: 28016, Start Num: 1
Candidate Starts for Tissue_37:
(Start: 1 @26673 has 39 MA's), (3, 26697), (7, 26769), (18, 27000), (25, 27123), (33, 27222), (36, 27255), (42, 27330), (48, 27381), (49, 27405), (52, 27447), (73, 27726), (78, 27759), (79, 27762), (84,

27825), (97, 28002),

Gene: Viceroy_35 Start: 26053, Stop: 27393, Start Num: 1
Candidate Starts for Viceroy_35:
(Start: 1 @26053 has 39 MA's), (3, 26077), (7, 26149), (18, 26380), (25, 26503), (36, 26635), (42, 26710), (48, 26761), (49, 26785), (52, 26827), (72, 27091), (75, 27109), (79, 27139), (92, 27286), (93, 27292), (97, 27379),

Gene: Wayne3_38 Start: 26919, Stop: 28259, Start Num: 1
Candidate Starts for Wayne3_38:
(Start: 1 @26919 has 39 MA's), (3, 26943), (7, 27015), (16, 27198), (18, 27246), (25, 27369), (36, 27501), (42, 27576), (48, 27627), (49, 27651), (52, 27693), (53, 27711), (54, 27723), (72, 27957), (75, 27975), (78, 28002), (79, 28005), (92, 28152), (93, 28158), (95, 28176), (97, 28245),

Gene: WheelerS25_42 Start: 27679, Stop: 29022, Start Num: 1
Candidate Starts for WheelerS25_42:
(Start: 1 @27679 has 39 MA's), (3, 27703), (7, 27775), (16, 27958), (18, 28006), (25, 28129), (31, 28183), (33, 28228), (36, 28261), (42, 28336), (48, 28387), (49, 28411), (52, 28453), (55, 28489), (66, 28648), (70, 28693), (75, 28735), (80, 28780), (95, 28939), (97, 29008),

Gene: Wheelie_36 Start: 26237, Stop: 27580, Start Num: 1
Candidate Starts for Wheelie_36:
(Start: 1 @26237 has 39 MA's), (3, 26261), (7, 26333), (16, 26516), (18, 26564), (25, 26687), (36, 26819), (42, 26894), (48, 26945), (49, 26969), (52, 27011), (55, 27047), (70, 27251), (75, 27293), (91, 27452), (92, 27473), (95, 27497), (97, 27566),

Gene: Wilca_36 Start: 24913, Stop: 26256, Start Num: 1
Candidate Starts for Wilca_36:
(Start: 1 @24913 has 39 MA's), (3, 24937), (11, 25138), (13, 25147), (18, 25240), (24, 25312), (25, 25363), (27, 25399), (30, 25414), (36, 25495), (42, 25570), (47, 25618), (48, 25621), (49, 25645), (54, 25717), (58, 25759), (63, 25819), (66, 25885), (80, 26017), (84, 26065), (86, 26074), (91, 26128), (97, 26242),

Gene: Zagie_36 Start: 26491, Stop: 27831, Start Num: 1
Candidate Starts for Zagie_36:
(Start: 1 @26491 has 39 MA's), (3, 26515), (7, 26587), (18, 26818), (25, 26941), (36, 27073), (42, 27148), (48, 27199), (49, 27223), (52, 27265), (69, 27499), (72, 27529), (75, 27547), (78, 27574), (79, 27577), (92, 27724), (93, 27730), (95, 27748), (97, 27817),

Gene: Zhafia_39 Start: 26715, Stop: 28058, Start Num: 1
Candidate Starts for Zhafia_39:
(Start: 1 @26715 has 39 MA's), (3, 26739), (7, 26811), (16, 26994), (18, 27042), (25, 27165), (36, 27297), (42, 27372), (48, 27423), (49, 27447), (52, 27489), (55, 27525), (70, 27729), (75, 27771), (91, 27930), (92, 27951), (95, 27975), (97, 28044),