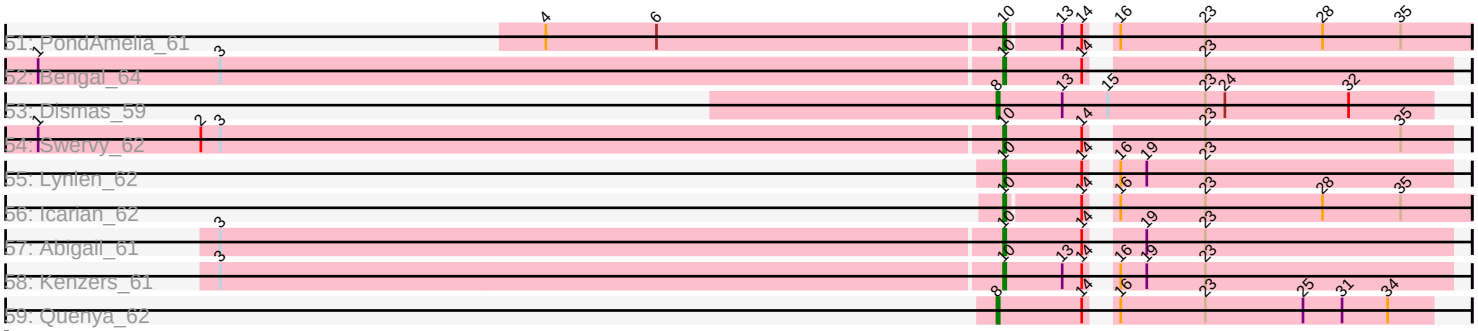
Pham 336655


1: Sharkboy_60 + 2
2: Akino08_60 + 1
3: BabyYoda_59 + 1
4: PhigPhack_64
5: SansAlet_63
6: Bernstein_60 + 7
7: Arroyo_62
8: Celaena_58
9: Phisb_63
10: Gack_59
11: TukTuk_63
12: AylexOG_62
13: CanFranMach_61
14: BubbaBear_61
15: Cashington_61
16: Lilo27_63
17: Elva_63
18: DickRichards_60 + 2
19: Jabb_61 + 2
20: Didgeridoo_67
21: Bachaco_58
22: LimaBean_61 + 1
23: ChiliPepper_58 + 1
24: Finalfrontier_62
25: Solea_64 + 1
26: Pecas_62
27: IndyLu_64
28: Avocadoman_61
29: DirtyBubble_59
30: Lanqtemish_62
31: FlameThrower_57 + 1
32: SarBear_62
33: SanaSana_61 + 1
34: BabyDaisy_64
35: AnnaLie_61 + 1
36: AvGardian_62
37: Kate33_66 + 2
38: Eden_60
39: Albedo_63
40: BAJuniper_59
41: WalkingDead_62 + 1
42: Albright_61
43: Franklin22_62
44: PastaFagioli_63
45: Jovita_60
46: SirBeanington_62
47: QMacho_63
48: Eula_61
49: Johnathan_61
50: Slay_63

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51: PondAmelia_61
52: Bengal_64
53: Dismas_59
54: Swervy_62
55: Lynlen_62
56: Icarian_62
57: Abigail_61
58: Kenzers_61
59: Quenya_62

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 336655 Report

This analysis was run 11/14/26 on database version 672.

Pham number 336655 has 83 members, 4 are drafts.

Phages represented in each track:
- Track 1 : Sharkboy_60, Kamdara_58, Kieran_58
- Track 2 : Akino08_60, Loviatar_60
- Track 3 : BabyYoda_59, Stromboli_59
- Track 4 : PhigPhack_64
- Track 5 : SansAfet_63
- Track 6 : Bernstein_60, Clayda5_62, Rollins_60, Brahms_60, Skylord_60, Coltrane_60, Vitas_60, Armstrong_60
- Track 7 : Arroyo_62
- Track 8 : Celaena_58
- Track 9 : Phisb_63
- Track 10 : Gack_59
- Track 11 : TukTuk_63
- Track 12 : AylexOG_62
- Track 13 : CanFranMach_61
- Track 14 : BubbaBear_61
- Track 15 : Cashington_61
- Track 16 : Lilo27_63
- Track 17 : Elva_63
- Track 18 : DickRichards_60, Burritobowl_63, CroZenni_62
- Track 19 : Jabb_61, CupcakePrincess_61, MsUbiquitous_61
- Track 20 : Didgeridoo_67
- Track 21 : Bachaco_58
- Track 22 : LimaBean_61, Doobus_60
- Track 23 : ChiliPepper_58, Rona_58
- Track 24 : Finalfrontier_62
- Track 25 : Solea_64, Milomuff_63
- Track 26 : Pecas_62
- Track 27 : IndyLu_64
- Track 28 : Avocadoman_61
- Track 29 : DirtyBubble_59
- Track 30 : Lahqtemish_62
- Track 31 : FlameThrower_57, Katzastrophic_59
- Track 32 : SarBear_62
- Track 33 : SanaSana_61, Stoor_59
- Track 34 : BabyDaisy_64
- Track 35 : AnnaLie_61, BelmontSKP_61
- Track 36 : AvGardian_62

• Track 37 : Kate33_66, Grist_64, Softsoap_63
• Track 38 : Eden_60
• Track 39 : Albedo_63
• Track 40 : BAjuniper_59
• Track 41 : WalkingDead_62, Nicky22_61
• Track 42 : Albright_61
• Track 43 : Franklin22_62
• Track 44 : PastaFagioli_63
• Track 45 : Jovita_60
• Track 46 : SirBeanington_62
• Track 47 : QMacho_63
• Track 48 : Eula_61
• Track 49 : Johnathan_61
• Track 50 : Slay_63
• Track 51 : PondAmelia_61
• Track 52 : Bengal_64
• Track 53 : Dismas_59
• Track 54 : Swervy_62
• Track 55 : Lynlen_62
• Track 56 : Icarian_62
• Track 57 : Abigail_61
• Track 58 : Kenzers_61
• Track 59 : Quenya_62

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

The start number called the most often in the published annotations is 10, it was called in 55 of the 79 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Abigail_61, Akino08_60, Albedo_63, Albright_61, AnnaLie_61, Arroyo_62, AvGardian_62, Avocadoman_61, AylexOG_62, BabyDaisy_64, BabyYoda_59, BelmontSKP_61, Bengal_64, BubbaBear_61, Burritobowl_63, Cashington_61, CroZenni_62, CupcakePrincess_61, DickRichards_60, Didgeridoo_67, DirtyBubble_59, Doobus_60, Elva_63, Eula_61, Finalfrontier_62, Grist_64, Icarian_62, IndyLu_64, Jabb_61, Johnathan_61, Jovita_60, Kate33_66, Kenzers_61, Lahqtemish_62, Lilo27_63, LimaBean_61, Loviatar_60, Lynlen_62, Milomuff_63, MsUbiquitous_61, Nicky22_61, PastaFagioli_63, Pecas_62, PhigPhack_64, Phisb_63, PondAmelia_61, QMacho_63, SanaSana_61, SansAfet_63, SarBear_62, SirBeanington_62, Slay_63, Softsoap_63, Solea_64, Stoor_59, Stromboli_59, Swervy_62, TukTuk_63, WalkingDead_62,

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

Genes that do not have the "Most Annotated" start:
• Armstrong_60, BAjuniper_59, Bachaco_58, Bernstein_60, Brahms_60, CanFranMach_61, Celaena_58, ChiliPepper_58, Clayda5_62, Coltrane_60, Dismas_59, Eden_60, FlameThrower_57, Franklin22_62, Gack_59, Kamdara_58, Katzastrophic_59, Kieran_58, Quenya_62, Rollins_60, Rona_58, Sharkboy_60,

Skylord_60, Vitas_60,

Summary by start number:

Start 8:
• Found in 23 of 83 (27.7%) of genes in pham
• Manual Annotations of this start: 23 of 79
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Armstrong_60 (EB), BAjuniper_59 (EB), Bachaco_58 (EB), Bernstein_60 (EB), Brahms_60 (EB), Celaena_58 (EB), ChiliPepper_58 (EB), Clayda5_62 (EB), Coltrane_60 (EB), Dismas_59 (EB), Eden_60 (EB), FlameThrower_57 (EB), Franklin22_62 (EB), Gack_59 (EB), Kamdara_58 (EB), Katzastrophic_59 (EB), Kieran_58 (EB), Quenya_62 (EB), Rollins_60 (EB), Rona_58 (EB), Sharkboy_60 (EB), Skylord_60 (EB), Vitas_60 (EB),

Start 9:
• Found in 1 of 83 (1.2%) of genes in pham
• Manual Annotations of this start: 1 of 79
• Called 100.0% of time when present
• Phage (with cluster) where this start called: CanFranMach_61 (EB),

Start 10:
• Found in 59 of 83 (71.1%) of genes in pham
• Manual Annotations of this start: 55 of 79
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Abigail_61 (EB), Akino08_60 (EB), Albedo_63 (EB), Albright_61 (EB), AnnaLie_61 (EB), Arroyo_62 (EB), AvGardian_62 (EB), Avocadoman_61 (EB), AylexOG_62 (EB), BabyDaisy_64 (EB), BabyYoda_59 (EB), BelmontSKP_61 (EB), Bengal_64 (EB), BubbaBear_61 (EB), Burritobowl_63 (EB), Cashington_61 (EB), CroZenni_62 (EB), CupcakePrincess_61 (EB), DickRichards_60 (EB), Didgeridoo_67 (EB), DirtyBubble_59 (EB), Doobus_60 (EB), Elva_63 (EB), Eula_61 (EB), Finalfrontier_62 (EB), Grist_64 (EB), Icarian_62 (EB), IndyLu_64 (EB), Jabb_61 (EB), Johnathan_61 (EB), Jovita_60 (EB), Kate33_66 (EB), Kenzers_61 (EB), Lahqtemish_62 (EB), Lilo27_63 (EB), LimaBean_61 (EB), Loviatar_60 (EB), Lynlen_62 (EB), Milomuff_63 (EB), MsUbiquitous_61 (EB), Nicky22_61 (EB), PastaFagioli_63 (EB), Pecas_62 (EB), PhigPhack_64 (EB), Phisb_63 (EB), PondAmelia_61 (EB), QMacho_63 (EB), SanaSana_61 (EB), SansAfet_63 (EB), SarBear_62 (EB), SirBeanington_62 (EB), Slay_63 (EB), Softsoap_63 (EB), Solea_64 (EB), Stoor_59 (EB), Stromboli_59 (EB), Swervy_62 (EB), TukTuk_63 (EB), WalkingDead_62 (EB),

Summary by clusters:

There is one cluster represented in this pham: EB

Info for manual annotations of cluster EB:
•Start number 8 was manually annotated 23 times for cluster EB.
•Start number 9 was manually annotated 1 time for cluster EB.
•Start number 10 was manually annotated 55 times for cluster EB.

Gene Information:

Gene: Abigail_61 Start: 38638, Stop: 38832, Start Num: 10
Candidate Starts for Abigail_61:
(3, 38281), (Start: 10 @38638 has 55 MA's), (14, 38674), (19, 38692), (23, 38719),

Gene: Akino08_60 Start: 40091, Stop: 40291, Start Num: 10
Candidate Starts for Akino08_60:
(Start: 10 @40091 has 55 MA's), (14, 40124), (16, 40130), (18, 40139), (23, 40169), (35, 40259),

Gene: Albedo_63 Start: 39558, Stop: 39752, Start Num: 10
Candidate Starts for Albedo_63:
(1, 39117), (3, 39201), (Start: 10 @39558 has 55 MA's), (14, 39594), (19, 39612), (23, 39639), (35, 39729),

Gene: Albright_61 Start: 38623, Stop: 38814, Start Num: 10
Candidate Starts for Albright_61:
(Start: 10 @38623 has 55 MA's), (14, 38656), (16, 38662), (19, 38674), (23, 38701),

Gene: AnnaLie_61 Start: 39293, Stop: 39487, Start Num: 10
Candidate Starts for AnnaLie_61:
(Start: 10 @39293 has 55 MA's), (14, 39329), (16, 39335), (19, 39347), (23, 39374),

Gene: Armstrong_60 Start: 37153, Stop: 37329, Start Num: 8
Candidate Starts for Armstrong_60:
(Start: 8 @37153 has 23 MA's), (13, 37183), (16, 37198), (17, 37201), (20, 37216), (22, 37228), (29, 37294), (32, 37303),

Gene: Arroyo_62 Start: 39595, Stop: 39789, Start Num: 10
Candidate Starts for Arroyo_62:
(Start: 10 @39595 has 55 MA's), (14, 39631), (19, 39649), (23, 39676),

Gene: AvGardian_62 Start: 39340, Stop: 39543, Start Num: 10
Candidate Starts for AvGardian_62:
(Start: 10 @39340 has 55 MA's), (11, 39346), (14, 39376), (16, 39382), (23, 39421), (35, 39511),

Gene: Avocadoman_61 Start: 38566, Stop: 38760, Start Num: 10
Candidate Starts for Avocadoman_61:
(7, 38554), (Start: 10 @38566 has 55 MA's), (14, 38602), (23, 38647), (33, 38722),

Gene: AylexOG_62 Start: 39204, Stop: 39398, Start Num: 10
Candidate Starts for AylexOG_62:
(Start: 10 @39204 has 55 MA's), (13, 39231), (14, 39240), (16, 39246), (19, 39258), (23, 39285), (35, 39375),

Gene: BAjuniper_59 Start: 39343, Stop: 39519, Start Num: 8
Candidate Starts for BAjuniper_59:
(Start: 8 @39343 has 23 MA's), (14, 39382), (17, 39391), (22, 39418), (24, 39436), (27, 39478), (28, 39481),

Gene: BabyDaisy_64 Start: 40097, Stop: 40297, Start Num: 10
Candidate Starts for BabyDaisy_64:
(7, 40085), (Start: 10 @40097 has 55 MA's), (14, 40130), (16, 40136), (23, 40175), (28, 40229), (29, 40232),

Gene: BabyYoda_59 Start: 39000, Stop: 39200, Start Num: 10
Candidate Starts for BabyYoda_59:
(Start: 10 @39000 has 55 MA's), (14, 39033), (16, 39039), (18, 39048), (19, 39051), (23, 39078), (35, 39168),

Gene: Bachaco_58 Start: 40052, Stop: 40240, Start Num: 8
Candidate Starts for Bachaco_58:
(Start: 8 @40052 has 23 MA's), (14, 40091), (17, 40100), (23, 40136), (31, 40199), (34, 40220),

Gene: BelmontSKP_61 Start: 39293, Stop: 39487, Start Num: 10
Candidate Starts for BelmontSKP_61:
(Start: 10 @39293 has 55 MA's), (14, 39329), (16, 39335), (19, 39347), (23, 39374),

Gene: Bengal_64 Start: 39353, Stop: 39547, Start Num: 10
Candidate Starts for Bengal_64:
(1, 38912), (3, 38996), (Start: 10 @39353 has 55 MA's), (14, 39389), (23, 39434),

Gene: Bernstein_60 Start: 37151, Stop: 37327, Start Num: 8
Candidate Starts for Bernstein_60:
(Start: 8 @37151 has 23 MA's), (13, 37181), (16, 37196), (17, 37199), (20, 37214), (22, 37226), (29, 37292), (32, 37301),

Gene: Brahms_60 Start: 37053, Stop: 37229, Start Num: 8
Candidate Starts for Brahms_60:
(Start: 8 @37053 has 23 MA's), (13, 37083), (16, 37098), (17, 37101), (20, 37116), (22, 37128), (29, 37194), (32, 37203),

Gene: BubbaBear_61 Start: 39350, Stop: 39544, Start Num: 10
Candidate Starts for BubbaBear_61:
(7, 39338), (Start: 10 @39350 has 55 MA's), (14, 39386), (16, 39392), (19, 39404), (23, 39431),

Gene: Burritobowl_63 Start: 39121, Stop: 39315, Start Num: 10
Candidate Starts for Burritobowl_63:
(Start: 10 @39121 has 55 MA's), (14, 39157), (16, 39163), (19, 39175), (23, 39202),

Gene: CanFranMach_61 Start: 38990, Stop: 39184, Start Num: 9
Candidate Starts for CanFranMach_61:
(Start: 9 @38990 has 1 MA's), (14, 39026), (16, 39032), (23, 39071), (36, 39167),

Gene: Cashington_61 Start: 38697, Stop: 38891, Start Num: 10
Candidate Starts for Cashington_61:
(Start: 10 @38697 has 55 MA's), (18, 38748), (19, 38751), (23, 38778), (35, 38868),

Gene: Celaena_58 Start: 39814, Stop: 40002, Start Num: 8
Candidate Starts for Celaena_58:
(Start: 8 @39814 has 23 MA's), (23, 39898), (31, 39961), (34, 39982),

Gene: ChiliPepper_58 Start: 39356, Stop: 39556, Start Num: 8
Candidate Starts for ChiliPepper_58:
(Start: 8 @39356 has 23 MA's), (13, 39386), (15, 39407), (23, 39452), (24, 39461),

Gene: Clayda5_62 Start: 37118, Stop: 37294, Start Num: 8
Candidate Starts for Clayda5_62:

(Start: 8 @37118 has 23 MA's), (13, 37148), (16, 37163), (17, 37166), (20, 37181), (22, 37193), (29, 37259), (32, 37268),

Gene: Coltrane_60 Start: 37053, Stop: 37229, Start Num: 8
Candidate Starts for Coltrane_60:
(Start: 8 @37053 has 23 MA's), (13, 37083), (16, 37098), (17, 37101), (20, 37116), (22, 37128), (29, 37194), (32, 37203),

Gene: CroZenni_62 Start: 38911, Stop: 39105, Start Num: 10
Candidate Starts for CroZenni_62:
(Start: 10 @38911 has 55 MA's), (14, 38947), (16, 38953), (19, 38965), (23, 38992),

Gene: CupcakePrincess_61 Start: 38675, Stop: 38869, Start Num: 10
Candidate Starts for CupcakePrincess_61:
(Start: 10 @38675 has 55 MA's), (13, 38702), (14, 38711), (16, 38717), (19, 38729), (23, 38756),

Gene: DickRichards_60 Start: 39077, Stop: 39271, Start Num: 10
Candidate Starts for DickRichards_60:
(Start: 10 @39077 has 55 MA's), (14, 39113), (16, 39119), (19, 39131), (23, 39158),

Gene: Didgeridoo_67 Start: 40207, Stop: 40407, Start Num: 10
Candidate Starts for Didgeridoo_67:
(7, 40195), (Start: 10 @40207 has 55 MA's), (14, 40240), (18, 40255), (23, 40285), (28, 40339),

Gene: DirtyBubble_59 Start: 39038, Stop: 39238, Start Num: 10
Candidate Starts for DirtyBubble_59:
(Start: 10 @39038 has 55 MA's), (14, 39071), (16, 39077), (23, 39116), (35, 39206),

Gene: Dismas_59 Start: 39277, Stop: 39477, Start Num: 8
Candidate Starts for Dismas_59:
(Start: 8 @39277 has 23 MA's), (13, 39307), (15, 39328), (23, 39373), (24, 39382), (32, 39439),

Gene: Doobus_60 Start: 38752, Stop: 38946, Start Num: 10
Candidate Starts for Doobus_60:
(Start: 10 @38752 has 55 MA's), (14, 38788), (19, 38806), (23, 38833), (33, 38908),

Gene: Eden_60 Start: 37901, Stop: 38077, Start Num: 8
Candidate Starts for Eden_60:
(Start: 8 @37901 has 23 MA's), (30, 38045),

Gene: Elva_63 Start: 39777, Stop: 39971, Start Num: 10
Candidate Starts for Elva_63:
(Start: 10 @39777 has 55 MA's), (14, 39807), (16, 39813), (23, 39852), (28, 39906), (35, 39942),

Gene: Eula_61 Start: 38661, Stop: 38855, Start Num: 10
Candidate Starts for Eula_61:
(Start: 10 @38661 has 55 MA's), (13, 38688), (14, 38697), (16, 38703), (23, 38742), (35, 38832),

Gene: Finalfrontier_62 Start: 39825, Stop: 40019, Start Num: 10
Candidate Starts for Finalfrontier_62:
(Start: 10 @39825 has 55 MA's), (14, 39861), (16, 39867), (19, 39879), (23, 39906),

Gene: FlameThrower_57 Start: 38851, Stop: 39039, Start Num: 8

Candidate Starts for FlameThrower_57:
(Start: 8 @38851 has 23 MA's), (14, 38890), (24, 38944), (31, 38998), (34, 39019),

Gene: Franklin22_62 Start: 37616, Stop: 37792, Start Num: 8
Candidate Starts for Franklin22_62:
(Start: 8 @37616 has 23 MA's), (21, 37685), (25, 37745), (31, 37763),

Gene: Gack_59 Start: 37534, Stop: 37710, Start Num: 8
Candidate Starts for Gack_59:
(Start: 8 @37534 has 23 MA's), (23, 37618), (25, 37663), (26, 37666),

Gene: Grist_64 Start: 39546, Stop: 39746, Start Num: 10
Candidate Starts for Grist_64:
(7, 39534), (Start: 10 @39546 has 55 MA's), (14, 39579), (16, 39585), (18, 39594), (23, 39624), (28, 39678),

Gene: Icarian_62 Start: 39689, Stop: 39889, Start Num: 10
Candidate Starts for Icarian_62:
(Start: 10 @39689 has 55 MA's), (14, 39722), (16, 39728), (23, 39767), (28, 39821), (35, 39857),

Gene: IndyLu_64 Start: 39828, Stop: 40028, Start Num: 10
Candidate Starts for IndyLu_64:
(7, 39816), (Start: 10 @39828 has 55 MA's), (14, 39861), (16, 39867), (23, 39906), (28, 39960),

Gene: Jabb_61 Start: 38675, Stop: 38869, Start Num: 10
Candidate Starts for Jabb_61:
(Start: 10 @38675 has 55 MA's), (13, 38702), (14, 38711), (16, 38717), (19, 38729), (23, 38756),

Gene: Johnathan_61 Start: 38621, Stop: 38815, Start Num: 10
Candidate Starts for Johnathan_61:
(Start: 10 @38621 has 55 MA's), (14, 38657), (16, 38663), (23, 38702),

Gene: Jovita_60 Start: 38432, Stop: 38626, Start Num: 10
Candidate Starts for Jovita_60:
(Start: 10 @38432 has 55 MA's), (12, 38444), (14, 38468), (16, 38474), (19, 38486), (23, 38513),

Gene: Kamdara_58 Start: 39315, Stop: 39515, Start Num: 8
Candidate Starts for Kamdara_58:
(Start: 8 @39315 has 23 MA's), (13, 39345), (15, 39366), (23, 39411), (24, 39420),

Gene: Kate33_66 Start: 39564, Stop: 39764, Start Num: 10
Candidate Starts for Kate33_66:
(7, 39552), (Start: 10 @39564 has 55 MA's), (14, 39597), (16, 39603), (18, 39612), (23, 39642), (28, 39696),

Gene: Katzastrophic_59 Start: 39361, Stop: 39549, Start Num: 8
Candidate Starts for Katzastrophic_59:
(Start: 8 @39361 has 23 MA's), (14, 39400), (24, 39454), (31, 39508), (34, 39529),

Gene: Kenzers_61 Start: 38491, Stop: 38685, Start Num: 10
Candidate Starts for Kenzers_61:
(3, 38134), (Start: 10 @38491 has 55 MA's), (13, 38518), (14, 38527), (16, 38533), (19, 38545), (23, 38572),

Gene: Kieran_58 Start: 39318, Stop: 39518, Start Num: 8
Candidate Starts for Kieran_58:
(Start: 8 @39318 has 23 MA's), (13, 39348), (15, 39369), (23, 39414), (24, 39423),

Gene: Lahqtemish_62 Start: 39841, Stop: 40041, Start Num: 10
Candidate Starts for Lahqtemish_62:
(7, 39829), (Start: 10 @39841 has 55 MA's), (14, 39874), (16, 39880), (18, 39889), (23, 39919), (28, 39973), (29, 39976),

Gene: Lilo27_63 Start: 39102, Stop: 39296, Start Num: 10
Candidate Starts for Lilo27_63:
(Start: 10 @39102 has 55 MA's), (14, 39138), (16, 39144), (23, 39183), (35, 39273),

Gene: LimaBean_61 Start: 38515, Stop: 38709, Start Num: 10
Candidate Starts for LimaBean_61:
(Start: 10 @38515 has 55 MA's), (14, 38551), (19, 38569), (23, 38596), (33, 38671),

Gene: Loviatar_60 Start: 40106, Stop: 40306, Start Num: 10
Candidate Starts for Loviatar_60:
(Start: 10 @40106 has 55 MA's), (14, 40139), (16, 40145), (18, 40154), (23, 40184), (35, 40274),

Gene: Lynlen_62 Start: 38674, Stop: 38868, Start Num: 10
Candidate Starts for Lynlen_62:
(Start: 10 @38674 has 55 MA's), (14, 38710), (16, 38716), (19, 38728), (23, 38755),

Gene: Milomuff_63 Start: 39210, Stop: 39404, Start Num: 10
Candidate Starts for Milomuff_63:
(1, 38769), (3, 38853), (Start: 10 @39210 has 55 MA's), (14, 39246), (16, 39252), (19, 39264), (23, 39291),

Gene: MsUbiquitous_61 Start: 38675, Stop: 38869, Start Num: 10
Candidate Starts for MsUbiquitous_61:
(Start: 10 @38675 has 55 MA's), (13, 38702), (14, 38711), (16, 38717), (19, 38729), (23, 38756),

Gene: Nicky22_61 Start: 39083, Stop: 39277, Start Num: 10
Candidate Starts for Nicky22_61:
(Start: 10 @39083 has 55 MA's), (14, 39119), (16, 39125), (23, 39164),

Gene: PastaFagioli_63 Start: 39787, Stop: 39987, Start Num: 10
Candidate Starts for PastaFagioli_63:
(Start: 10 @39787 has 55 MA's), (14, 39820), (16, 39826), (18, 39835), (23, 39865), (28, 39919), (29, 39922), (35, 39955),

Gene: Pecas_62 Start: 38944, Stop: 39138, Start Num: 10
Candidate Starts for Pecas_62:
(1, 38503), (2, 38578), (3, 38587), (Start: 10 @38944 has 55 MA's), (14, 38980), (16, 38986), (19, 38998), (23, 39025), (35, 39115),

Gene: PhigPhack_64 Start: 39217, Stop: 39411, Start Num: 10
Candidate Starts for PhigPhack_64:
(3, 38860), (Start: 10 @39217 has 55 MA's), (14, 39253), (16, 39259), (19, 39271), (23, 39298), (35, 39388),

Gene: Phisb_63 Start: 39190, Stop: 39384, Start Num: 10
Candidate Starts for Phisb_63:
(Start: 10 @39190 has 55 MA's), (14, 39226), (16, 39232), (19, 39244), (23, 39271),

Gene: PondAmelia_61 Start: 39066, Stop: 39266, Start Num: 10
Candidate Starts for PondAmelia_61:
(4, 38859), (6, 38910), (Start: 10 @39066 has 55 MA's), (13, 39090), (14, 39099), (16, 39105), (23, 39144), (28, 39198), (35, 39234),

Gene: QMacho_63 Start: 39321, Stop: 39515, Start Num: 10
Candidate Starts for QMacho_63:
(Start: 10 @39321 has 55 MA's), (14, 39357), (19, 39375), (23, 39402),

Gene: Quenya_62 Start: 39756, Stop: 39944, Start Num: 8
Candidate Starts for Quenya_62:
(Start: 8 @39756 has 23 MA's), (14, 39795), (16, 39801), (23, 39840), (25, 39885), (31, 39903), (34, 39924),

Gene: Rollins_60 Start: 37151, Stop: 37327, Start Num: 8
Candidate Starts for Rollins_60:
(Start: 8 @37151 has 23 MA's), (13, 37181), (16, 37196), (17, 37199), (20, 37214), (22, 37226), (29, 37292), (32, 37301),

Gene: Rona_58 Start: 39268, Stop: 39468, Start Num: 8
Candidate Starts for Rona_58:
(Start: 8 @39268 has 23 MA's), (13, 39298), (15, 39319), (23, 39364), (24, 39373),

Gene: SanaSana_61 Start: 39449, Stop: 39649, Start Num: 10
Candidate Starts for SanaSana_61:
(Start: 10 @39449 has 55 MA's), (13, 39473), (14, 39482), (16, 39488), (18, 39497), (23, 39527), (35, 39617),

Gene: SansAfet_63 Start: 39166, Stop: 39360, Start Num: 10
Candidate Starts for SansAfet_63:
(5, 38977), (Start: 10 @39166 has 55 MA's), (14, 39202), (16, 39208), (19, 39220), (23, 39247), (35, 39337),

Gene: SarBear_62 Start: 38730, Stop: 38924, Start Num: 10
Candidate Starts for SarBear_62:
(Start: 10 @38730 has 55 MA's), (14, 38766), (23, 38811), (35, 38901),

Gene: Sharkboy_60 Start: 39642, Stop: 39842, Start Num: 8
Candidate Starts for Sharkboy_60:
(Start: 8 @39642 has 23 MA's), (13, 39672), (15, 39693), (23, 39738), (24, 39747),

Gene: SirBeanington_62 Start: 39425, Stop: 39619, Start Num: 10
Candidate Starts for SirBeanington_62:
(1, 38984), (3, 39068), (Start: 10 @39425 has 55 MA's), (14, 39461), (16, 39467), (19, 39479), (23, 39506), (35, 39596),

Gene: Skylord_60 Start: 37068, Stop: 37244, Start Num: 8
Candidate Starts for Skylord_60:

(Start: 8 @37068 has 23 MA's), (13, 37098), (16, 37113), (17, 37116), (20, 37131), (22, 37143), (29, 37209), (32, 37218),

Gene: Slay_63 Start: 39700, Stop: 39894, Start Num: 10
Candidate Starts for Slay_63:
(Start: 10 @39700 has 55 MA's), (14, 39736), (19, 39754), (23, 39781),

Gene: Softsoap_63 Start: 39383, Stop: 39583, Start Num: 10
Candidate Starts for Softsoap_63:
(7, 39371), (Start: 10 @39383 has 55 MA's), (14, 39416), (16, 39422), (18, 39431), (23, 39461), (28, 39515),

Gene: Solea_64 Start: 39209, Stop: 39403, Start Num: 10
Candidate Starts for Solea_64:
(1, 38768), (3, 38852), (Start: 10 @39209 has 55 MA's), (14, 39245), (16, 39251), (19, 39263), (23, 39290),

Gene: Stoor_59 Start: 39236, Stop: 39436, Start Num: 10
Candidate Starts for Stoor_59:
(Start: 10 @39236 has 55 MA's), (13, 39260), (14, 39269), (16, 39275), (18, 39284), (23, 39314), (35, 39404),

Gene: Stromboli_59 Start: 39037, Stop: 39237, Start Num: 10
Candidate Starts for Stromboli_59:
(Start: 10 @39037 has 55 MA's), (14, 39070), (16, 39076), (18, 39085), (19, 39088), (23, 39115), (35, 39205),

Gene: Swervy_62 Start: 38794, Stop: 38988, Start Num: 10
Candidate Starts for Swervy_62:
(1, 38353), (2, 38428), (3, 38437), (Start: 10 @38794 has 55 MA's), (14, 38830), (23, 38875), (35, 38965),

Gene: TukTuk_63 Start: 39239, Stop: 39433, Start Num: 10
Candidate Starts for TukTuk_63:
(1, 38798), (2, 38873), (3, 38882), (Start: 10 @39239 has 55 MA's), (14, 39275), (19, 39293), (23, 39320), (35, 39410),

Gene: Vitas_60 Start: 37124, Stop: 37300, Start Num: 8
Candidate Starts for Vitas_60:
(Start: 8 @37124 has 23 MA's), (13, 37154), (16, 37169), (17, 37172), (20, 37187), (22, 37199), (29, 37265), (32, 37274),

Gene: WalkingDead_62 Start: 40213, Stop: 40407, Start Num: 10
Candidate Starts for WalkingDead_62:
(Start: 10 @40213 has 55 MA's), (14, 40249), (16, 40255), (23, 40294),