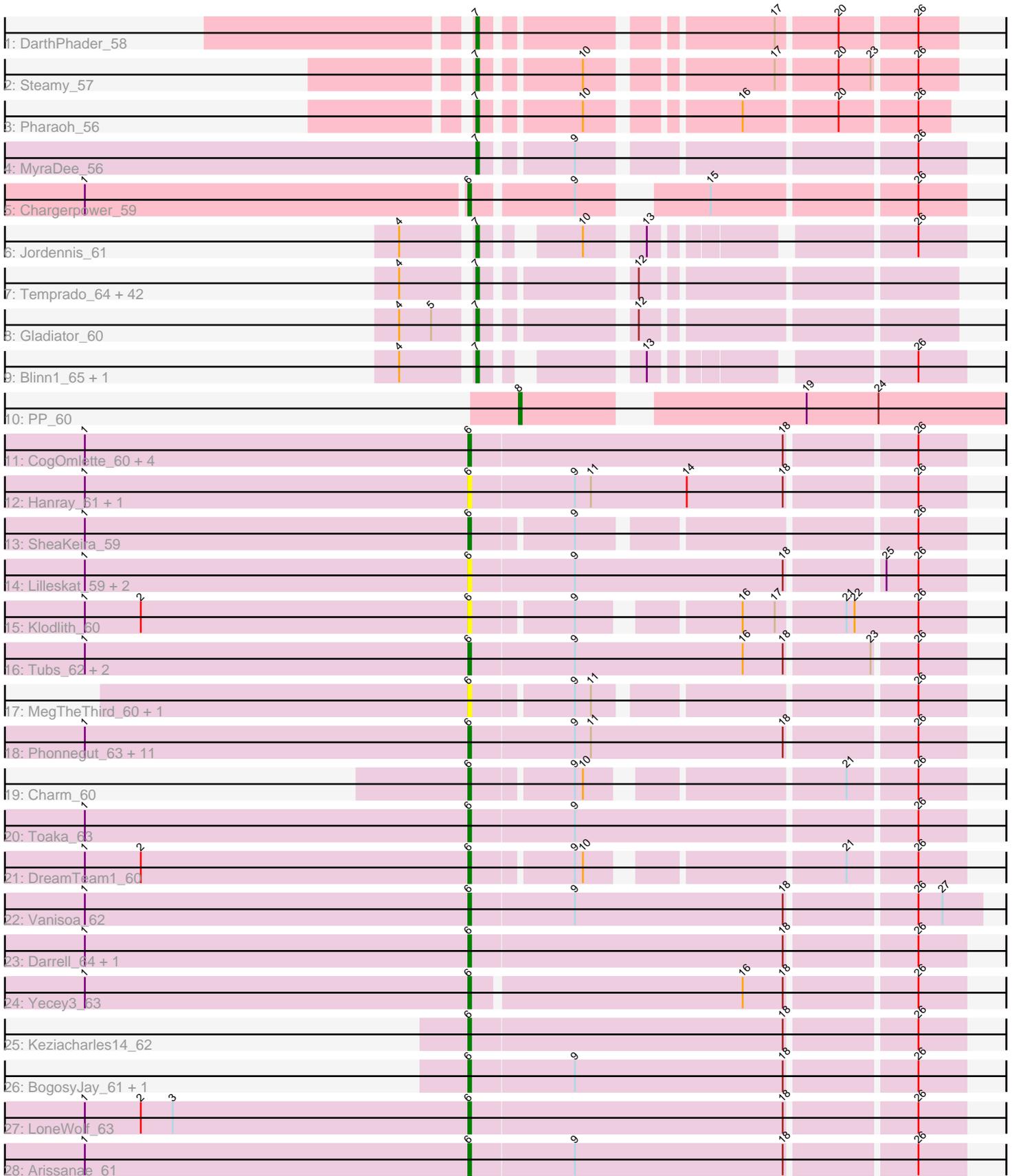# Pham 283684

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 283684 Report

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

Pham number 283684 has 94 members, 19 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 : Jordennis_61
• Track 7 : Temprado_64, Rifter_63, Tucker_63, DaVinci_60, Candra_60, Hexamo_63, Jeffabunny_63, SmellyB_62, ToneTone_60, BennyP_62, Isiphiwo_60, Gruunaga_63, Wiks_62, Polyphemus_64, SuperCallie99_59, Kazan_63, Zaka_63, Artemis2UCLA_63, Cookiedough_62, Koko_65, Kipper29_62, WunderPhul_63, McFly_62, EricB_61, Zulu_64, 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, SuperAwesome_62, CloudWang3_64
• Track 8 : Gladiator_60
• Track 9 : Blinn1_65, Priamo_64
• Track 10 : PP_60
• Track 11 : CogOmlette_60, WorldCup_60, Bellris_60, Minispark_60, Rahalelujah_62
• Track 12 : Hanray_61, Holex_61
• Track 13 : SheaKeira_59
• Track 14 : Lilleskat_59, EdogawaKiddo_60, Sachima_58
• Track 15 : Klodlith_60
• Track 16 : Tubs_62, PackMan_61, Phaeder_62
• Track 17 : MegTheThird_60, Celestialunch_60
• Track 18 : Phonnegut_63, Aliter_63, Ugenie5_59, HortumSL17_63, Scherzo_63, Beemo_63, Pioneer_63, Catalina_64, RyeScarlet_64, Onglai_61, Jiawan_60, Myxus_62
• Track 19 : Charm_60
• Track 20 : Toaka_63
• Track 21 : DreamTeam1_60
• Track 22 : Vanisoa_62
• Track 23 : Darrell_64, Elephantoon_61
• Track 24 : Yecey3_63
• Track 25 : Keziacharles14_62
• Track 26 : BogosyJay_61, Maminiaina_61
• Track 27 : LoneWolf_63
• Track 28 : Arissanae_61

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 75 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Artemis2UCLA_63, BABullseye_55, BennyP_62, BlessJoy_63, Blinn1_65, Candra_60, 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, Indra_66, Isiphiwo_60, Jeffabunny_63, Jordennis_61, Kazan_63, Kipper29_62, Koko_65, Lilbunny_62, McFly_62, MyraDee_56, Neeharika16_61, Newrala_62, Pharaoh_56, Pmask_61, Polyphemus_64, Priamo_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_60, BogosyJay_61, Catalina_64, Celestialunch_60, Chargerpower_59, Charm_60, CogOmlette_60, Darrell_64, DreamTeam1_60, EdogawaKiddo_60, Elephantoon_61, Hanray_61, Holex_61, HortumSL17_63, Jiawan_60, Keziacharles14_62, Klodlith_60, Lilleskat_59, LoneWolf_63, Maminiaina_61, MegTheThird_60, Minispark_60, Myxus_62, Onglai_61, PP_60, PackMan_61, Phaeder_62, Phonnegut_63, Pioneer_63, Rahalelujah_62, RyeScarlet_64, Sachima_58, Scherzo_63, SheaKeira_59, Toaka_63, Tubs_62, Ugenie5_59, Vanisoa_62, WorldCup_60, Yecey3_63,

Summary by start number:

Start 6:
• Found in 42 of 94 (44.7%) of genes in pham
• Manual Annotations of this start: 27 of 75
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Aliter_63 (A9), Arissanae_61 (A9), Beemo_63 (A9), Bellris_60 (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_60 (A9), Elephantoon_61 (A9), Hanray_61 (A9), Holex_61 (A9), HortumSL17_63 (A9), Jiawan_60 (A9), Keziacharles14_62 (A9), Klodlith_60 (A9), Lilleskat_59 (A9), LoneWolf_63 (A9), Maminiaina_61 (A9), MegTheThird_60 (A9), Minispark_60 (A9), Myxus_62 (A9), Onglai_61 (A9), PackMan_61 (A9), Phaeder_62 (A9), Phonnegut_63 (A9), Pioneer_63 (A9), Rahalelujah_62 (A9), RyeScarlet_64 (A9), Sachima_58 (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 7:

• Found in 51 of 94 (54.3%) of genes in pham
• Manual Annotations of this start: 47 of 75
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Artemis2UCLA_63 (A6), BABullseye_55 (A6), BennyP_62 (A6), BlessJoy_63 (A6), Blinn1_65 (A6), Candra_60 (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), Indra_66 (A6), Isiphiwo_60 (A6), Jeffabunny_63 (A6), Jordennis_61 (A6), Kazan_63 (A6), Kipper29_62 (A6), Koko_65 (A6), Lilbunny_62 (A6), McFly_62 (A6), MyraDee_56 (A18), Neeharika16_61 (A6), Newrala_62 (A6), Pharaoh_56 (A12), Pmask_61 (A6), Polyphemus_64 (A6), Priamo_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 8:
• Found in 1 of 94 (1.1%) of genes in pham
• Manual Annotations of this start: 1 of 75
• Called 100.0% of time when present
• Phage (with cluster) where this start called: PP_60 (A7),

Summary by clusters:

There are 6 clusters represented in this pham: A22, A12, A18, A7, A6, A9,

Info for manual annotations of cluster A12:
•Start number 7 was manually annotated 3 times for cluster A12.

Info for manual annotations of cluster A18:
•Start number 7 was manually annotated 1 time for cluster A18.

Info for manual annotations of cluster A22:
•Start number 6 was manually annotated 1 time for cluster A22.

Info for manual annotations of cluster A6:
•Start number 7 was manually annotated 43 times for cluster A6.

Info for manual annotations of cluster A7:
•Start number 8 was manually annotated 1 time for cluster A7.

Info for manual annotations of cluster A9:
•Start number 6 was manually annotated 26 times for cluster A9.

Gene Information:

Gene: Aliter_63 Start: 39504, Stop: 39325, Start Num: 6
Candidate Starts for Aliter_63:
(1, 39648), (Start: 6 @39504 has 27 MA's), (9, 39465), (11, 39459), (18, 39387), (26, 39342),

Gene: Arissanae_61 Start: 40070, Stop: 39891, Start Num: 6
Candidate Starts for Arissanae_61:
(1, 40214), (Start: 6 @40070 has 27 MA's), (9, 40031), (18, 39953), (26, 39908),

Gene: Artemis2UCLA_63 Start: 38204, Stop: 38049, Start Num: 7
Candidate Starts for Artemis2UCLA_63:
(4, 38228), (Start: 7 @38204 has 47 MA's), (12, 38156),

Gene: BABullseye_55 Start: 35759, Stop: 35604, Start Num: 7
Candidate Starts for BABullseye_55:
(4, 35783), (Start: 7 @35759 has 47 MA's), (12, 35711),

Gene: Beemo_63 Start: 39674, Stop: 39495, Start Num: 6
Candidate Starts for Beemo_63:
(1, 39818), (Start: 6 @39674 has 27 MA's), (9, 39635), (11, 39629), (18, 39557), (26, 39512),

Gene: Bellris_60 Start: 39197, Stop: 39018, Start Num: 6
Candidate Starts for Bellris_60:
(1, 39341), (Start: 6 @39197 has 27 MA's), (18, 39080), (26, 39035),

Gene: BennyP_62 Start: 38274, Stop: 38119, Start Num: 7
Candidate Starts for BennyP_62:
(4, 38298), (Start: 7 @38274 has 47 MA's), (12, 38226),

Gene: BlessJoy_63 Start: 38630, Stop: 38475, Start Num: 7
Candidate Starts for BlessJoy_63:
(4, 38654), (Start: 7 @38630 has 47 MA's), (12, 38582),

Gene: Blinn1_65 Start: 38288, Stop: 38142, Start Num: 7
Candidate Starts for Blinn1_65:
(4, 38312), (Start: 7 @38288 has 47 MA's), (13, 38243), (26, 38159),

Gene: BogosyJay_61 Start: 39471, Stop: 39292, Start Num: 6
Candidate Starts for BogosyJay_61:
(Start: 6 @39471 has 27 MA's), (9, 39432), (18, 39354), (26, 39309),

Gene: Candra_60 Start: 38123, Stop: 37968, Start Num: 7
Candidate Starts for Candra_60:
(4, 38147), (Start: 7 @38123 has 47 MA's), (12, 38075),

Gene: Catalina_64 Start: 39577, Stop: 39398, Start Num: 6
Candidate Starts for Catalina_64:
(1, 39721), (Start: 6 @39577 has 27 MA's), (9, 39538), (11, 39532), (18, 39460), (26, 39415),

Gene: Celestialunch_60 Start: 39140, Stop: 38973, Start Num: 6
Candidate Starts for Celestialunch_60:
(Start: 6 @39140 has 27 MA's), (9, 39104), (11, 39098), (26, 38990),

Gene: Chargerpower_59 Start: 38011, Stop: 37850, Start Num: 6
Candidate Starts for Chargerpower_59:
(1, 38152), (Start: 6 @38011 has 27 MA's), (9, 37975), (15, 37939), (26, 37867),

Gene: Charm_60 Start: 39202, Stop: 39038, Start Num: 6

Candidate Starts for Charm_60:
(Start: 6 @39202 has 27 MA's), (9, 39166), (10, 39163), (21, 39079), (26, 39055),

Gene: Chartreuse_61 Start: 37474, Stop: 37319, Start Num: 7
Candidate Starts for Chartreuse_61:
(4, 37498), (Start: 7 @37474 has 47 MA's), (12, 37426),

Gene: CloudWang3_64 Start: 38716, Stop: 38564, Start Num: 7
Candidate Starts for CloudWang3_64:
(4, 38740), (Start: 7 @38716 has 47 MA's), (12, 38668),

Gene: CogOmlette_60 Start: 39194, Stop: 39015, Start Num: 6
Candidate Starts for CogOmlette_60:
(1, 39338), (Start: 6 @39194 has 27 MA's), (18, 39077), (26, 39032),

Gene: Cookiedough_62 Start: 38102, Stop: 37947, Start Num: 7
Candidate Starts for Cookiedough_62:
(4, 38126), (Start: 7 @38102 has 47 MA's), (12, 38054),

Gene: DaVinci_60 Start: 37528, Stop: 37373, Start Num: 7
Candidate Starts for DaVinci_60:
(4, 37552), (Start: 7 @37528 has 47 MA's), (12, 37480),

Gene: Darrell_64 Start: 40145, Stop: 39966, Start Num: 6
Candidate Starts for Darrell_64:
(1, 40289), (Start: 6 @40145 has 27 MA's), (18, 40028), (26, 39983),

Gene: DarthPhader_58 Start: 40398, Stop: 40243, Start Num: 7
Candidate Starts for DarthPhader_58:
(Start: 7 @40398 has 47 MA's), (17, 40305), (20, 40284), (26, 40257),

Gene: DelvinSonDorr_59 Start: 38333, Stop: 38178, Start Num: 7
Candidate Starts for DelvinSonDorr_59:
(4, 38357), (Start: 7 @38333 has 47 MA's), (12, 38285),

Gene: Dorothea_62 Start: 38100, Stop: 37945, Start Num: 7
Candidate Starts for Dorothea_62:
(4, 38124), (Start: 7 @38100 has 47 MA's), (12, 38052),

Gene: DreamTeam1_60 Start: 39034, Stop: 38870, Start Num: 6
Candidate Starts for DreamTeam1_60:
(1, 39178), (2, 39157), (Start: 6 @39034 has 27 MA's), (9, 38998), (10, 38995), (21, 38911), (26, 38887),

Gene: EdogawaKiddo_60 Start: 39541, Stop: 39362, Start Num: 6
Candidate Starts for EdogawaKiddo_60:
(1, 39685), (Start: 6 @39541 has 27 MA's), (9, 39502), (18, 39424), (25, 39391), (26, 39379),

Gene: Elephantoon_61 Start: 38884, Stop: 38705, Start Num: 6
Candidate Starts for Elephantoon_61:
(1, 39028), (Start: 6 @38884 has 27 MA's), (18, 38767), (26, 38722),

Gene: EricB_61 Start: 38080, Stop: 37925, Start Num: 7

Candidate Starts for EricB_61:
(4, 38104), (Start: 7 @38080 has 47 MA's), (12, 38032),

Gene: Garak_64 Start: 38571, Stop: 38416, Start Num: 7
Candidate Starts for Garak_64:
(4, 38595), (Start: 7 @38571 has 47 MA's), (12, 38523),

Gene: Gladiator_60 Start: 37796, Stop: 37641, Start Num: 7
Candidate Starts for Gladiator_60:
(4, 37820), (5, 37808), (Start: 7 @37796 has 47 MA's), (12, 37748),

Gene: Gruunaga_63 Start: 38495, Stop: 38340, Start Num: 7
Candidate Starts for Gruunaga_63:
(4, 38519), (Start: 7 @38495 has 47 MA's), (12, 38447),

Gene: Hanray_61 Start: 39629, Stop: 39450, Start Num: 6
Candidate Starts for Hanray_61:
(1, 39773), (Start: 6 @39629 has 27 MA's), (9, 39590), (11, 39584), (14, 39548), (18, 39512), (26, 39467),

Gene: Helmet_65 Start: 38571, Stop: 38416, Start Num: 7
Candidate Starts for Helmet_65:
(4, 38595), (Start: 7 @38571 has 47 MA's), (12, 38523),

Gene: Hexamo_63 Start: 38201, Stop: 38046, Start Num: 7
Candidate Starts for Hexamo_63:
(4, 38225), (Start: 7 @38201 has 47 MA's), (12, 38153),

Gene: Holex_61 Start: 39645, Stop: 39466, Start Num: 6
Candidate Starts for Holex_61:
(1, 39789), (Start: 6 @39645 has 27 MA's), (9, 39606), (11, 39600), (14, 39564), (18, 39528), (26, 39483),

Gene: Hoot_57 Start: 35938, Stop: 35783, Start Num: 7
Candidate Starts for Hoot_57:
(4, 35962), (Start: 7 @35938 has 47 MA's), (12, 35890),

Gene: HortumSL17_63 Start: 39576, Stop: 39397, Start Num: 6
Candidate Starts for HortumSL17_63:
(1, 39720), (Start: 6 @39576 has 27 MA's), (9, 39537), (11, 39531), (18, 39459), (26, 39414),

Gene: Indra_66 Start: 38572, Stop: 38417, Start Num: 7
Candidate Starts for Indra_66:
(4, 38596), (Start: 7 @38572 has 47 MA's), (12, 38524),

Gene: Isiphiwo_60 Start: 37654, Stop: 37499, Start Num: 7
Candidate Starts for Isiphiwo_60:
(4, 37678), (Start: 7 @37654 has 47 MA's), (12, 37606),

Gene: Jeffabunny_63 Start: 38198, Stop: 38043, Start Num: 7
Candidate Starts for Jeffabunny_63:
(4, 38222), (Start: 7 @38198 has 47 MA's), (12, 38150),

Gene: Jiawan_60 Start: 39661, Stop: 39482, Start Num: 6
Candidate Starts for Jiawan_60:
(1, 39805), (Start: 6 @39661 has 27 MA's), (9, 39622), (11, 39616), (18, 39544), (26, 39499),

Gene: Jordennis_61 Start: 37840, Stop: 37694, Start Num: 7
Candidate Starts for Jordennis_61:
(4, 37864), (Start: 7 @37840 has 47 MA's), (10, 37813), (13, 37795), (26, 37711),

Gene: Kazan_63 Start: 38093, Stop: 37938, Start Num: 7
Candidate Starts for Kazan_63:
(4, 38117), (Start: 7 @38093 has 47 MA's), (12, 38045),

Gene: Keziacharles14_62 Start: 40639, Stop: 40460, Start Num: 6
Candidate Starts for Keziacharles14_62:
(Start: 6 @40639 has 27 MA's), (18, 40522), (26, 40477),

Gene: Kipper29_62 Start: 38106, Stop: 37951, Start Num: 7
Candidate Starts for Kipper29_62:
(4, 38130), (Start: 7 @38106 has 47 MA's), (12, 38058),

Gene: Klodlith_60 Start: 39099, Stop: 38932, Start Num: 6
Candidate Starts for Klodlith_60:
(1, 39243), (2, 39222), (Start: 6 @39099 has 27 MA's), (9, 39063), (16, 39012), (17, 39000), (21, 38976), (22, 38973), (26, 38949),

Gene: Koko_65 Start: 39056, Stop: 38904, Start Num: 7
Candidate Starts for Koko_65:
(4, 39080), (Start: 7 @39056 has 47 MA's), (12, 39008),

Gene: Lilbunny_62 Start: 38202, Stop: 38047, Start Num: 7
Candidate Starts for Lilbunny_62:
(4, 38226), (Start: 7 @38202 has 47 MA's), (12, 38154),

Gene: Lilleskat_59 Start: 39494, Stop: 39315, Start Num: 6
Candidate Starts for Lilleskat_59:
(1, 39638), (Start: 6 @39494 has 27 MA's), (9, 39455), (18, 39377), (25, 39344), (26, 39332),

Gene: LoneWolf_63 Start: 39606, Stop: 39427, Start Num: 6
Candidate Starts for LoneWolf_63:
(1, 39750), (2, 39729), (3, 39717), (Start: 6 @39606 has 27 MA's), (18, 39489), (26, 39444),

Gene: Maminiaina_61 Start: 39453, Stop: 39274, Start Num: 6
Candidate Starts for Maminiaina_61:
(Start: 6 @39453 has 27 MA's), (9, 39414), (18, 39336), (26, 39291),

Gene: McFly_62 Start: 38087, Stop: 37932, Start Num: 7
Candidate Starts for McFly_62:
(4, 38111), (Start: 7 @38087 has 47 MA's), (12, 38039),

Gene: MegTheThird_60 Start: 39139, Stop: 38972, Start Num: 6
Candidate Starts for MegTheThird_60:
(Start: 6 @39139 has 27 MA's), (9, 39103), (11, 39097), (26, 38989),

Gene: Minispark_60 Start: 39191, Stop: 39012, Start Num: 6
Candidate Starts for Minispark_60:
(1, 39335), (Start: 6 @39191 has 27 MA's), (18, 39074), (26, 39029),

Gene: MyraDee_56 Start: 36038, Stop: 35877, Start Num: 7
Candidate Starts for MyraDee_56:
(Start: 7 @36038 has 47 MA's), (9, 36008), (26, 35894),

Gene: Myxus_62 Start: 39576, Stop: 39397, Start Num: 6
Candidate Starts for Myxus_62:
(1, 39720), (Start: 6 @39576 has 27 MA's), (9, 39537), (11, 39531), (18, 39459), (26, 39414),

Gene: Neeharika16_61 Start: 37547, Stop: 37392, Start Num: 7
Candidate Starts for Neeharika16_61:
(4, 37571), (Start: 7 @37547 has 47 MA's), (12, 37499),

Gene: Newrala_62 Start: 38089, Stop: 37934, Start Num: 7
Candidate Starts for Newrala_62:
(4, 38113), (Start: 7 @38089 has 47 MA's), (12, 38041),

Gene: Onglai_61 Start: 37917, Stop: 37738, Start Num: 6
Candidate Starts for Onglai_61:
(1, 38061), (Start: 6 @37917 has 27 MA's), (9, 37878), (11, 37872), (18, 37800), (26, 37755),

Gene: PP_60 Start: 42795, Stop: 42628, Start Num: 8
Candidate Starts for PP_60:
(Start: 8 @42795 has 1 MA's), (19, 42702), (24, 42675),

Gene: PackMan_61 Start: 39451, Stop: 39272, Start Num: 6
Candidate Starts for PackMan_61:
(1, 39595), (Start: 6 @39451 has 27 MA's), (9, 39412), (16, 39349), (18, 39334), (23, 39304), (26, 39289),

Gene: Phaeder_62 Start: 39451, Stop: 39272, Start Num: 6
Candidate Starts for Phaeder_62:
(1, 39595), (Start: 6 @39451 has 27 MA's), (9, 39412), (16, 39349), (18, 39334), (23, 39304), (26, 39289),

Gene: Pharaoh_56 Start: 39272, Stop: 39120, Start Num: 7
Candidate Starts for Pharaoh_56:
(Start: 7 @39272 has 47 MA's), (10, 39239), (16, 39191), (20, 39158), (26, 39131),

Gene: Phonnegut_63 Start: 39673, Stop: 39494, Start Num: 6
Candidate Starts for Phonnegut_63:
(1, 39817), (Start: 6 @39673 has 27 MA's), (9, 39634), (11, 39628), (18, 39556), (26, 39511),

Gene: Pioneer_63 Start: 39673, Stop: 39494, Start Num: 6
Candidate Starts for Pioneer_63:
(1, 39817), (Start: 6 @39673 has 27 MA's), (9, 39634), (11, 39628), (18, 39556), (26, 39511),

Gene: Pmask_61 Start: 38090, Stop: 37935, Start Num: 7
Candidate Starts for Pmask_61:
(4, 38114), (Start: 7 @38090 has 47 MA's), (12, 38042),

Gene: Polyphemus_64 Start: 38475, Stop: 38320, Start Num: 7
Candidate Starts for Polyphemus_64:
(4, 38499), (Start: 7 @38475 has 47 MA's), (12, 38427),

Gene: Priamo_64 Start: 37906, Stop: 37760, Start Num: 7
Candidate Starts for Priamo_64:
(4, 37930), (Start: 7 @37906 has 47 MA's), (13, 37861), (26, 37777),

Gene: Rahalelujah_62 Start: 39206, Stop: 39027, Start Num: 6
Candidate Starts for Rahalelujah_62:
(1, 39350), (Start: 6 @39206 has 27 MA's), (18, 39089), (26, 39044),

Gene: Rifter_63 Start: 37698, Stop: 37543, Start Num: 7
Candidate Starts for Rifter_63:
(4, 37722), (Start: 7 @37698 has 47 MA's), (12, 37650),

Gene: Roksolana_64 Start: 38532, Stop: 38377, Start Num: 7
Candidate Starts for Roksolana_64:
(4, 38556), (Start: 7 @38532 has 47 MA's), (12, 38484),

Gene: RyeScarlet_64 Start: 39648, Stop: 39469, Start Num: 6
Candidate Starts for RyeScarlet_64:
(1, 39792), (Start: 6 @39648 has 27 MA's), (9, 39609), (11, 39603), (18, 39531), (26, 39486),

Gene: Sachima_58 Start: 39474, Stop: 39295, Start Num: 6
Candidate Starts for Sachima_58:
(1, 39618), (Start: 6 @39474 has 27 MA's), (9, 39435), (18, 39357), (25, 39324), (26, 39312),

Gene: Scherzo_63 Start: 39862, Stop: 39683, Start Num: 6
Candidate Starts for Scherzo_63:
(1, 40006), (Start: 6 @39862 has 27 MA's), (9, 39823), (11, 39817), (18, 39745), (26, 39700),

Gene: SheaKeira_59 Start: 39050, Stop: 38883, Start Num: 6
Candidate Starts for SheaKeira_59:
(1, 39194), (Start: 6 @39050 has 27 MA's), (9, 39014), (26, 38900),

Gene: SmellyB_62 Start: 38087, Stop: 37932, Start Num: 7
Candidate Starts for SmellyB_62:
(4, 38111), (Start: 7 @38087 has 47 MA's), (12, 38039),

Gene: Steamy_57 Start: 39000, Stop: 38845, Start Num: 7
Candidate Starts for Steamy_57:
(Start: 7 @39000 has 47 MA's), (10, 38967), (17, 38907), (20, 38886), (23, 38874), (26, 38859),

Gene: SuperAwesome_62 Start: 38092, Stop: 37937, Start Num: 7
Candidate Starts for SuperAwesome_62:
(4, 38116), (Start: 7 @38092 has 47 MA's), (12, 38044),

Gene: SuperCallie99_59 Start: 37974, Stop: 37819, Start Num: 7
Candidate Starts for SuperCallie99_59:
(4, 37998), (Start: 7 @37974 has 47 MA's), (12, 37926),

Gene: Temprado_64 Start: 38571, Stop: 38416, Start Num: 7
Candidate Starts for Temprado_64:
(4, 38595), (Start: 7 @38571 has 47 MA's), (12, 38523),

Gene: Toaka_63 Start: 39678, Stop: 39499, Start Num: 6
Candidate Starts for Toaka_63:
(1, 39822), (Start: 6 @39678 has 27 MA's), (9, 39639), (26, 39516),

Gene: ToneTone_60 Start: 38131, Stop: 37976, Start Num: 7
Candidate Starts for ToneTone_60:
(4, 38155), (Start: 7 @38131 has 47 MA's), (12, 38083),

Gene: Tubs_62 Start: 39451, Stop: 39272, Start Num: 6
Candidate Starts for Tubs_62:
(1, 39595), (Start: 6 @39451 has 27 MA's), (9, 39412), (16, 39349), (18, 39334), (23, 39304), (26, 39289),

Gene: Tucker_63 Start: 38300, Stop: 38145, Start Num: 7
Candidate Starts for Tucker_63:
(4, 38324), (Start: 7 @38300 has 47 MA's), (12, 38252),

Gene: Ugenie5_59 Start: 39861, Stop: 39682, Start Num: 6
Candidate Starts for Ugenie5_59:
(1, 40005), (Start: 6 @39861 has 27 MA's), (9, 39822), (11, 39816), (18, 39744), (26, 39699),

Gene: Vanisoa_62 Start: 40555, Stop: 40370, Start Num: 6
Candidate Starts for Vanisoa_62:
(1, 40699), (Start: 6 @40555 has 27 MA's), (9, 40516), (18, 40438), (26, 40393), (27, 40384),

Gene: VohminGhazi_62 Start: 38088, Stop: 37933, Start Num: 7
Candidate Starts for VohminGhazi_62:
(4, 38112), (Start: 7 @38088 has 47 MA's), (12, 38040),

Gene: Wiks_62 Start: 38202, Stop: 38047, Start Num: 7
Candidate Starts for Wiks_62:
(4, 38226), (Start: 7 @38202 has 47 MA's), (12, 38154),

Gene: WorldCup_60 Start: 39200, Stop: 39021, Start Num: 6
Candidate Starts for WorldCup_60:
(1, 39344), (Start: 6 @39200 has 27 MA's), (18, 39083), (26, 39038),

Gene: WunderPhul_63 Start: 38200, Stop: 38045, Start Num: 7
Candidate Starts for WunderPhul_63:
(4, 38224), (Start: 7 @38200 has 47 MA's), (12, 38152),

Gene: Yecey3_63 Start: 39447, Stop: 39271, Start Num: 6
Candidate Starts for Yecey3_63:
(1, 39591), (Start: 6 @39447 has 27 MA's), (16, 39348), (18, 39333), (26, 39288),

Gene: Yokurt_62 Start: 38202, Stop: 38047, Start Num: 7
Candidate Starts for Yokurt_62:
(4, 38226), (Start: 7 @38202 has 47 MA's), (12, 38154),

Gene: Zaka_63 Start: 38202, Stop: 38047, Start Num: 7
Candidate Starts for Zaka_63:
(4, 38226), (Start: 7 @38202 has 47 MA's), (12, 38154),

Gene: Zulu_64 Start: 38580, Stop: 38425, Start Num: 7
Candidate Starts for Zulu_64:
(4, 38604), (Start: 7 @38580 has 47 MA's), (12, 38532),