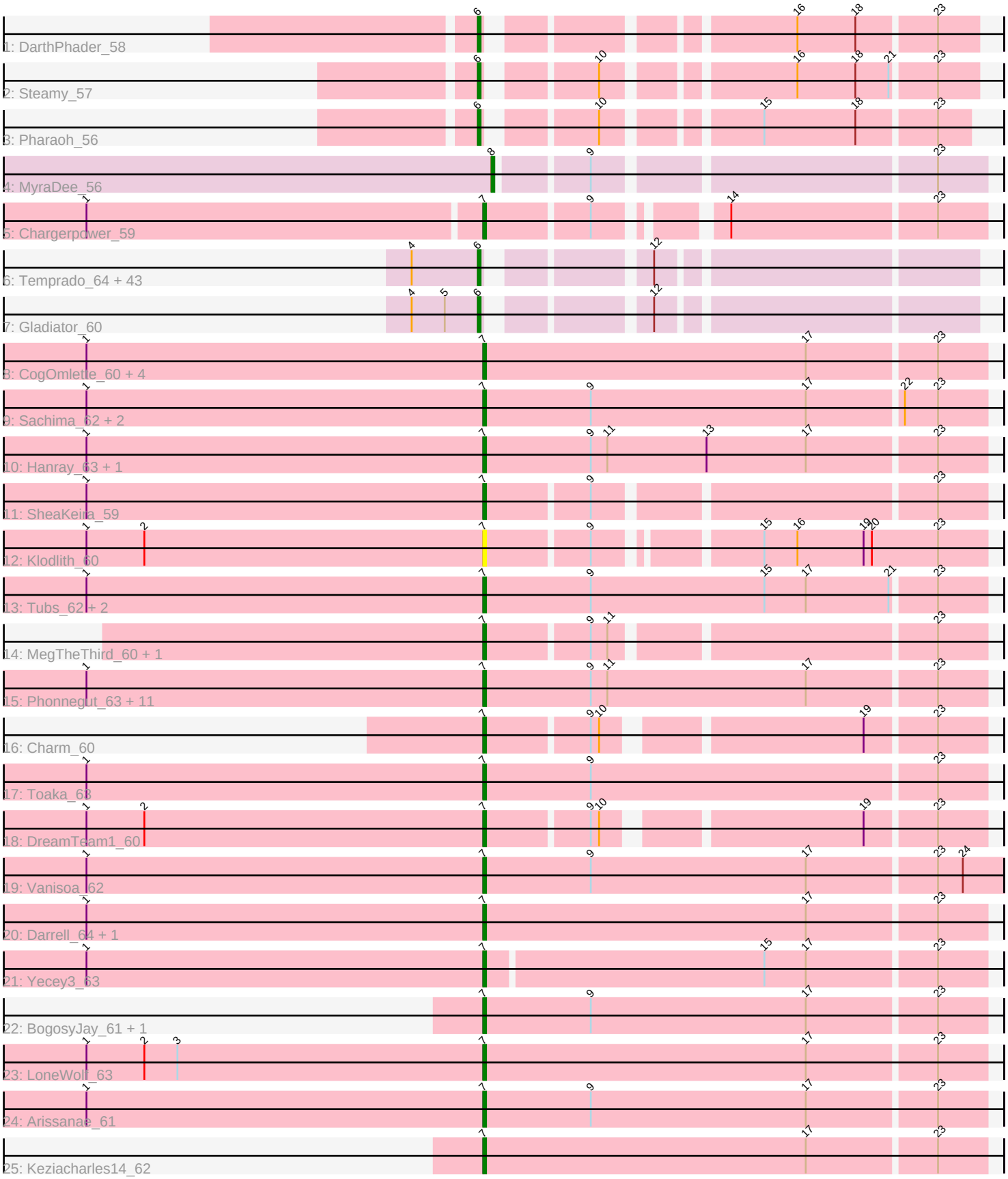
Pham 345607


1: DarthPhader_58
2: Steamy_57
3: Pharaoh_56
4: MyraDee_56
5: Chargerpower_59
6: Temprado_64 + 43
7: Gladiator_60
8: CogOmlette_60 + 4
9: Sachima_62 + 2
10: Hanray_63 + 1
11: SheaKeira_59
12: Klodlith_60
13: Tubs_62 + 2
14: MegTheThird_60 + 1
15: Phonnegut_63 + 11
16: Charm_60
17: Toaka_63
18: DreamTeam1_60
19: Vanisoa_62
20: Darrell_64 + 1
21: Yecey3_63
22: BogosyJay_61 + 1
23: LoneWolf_63
24: Arissanae_61
25: Keziacharles14_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 345607 Report

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

Pham number 345607 has 91 members, 7 are drafts.

Phages represented in each track:
• Track 1 : DarthPhader_58
• Track 2 : Steamy_57
• Track 3 : Pharaoh_56
• Track 4 : MyraDee_56
• Track 5 : Chargerpower_59
• Track 6 : Temprado_64, Rifter_63, Imbriano_64, Tucker_63, DaVinci_60, Hexamo_63, Jeffabunny_63, SmellyB_62, ToneTone_60, Isiphiwo_60, Gruunaga_63, Wiks_62, Polyphemus_64, SuperAwesome_62, SuperCallie99_59, Kazan_63, Zaka_63, Artemis2UCLA_63, BennyP_63, Cookiedough_62, Koko_65, Kipper29_62, WunderPhul_63, McFly_62, EricB_61, Zulu_64, Candra_63, Neeharika16_61, Newrala_62, Dorothea_62, Pmask_61, VohminGhazi_62, Chartreuse_61, Hoot_57, DelvinSonDorr_59, Roksolana_64, Indra_66, Helmet_65, Lilbunny_62, Garak_64, BlessJoy_63, BABullseye_55, Yokurt_62, CloudWang3_64
• Track 7 : Gladiator_60
• Track 8 : CogOmlette_60, WorldCup_60, Bellris_62, Minispark_60, Rahalelujah_62
• Track 9 : Sachima_62, EdogawaKiddo_62, Lilleskat_62
• Track 10 : Hanray_63, Holex_63
• Track 11 : SheaKeira_59
• Track 12 : Klodlith_60
• Track 13 : Tubs_62, PackMan_61, Phaeder_62
• Track 14 : MegTheThird_60, Celestialunch_60
• Track 15 : Phonnegut_63, Ugenie5_59, HortumSL17_63, Scherzo_63, Jiawan_63, Beemo_63, Pioneer_63, Catalina_64, RyeScarlet_63, Onglai_62, Aliter_63, Myxus_62
• Track 16 : Charm_60
• Track 17 : Toaka_63
• Track 18 : DreamTeam1_60
• Track 19 : Vanisoa_62
• Track 20 : Darrell_64, Elephantoon_61
• Track 21 : Yecey3_63
• Track 22 : BogosyJay_61, Maminiaina_61
• Track 23 : LoneWolf_63
• Track 24 : Arissanae_61
• Track 25 : Keziacharles14_62

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

The start number called the most often in the published annotations is 6, it was called in 46 of the 84 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Artemis2UCLA_63, BABullseye_55, BennyP_63, BlessJoy_63, Candra_63, Chartreuse_61, CloudWang3_64, Cookiedough_62, DaVinci_60, DarthPhader_58, DelvinSonDorr_59, Dorothea_62, EricB_61, Garak_64, Gladiator_60, Gruunaga_63, Helmet_65, Hexamo_63, Hoot_57, Imbriano_64, Indra_66, Isiphiwo_60, Jeffabunny_63, Kazan_63, Kipper29_62, Koko_65, Lilbunny_62, McFly_62, Neeharika16_61, Newrala_62, Pharaoh_56, Pmask_61, Polyphemus_64, Rifter_63, Roksolana_64, SmellyB_62, Steamy_57, SuperAwesome_62, SuperCallie99_59, Temprado_64, ToneTone_60, Tucker_63, VohminGhazi_62, Wiks_62, WunderPhul_63, Yokurt_62, Zaka_63, Zulu_64,

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

Genes that do not have the "Most Annotated" start:
• Aliter_63, Arissanae_61, Beemo_63, Bellris_62, BogosyJay_61, Catalina_64, Celestialunch_60, Chargerpower_59, Charm_60, CogOmlette_60, Darrell_64, DreamTeam1_60, EdogawaKiddo_62, Elephantoon_61, Hanray_63, Holex_63, HortumSL17_63, Jiawan_63, Keziacharles14_62, Klodlith_60, Lilleskat_62, LoneWolf_63, Maminiaina_61, MegTheThird_60, Minispark_60, MyraDee_56, Myxus_62, Onglai_62, PackMan_61, Phaeder_62, Phonnegut_63, Pioneer_63, Rahalelujah_62, RyeScarlet_63, Sachima_62, Scherzo_63, SheaKeira_59, Toaka_63, Tubs_62, Ugenie5_59, Vanisoa_62, WorldCup_60, Yecey3_63,

Summary by start number:

Start 6:
• Found in 48 of 91 (52.7%) of genes in pham
• Manual Annotations of this start: 46 of 84
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Artemis2UCLA_63 (A6), BABullseye_55 (A6), BennyP_63 (A6), BlessJoy_63 (A6), Candra_63 (A6), Chartreuse_61 (A6), CloudWang3_64 (A6), Cookiedough_62 (A6), DaVinci_60 (A6), DarthPhader_58 (A12), DelvinSonDorr_59 (A6), Dorothea_62 (A6), EricB_61 (A6), Garak_64 (A6), Gladiator_60 (A6), Gruunaga_63 (A6), Helmet_65 (A6), Hexamo_63 (A6), Hoot_57 (A6), Imbriano_64 (A6), Indra_66 (A6), Isiphiwo_60 (A6), Jeffabunny_63 (A6), Kazan_63 (A6), Kipper29_62 (A6), Koko_65 (A6), Lilbunny_62 (A6), McFly_62 (A6), Neeharika16_61 (A6), Newrala_62 (A6), Pharaoh_56 (A12), Pmask_61 (A6), Polyphemus_64 (A6), Rifter_63 (A6), Roksolana_64 (A6), SmellyB_62 (A6), Steamy_57 (A12), SuperAwesome_62 (A6), SuperCallie99_59 (A6), Temprado_64 (A6), ToneTone_60 (A6), Tucker_63 (A6), VohminGhazi_62 (A6), Wiks_62 (A6), WunderPhul_63 (A6), Yokurt_62 (A6), Zaka_63 (A6), Zulu_64 (A6),

Start 7:
• Found in 42 of 91 (46.2%) of genes in pham
• Manual Annotations of this start: 37 of 84
• Called 100.0% of time when present

• Phage (with cluster) where this start called: Aliter_63 (A9), Arissanae_61 (A9), Beemo_63 (A9), Bellris_62 (A9), BogosyJay_61 (A9), Catalina_64 (A9), Celestialunch_60 (A9), Chargerpower_59 (A22), Charm_60 (A9), CogOmlette_60 (A9), Darrell_64 (A9), DreamTeam1_60 (A9), EdogawaKiddo_62 (A9), Elephantoon_61 (A9), Hanray_63 (A9), Holex_63 (A9), HortumSL17_63 (A9), Jiawan_63 (A9), Keziacharles14_62 (A9), Klodlith_60 (A9), Lilleskat_62 (A9), LoneWolf_63 (A9), Maminiaina_61 (A9), MegTheThird_60 (A9), Minispark_60 (A9), Myxus_62 (A9), Onglai_62 (A9), PackMan_61 (A9), Phaeder_62 (A9), Phonnegut_63 (A9), Pioneer_63 (A9), Rahalelujah_62 (A9), RyeScarlet_63 (A9), Sachima_62 (A9), Scherzo_63 (A9), SheaKeira_59 (A9), Toaka_63 (A9), Tubs_62 (A9), Ugenie5_59 (A9), Vanisoa_62 (A9), WorldCup_60 (A9), Yecey3_63 (A9),

Start 8:
• Found in 1 of 91 (1.1%) of genes in pham
• Manual Annotations of this start: 1 of 84
• Called 100.0% of time when present
• Phage (with cluster) where this start called: MyraDee_56 (A18),

Summary by clusters:

There are 5 clusters represented in this pham: A9, A22, A12, A18, A6,

Info for manual annotations of cluster A12:
•Start number 6 was manually annotated 3 times for cluster A12.

Info for manual annotations of cluster A18:
•Start number 8 was manually annotated 1 time for cluster A18.

Info for manual annotations of cluster A22:
•Start number 7 was manually annotated 1 time for cluster A22.

Info for manual annotations of cluster A6:
•Start number 6 was manually annotated 43 times for cluster A6.

Info for manual annotations of cluster A9:
•Start number 7 was manually annotated 36 times for cluster A9.

Gene Information:

Gene: Aliter_63 Start: 39504, Stop: 39325, Start Num: 7
Candidate Starts for Aliter_63:
(1, 39648), (Start: 7 @39504 has 37 MA's), (9, 39465), (11, 39459), (17, 39387), (23, 39342),

Gene: Arissanae_61 Start: 40070, Stop: 39891, Start Num: 7
Candidate Starts for Arissanae_61:
(1, 40214), (Start: 7 @40070 has 37 MA's), (9, 40031), (17, 39953), (23, 39908),

Gene: Artemis2UCLA_63 Start: 38204, Stop: 38049, Start Num: 6
Candidate Starts for Artemis2UCLA_63:
(4, 38228), (Start: 6 @38204 has 46 MA's), (12, 38156),

Gene: BABullseye_55 Start: 35759, Stop: 35604, Start Num: 6
Candidate Starts for BABullseye_55:
(4, 35783), (Start: 6 @35759 has 46 MA's), (12, 35711),

Gene: Beemo_63 Start: 39674, Stop: 39495, Start Num: 7
Candidate Starts for Beemo_63:
(1, 39818), (Start: 7 @39674 has 37 MA's), (9, 39635), (11, 39629), (17, 39557), (23, 39512),

Gene: Bellris_62 Start: 39197, Stop: 39018, Start Num: 7
Candidate Starts for Bellris_62:
(1, 39341), (Start: 7 @39197 has 37 MA's), (17, 39080), (23, 39035),

Gene: BennyP_63 Start: 38274, Stop: 38119, Start Num: 6
Candidate Starts for BennyP_63:
(4, 38298), (Start: 6 @38274 has 46 MA's), (12, 38226),

Gene: BlessJoy_63 Start: 38630, Stop: 38475, Start Num: 6
Candidate Starts for BlessJoy_63:
(4, 38654), (Start: 6 @38630 has 46 MA's), (12, 38582),

Gene: BogosyJay_61 Start: 39471, Stop: 39292, Start Num: 7
Candidate Starts for BogosyJay_61:
(Start: 7 @39471 has 37 MA's), (9, 39432), (17, 39354), (23, 39309),

Gene: Candra_63 Start: 38123, Stop: 37968, Start Num: 6
Candidate Starts for Candra_63:
(4, 38147), (Start: 6 @38123 has 46 MA's), (12, 38075),

Gene: Catalina_64 Start: 39577, Stop: 39398, Start Num: 7
Candidate Starts for Catalina_64:
(1, 39721), (Start: 7 @39577 has 37 MA's), (9, 39538), (11, 39532), (17, 39460), (23, 39415),

Gene: Celestialunch_60 Start: 39140, Stop: 38973, Start Num: 7
Candidate Starts for Celestialunch_60:
(Start: 7 @39140 has 37 MA's), (9, 39104), (11, 39098), (23, 38990),

Gene: Chargerpower_59 Start: 38011, Stop: 37850, Start Num: 7
Candidate Starts for Chargerpower_59:
(1, 38152), (Start: 7 @38011 has 37 MA's), (9, 37975), (14, 37939), (23, 37867),

Gene: Charm_60 Start: 39202, Stop: 39038, Start Num: 7
Candidate Starts for Charm_60:
(Start: 7 @39202 has 37 MA's), (9, 39166), (10, 39163), (19, 39079), (23, 39055),

Gene: Chartreuse_61 Start: 37474, Stop: 37319, Start Num: 6
Candidate Starts for Chartreuse_61:
(4, 37498), (Start: 6 @37474 has 46 MA's), (12, 37426),

Gene: CloudWang3_64 Start: 38716, Stop: 38564, Start Num: 6
Candidate Starts for CloudWang3_64:
(4, 38740), (Start: 6 @38716 has 46 MA's), (12, 38668),

Gene: CogOmlette_60 Start: 39194, Stop: 39015, Start Num: 7

Candidate Starts for CogOmlette_60:
(1, 39338), (Start: 7 @39194 has 37 MA's), (17, 39077), (23, 39032),

Gene: Cookiedough_62 Start: 38102, Stop: 37947, Start Num: 6
Candidate Starts for Cookiedough_62:
(4, 38126), (Start: 6 @38102 has 46 MA's), (12, 38054),

Gene: DaVinci_60 Start: 37528, Stop: 37373, Start Num: 6
Candidate Starts for DaVinci_60:
(4, 37552), (Start: 6 @37528 has 46 MA's), (12, 37480),

Gene: Darrell_64 Start: 40145, Stop: 39966, Start Num: 7
Candidate Starts for Darrell_64:
(1, 40289), (Start: 7 @40145 has 37 MA's), (17, 40028), (23, 39983),

Gene: DarthPhader_58 Start: 40398, Stop: 40243, Start Num: 6
Candidate Starts for DarthPhader_58:
(Start: 6 @40398 has 46 MA's), (16, 40305), (18, 40284), (23, 40257),

Gene: DelvinSonDorr_59 Start: 38333, Stop: 38178, Start Num: 6
Candidate Starts for DelvinSonDorr_59:
(4, 38357), (Start: 6 @38333 has 46 MA's), (12, 38285),

Gene: Dorothea_62 Start: 38100, Stop: 37945, Start Num: 6
Candidate Starts for Dorothea_62:
(4, 38124), (Start: 6 @38100 has 46 MA's), (12, 38052),

Gene: DreamTeam1_60 Start: 39034, Stop: 38870, Start Num: 7
Candidate Starts for DreamTeam1_60:
(1, 39178), (2, 39157), (Start: 7 @39034 has 37 MA's), (9, 38998), (10, 38995), (19, 38911), (23, 38887),

Gene: EdogawaKiddo_62 Start: 39541, Stop: 39362, Start Num: 7
Candidate Starts for EdogawaKiddo_62:
(1, 39685), (Start: 7 @39541 has 37 MA's), (9, 39502), (17, 39424), (22, 39391), (23, 39379),

Gene: Elephantoon_61 Start: 38884, Stop: 38705, Start Num: 7
Candidate Starts for Elephantoon_61:
(1, 39028), (Start: 7 @38884 has 37 MA's), (17, 38767), (23, 38722),

Gene: EricB_61 Start: 38080, Stop: 37925, Start Num: 6
Candidate Starts for EricB_61:
(4, 38104), (Start: 6 @38080 has 46 MA's), (12, 38032),

Gene: Garak_64 Start: 38571, Stop: 38416, Start Num: 6
Candidate Starts for Garak_64:
(4, 38595), (Start: 6 @38571 has 46 MA's), (12, 38523),

Gene: Gladiator_60 Start: 37796, Stop: 37641, Start Num: 6
Candidate Starts for Gladiator_60:
(4, 37820), (5, 37808), (Start: 6 @37796 has 46 MA's), (12, 37748),

Gene: Gruunaga_63 Start: 38495, Stop: 38340, Start Num: 6

Candidate Starts for Gruunaga_63:
(4, 38519), (Start: 6 @38495 has 46 MA's), (12, 38447),

Gene: Hanray_63 Start: 39629, Stop: 39450, Start Num: 7
Candidate Starts for Hanray_63:
(1, 39773), (Start: 7 @39629 has 37 MA's), (9, 39590), (11, 39584), (13, 39548), (17, 39512), (23, 39467),

Gene: Helmet_65 Start: 38571, Stop: 38416, Start Num: 6
Candidate Starts for Helmet_65:
(4, 38595), (Start: 6 @38571 has 46 MA's), (12, 38523),

Gene: Hexamo_63 Start: 38201, Stop: 38046, Start Num: 6
Candidate Starts for Hexamo_63:
(4, 38225), (Start: 6 @38201 has 46 MA's), (12, 38153),

Gene: Holex_63 Start: 39645, Stop: 39466, Start Num: 7
Candidate Starts for Holex_63:
(1, 39789), (Start: 7 @39645 has 37 MA's), (9, 39606), (11, 39600), (13, 39564), (17, 39528), (23, 39483),

Gene: Hoot_57 Start: 35938, Stop: 35783, Start Num: 6
Candidate Starts for Hoot_57:
(4, 35962), (Start: 6 @35938 has 46 MA's), (12, 35890),

Gene: HortumSL17_63 Start: 39576, Stop: 39397, Start Num: 7
Candidate Starts for HortumSL17_63:
(1, 39720), (Start: 7 @39576 has 37 MA's), (9, 39537), (11, 39531), (17, 39459), (23, 39414),

Gene: Imbriano_64 Start: 38487, Stop: 38332, Start Num: 6
Candidate Starts for Imbriano_64:
(4, 38511), (Start: 6 @38487 has 46 MA's), (12, 38439),

Gene: Indra_66 Start: 38572, Stop: 38417, Start Num: 6
Candidate Starts for Indra_66:
(4, 38596), (Start: 6 @38572 has 46 MA's), (12, 38524),

Gene: Isiphiwo_60 Start: 37654, Stop: 37499, Start Num: 6
Candidate Starts for Isiphiwo_60:
(4, 37678), (Start: 6 @37654 has 46 MA's), (12, 37606),

Gene: Jeffabunny_63 Start: 38198, Stop: 38043, Start Num: 6
Candidate Starts for Jeffabunny_63:
(4, 38222), (Start: 6 @38198 has 46 MA's), (12, 38150),

Gene: Jiawan_63 Start: 39661, Stop: 39482, Start Num: 7
Candidate Starts for Jiawan_63:
(1, 39805), (Start: 7 @39661 has 37 MA's), (9, 39622), (11, 39616), (17, 39544), (23, 39499),

Gene: Kazan_63 Start: 38093, Stop: 37938, Start Num: 6
Candidate Starts for Kazan_63:
(4, 38117), (Start: 6 @38093 has 46 MA's), (12, 38045),

Gene: Keziacharles14_62 Start: 40639, Stop: 40460, Start Num: 7
Candidate Starts for Keziacharles14_62:
(Start: 7 @40639 has 37 MA's), (17, 40522), (23, 40477),

Gene: Kipper29_62 Start: 38106, Stop: 37951, Start Num: 6
Candidate Starts for Kipper29_62:
(4, 38130), (Start: 6 @38106 has 46 MA's), (12, 38058),

Gene: Klodlith_60 Start: 39099, Stop: 38932, Start Num: 7
Candidate Starts for Klodlith_60:
(1, 39243), (2, 39222), (Start: 7 @39099 has 37 MA's), (9, 39063), (15, 39012), (16, 39000), (19, 38976), (20, 38973), (23, 38949),

Gene: Koko_65 Start: 39056, Stop: 38904, Start Num: 6
Candidate Starts for Koko_65:
(4, 39080), (Start: 6 @39056 has 46 MA's), (12, 39008),

Gene: Lilbunny_62 Start: 38202, Stop: 38047, Start Num: 6
Candidate Starts for Lilbunny_62:
(4, 38226), (Start: 6 @38202 has 46 MA's), (12, 38154),

Gene: Lilleskat_62 Start: 39494, Stop: 39315, Start Num: 7
Candidate Starts for Lilleskat_62:
(1, 39638), (Start: 7 @39494 has 37 MA's), (9, 39455), (17, 39377), (22, 39344), (23, 39332),

Gene: LoneWolf_63 Start: 39606, Stop: 39427, Start Num: 7
Candidate Starts for LoneWolf_63:
(1, 39750), (2, 39729), (3, 39717), (Start: 7 @39606 has 37 MA's), (17, 39489), (23, 39444),

Gene: Maminiaina_61 Start: 39453, Stop: 39274, Start Num: 7
Candidate Starts for Maminiaina_61:
(Start: 7 @39453 has 37 MA's), (9, 39414), (17, 39336), (23, 39291),

Gene: McFly_62 Start: 38087, Stop: 37932, Start Num: 6
Candidate Starts for McFly_62:
(4, 38111), (Start: 6 @38087 has 46 MA's), (12, 38039),

Gene: MegTheThird_60 Start: 39139, Stop: 38972, Start Num: 7
Candidate Starts for MegTheThird_60:
(Start: 7 @39139 has 37 MA's), (9, 39103), (11, 39097), (23, 38989),

Gene: Minispark_60 Start: 39191, Stop: 39012, Start Num: 7
Candidate Starts for Minispark_60:
(1, 39335), (Start: 7 @39191 has 37 MA's), (17, 39074), (23, 39029),

Gene: MyraDee_56 Start: 36038, Stop: 35877, Start Num: 8
Candidate Starts for MyraDee_56:
(Start: 8 @36038 has 1 MA's), (9, 36008), (23, 35894),

Gene: Myxus_62 Start: 39576, Stop: 39397, Start Num: 7
Candidate Starts for Myxus_62:
(1, 39720), (Start: 7 @39576 has 37 MA's), (9, 39537), (11, 39531), (17, 39459), (23, 39414),

Gene: Neeharika16_61 Start: 37547, Stop: 37392, Start Num: 6
Candidate Starts for Neeharika16_61:
(4, 37571), (Start: 6 @37547 has 46 MA's), (12, 37499),

Gene: Newrala_62 Start: 38089, Stop: 37934, Start Num: 6
Candidate Starts for Newrala_62:
(4, 38113), (Start: 6 @38089 has 46 MA's), (12, 38041),

Gene: Onglai_62 Start: 37917, Stop: 37738, Start Num: 7
Candidate Starts for Onglai_62:
(1, 38061), (Start: 7 @37917 has 37 MA's), (9, 37878), (11, 37872), (17, 37800), (23, 37755),

Gene: PackMan_61 Start: 39451, Stop: 39272, Start Num: 7
Candidate Starts for PackMan_61:
(1, 39595), (Start: 7 @39451 has 37 MA's), (9, 39412), (15, 39349), (17, 39334), (21, 39304), (23, 39289),

Gene: Phaeder_62 Start: 39451, Stop: 39272, Start Num: 7
Candidate Starts for Phaeder_62:
(1, 39595), (Start: 7 @39451 has 37 MA's), (9, 39412), (15, 39349), (17, 39334), (21, 39304), (23, 39289),

Gene: Pharaoh_56 Start: 39272, Stop: 39120, Start Num: 6
Candidate Starts for Pharaoh_56:
(Start: 6 @39272 has 46 MA's), (10, 39239), (15, 39191), (18, 39158), (23, 39131),

Gene: Phonnegut_63 Start: 39673, Stop: 39494, Start Num: 7
Candidate Starts for Phonnegut_63:
(1, 39817), (Start: 7 @39673 has 37 MA's), (9, 39634), (11, 39628), (17, 39556), (23, 39511),

Gene: Pioneer_63 Start: 39673, Stop: 39494, Start Num: 7
Candidate Starts for Pioneer_63:
(1, 39817), (Start: 7 @39673 has 37 MA's), (9, 39634), (11, 39628), (17, 39556), (23, 39511),

Gene: Pmask_61 Start: 38090, Stop: 37935, Start Num: 6
Candidate Starts for Pmask_61:
(4, 38114), (Start: 6 @38090 has 46 MA's), (12, 38042),

Gene: Polyphemus_64 Start: 38475, Stop: 38320, Start Num: 6
Candidate Starts for Polyphemus_64:
(4, 38499), (Start: 6 @38475 has 46 MA's), (12, 38427),

Gene: Rahalelujah_62 Start: 39206, Stop: 39027, Start Num: 7
Candidate Starts for Rahalelujah_62:
(1, 39350), (Start: 7 @39206 has 37 MA's), (17, 39089), (23, 39044),

Gene: Rifter_63 Start: 37698, Stop: 37543, Start Num: 6
Candidate Starts for Rifter_63:
(4, 37722), (Start: 6 @37698 has 46 MA's), (12, 37650),

Gene: Roksolana_64 Start: 38532, Stop: 38377, Start Num: 6
Candidate Starts for Roksolana_64:
(4, 38556), (Start: 6 @38532 has 46 MA's), (12, 38484),

Gene: RyeScarlet_63 Start: 39648, Stop: 39469, Start Num: 7
Candidate Starts for RyeScarlet_63:
(1, 39792), (Start: 7 @39648 has 37 MA's), (9, 39609), (11, 39603), (17, 39531), (23, 39486),

Gene: Sachima_62 Start: 39474, Stop: 39295, Start Num: 7
Candidate Starts for Sachima_62:
(1, 39618), (Start: 7 @39474 has 37 MA's), (9, 39435), (17, 39357), (22, 39324), (23, 39312),

Gene: Scherzo_63 Start: 39862, Stop: 39683, Start Num: 7
Candidate Starts for Scherzo_63:
(1, 40006), (Start: 7 @39862 has 37 MA's), (9, 39823), (11, 39817), (17, 39745), (23, 39700),

Gene: SheaKeira_59 Start: 39050, Stop: 38883, Start Num: 7
Candidate Starts for SheaKeira_59:
(1, 39194), (Start: 7 @39050 has 37 MA's), (9, 39014), (23, 38900),

Gene: SmellyB_62 Start: 38087, Stop: 37932, Start Num: 6
Candidate Starts for SmellyB_62:
(4, 38111), (Start: 6 @38087 has 46 MA's), (12, 38039),

Gene: Steamy_57 Start: 39000, Stop: 38845, Start Num: 6
Candidate Starts for Steamy_57:
(Start: 6 @39000 has 46 MA's), (10, 38967), (16, 38907), (18, 38886), (21, 38874), (23, 38859),

Gene: SuperAwesome_62 Start: 38092, Stop: 37937, Start Num: 6
Candidate Starts for SuperAwesome_62:
(4, 38116), (Start: 6 @38092 has 46 MA's), (12, 38044),

Gene: SuperCallie99_59 Start: 37974, Stop: 37819, Start Num: 6
Candidate Starts for SuperCallie99_59:
(4, 37998), (Start: 6 @37974 has 46 MA's), (12, 37926),

Gene: Temprado_64 Start: 38571, Stop: 38416, Start Num: 6
Candidate Starts for Temprado_64:
(4, 38595), (Start: 6 @38571 has 46 MA's), (12, 38523),

Gene: Toaka_63 Start: 39678, Stop: 39499, Start Num: 7
Candidate Starts for Toaka_63:
(1, 39822), (Start: 7 @39678 has 37 MA's), (9, 39639), (23, 39516),

Gene: ToneTone_60 Start: 38131, Stop: 37976, Start Num: 6
Candidate Starts for ToneTone_60:
(4, 38155), (Start: 6 @38131 has 46 MA's), (12, 38083),

Gene: Tubs_62 Start: 39451, Stop: 39272, Start Num: 7
Candidate Starts for Tubs_62:
(1, 39595), (Start: 7 @39451 has 37 MA's), (9, 39412), (15, 39349), (17, 39334), (21, 39304), (23, 39289),

Gene: Tucker_63 Start: 38300, Stop: 38145, Start Num: 6
Candidate Starts for Tucker_63:
(4, 38324), (Start: 6 @38300 has 46 MA's), (12, 38252),

Gene: Ugenie5_59 Start: 39861, Stop: 39682, Start Num: 7
Candidate Starts for Ugenie5_59:
(1, 40005), (Start: 7 @39861 has 37 MA's), (9, 39822), (11, 39816), (17, 39744), (23, 39699),

Gene: Vanisoa_62 Start: 40555, Stop: 40370, Start Num: 7
Candidate Starts for Vanisoa_62:
(1, 40699), (Start: 7 @40555 has 37 MA's), (9, 40516), (17, 40438), (23, 40393), (24, 40384),

Gene: VohminGhazi_62 Start: 38088, Stop: 37933, Start Num: 6
Candidate Starts for VohminGhazi_62:
(4, 38112), (Start: 6 @38088 has 46 MA's), (12, 38040),

Gene: Wiks_62 Start: 38202, Stop: 38047, Start Num: 6
Candidate Starts for Wiks_62:
(4, 38226), (Start: 6 @38202 has 46 MA's), (12, 38154),

Gene: WorldCup_60 Start: 39200, Stop: 39021, Start Num: 7
Candidate Starts for WorldCup_60:
(1, 39344), (Start: 7 @39200 has 37 MA's), (17, 39083), (23, 39038),

Gene: WunderPhul_63 Start: 38200, Stop: 38045, Start Num: 6
Candidate Starts for WunderPhul_63:
(4, 38224), (Start: 6 @38200 has 46 MA's), (12, 38152),

Gene: Yecey3_63 Start: 39447, Stop: 39271, Start Num: 7
Candidate Starts for Yecey3_63:
(1, 39591), (Start: 7 @39447 has 37 MA's), (15, 39348), (17, 39333), (23, 39288),

Gene: Yokurt_62 Start: 38202, Stop: 38047, Start Num: 6
Candidate Starts for Yokurt_62:
(4, 38226), (Start: 6 @38202 has 46 MA's), (12, 38154),

Gene: Zaka_63 Start: 38202, Stop: 38047, Start Num: 6
Candidate Starts for Zaka_63:
(4, 38226), (Start: 6 @38202 has 46 MA's), (12, 38154),

Gene: Zulu_64 Start: 38580, Stop: 38425, Start Num: 6
Candidate Starts for Zulu_64:
(4, 38604), (Start: 6 @38580 has 46 MA's), (12, 38532),