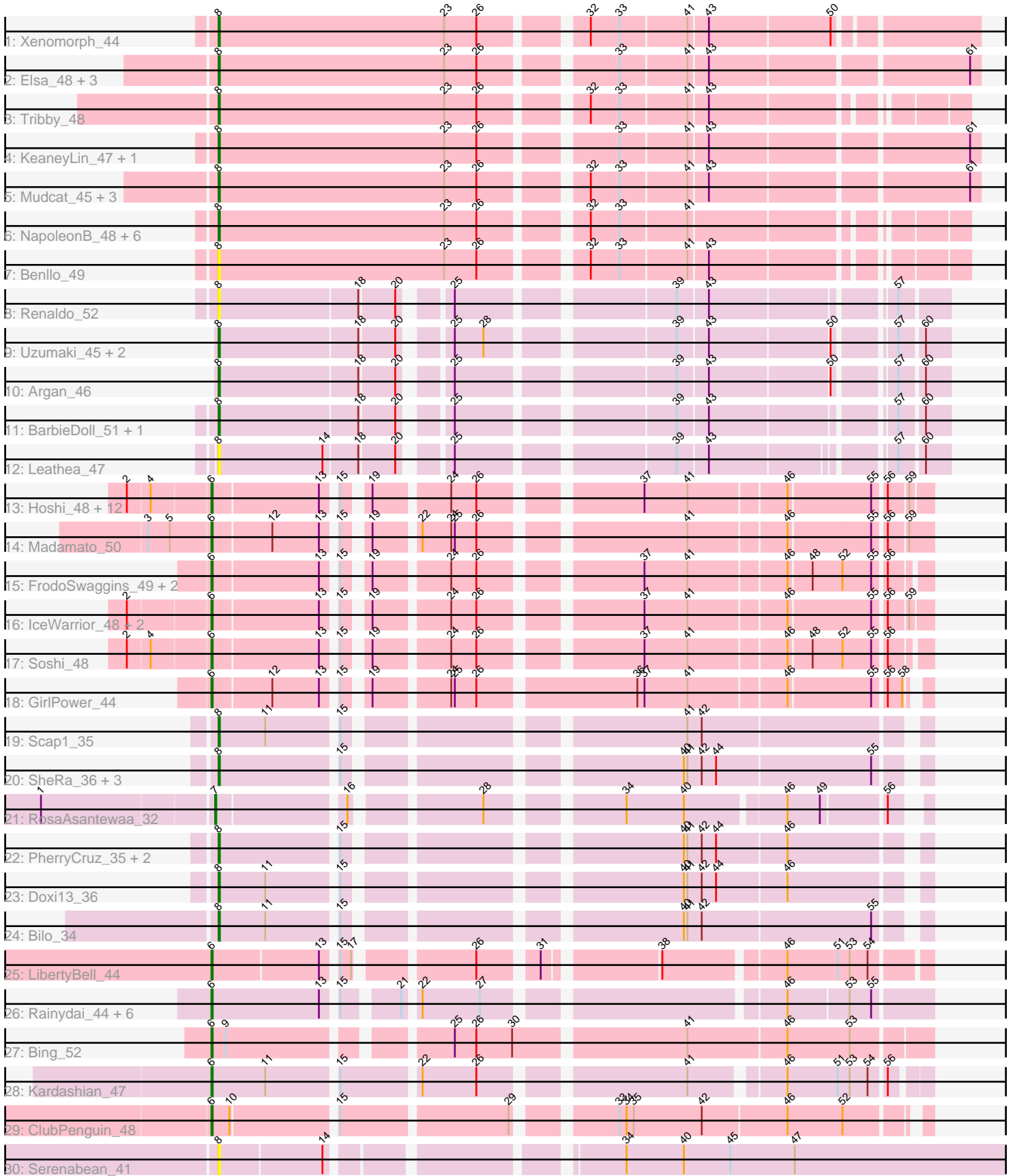


Pham 157830



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 157830 Report

This analysis was run 04/13/24 on database version 558.

Pham number 157830 has 73 members, 8 are drafts.

Phages represented in each track:

- Track 1 : Xenomorph_44
- Track 2 : Elsa_48, Arcadia_48, Nason_48, Circum_50
- Track 3 : Tribby_48
- Track 4 : KeaneyLin_47, GoCrazy_47
- Track 5 : Mudcat_45, Correa_46, JEGGS_47, Heisenberger_47
- Track 6 : NapoleonB_48, Mooshroom_49, Cheesy_48, Kardesai_49, Hankly_47, Dynamite_48, BenitoAntonio_48
- Track 7 : Benllo_49
- Track 8 : Renaldo_52
- Track 9 : Uzumaki_45, GantcherGoblin_46, Zeina_48
- Track 10 : Argan_46
- Track 11 : BarbieDoll_51, Lewando_49
- Track 12 : Leathea_47
- Track 13 : Hoshi_48, Rima_50, FidgetOrca_49, OlympicHelado_49, Spectropatronm_49, TieDye_48, Indigenous_49, Esketit_49, Namu_50, Meibysrarus_47, Maya_49, TonyStarch_48, Jaylociraptor_49
- Track 14 : Madamato_50
- Track 15 : FrodoSwaggins_49, Popy_49, DrGrey_48
- Track 16 : IceWarrior_48, CherryBlossom_49, TaidaOne_49
- Track 17 : Soshi_48
- Track 18 : GirlPower_44
- Track 19 : Scap1_35
- Track 20 : SheRa_36, Moozy_35, Annihilus_36, HotFries_35
- Track 21 : RosaAsantewaa_32
- Track 22 : PherryCruz_35, GoblinVoyage_36, RavenPuff_35
- Track 23 : Doxi13_36
- Track 24 : Bilu_34
- Track 25 : LibertyBell_44
- Track 26 : Rainydai_44, Miek_44, Thiqqums_45, CricKo_45, Regigigas_46, FromIndy_45, SendItCS_43
- Track 27 : Bing_52
- Track 28 : Kardashian_47
- Track 29 : ClubPenguin_48
- Track 30 : Serenabean_41

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

The start number called the most often in the published annotations is 8, it was called in 33 of the 65 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Annihilus_36, Arcadia_48, Argan_46, BarbieDoll_51, BenitoAntonio_48, Benllo_49, Bilo_34, Cheesy_48, Circum_50, Correa_46, Doxi13_36, Dynamite_48, Elsa_48, GantcherGoblin_46, GoCrazy_47, GoblinVoyage_36, Hankly_47, Heisenberger_47, HotFries_35, JEGGS_47, Kardesai_49, KeaneyLin_47, Leathea_47, Lewando_49, Mooshroom_49, Moozy_35, Mudcat_45, NapoleonB_48, Nason_48, PherryCruz_35, RavenPuff_35, Renaldo_52, Scap1_35, Serenabean_41, SheRa_36, Tribby_48, Uzumaki_45, Xenomorph_44, Zeina_48,

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

•

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

• Bing_52, CherryBlossom_49, ClubPenguin_48, CricKo_45, DrGrey_48, Esketit_49, FidgetOrca_49, FrodoSwaggins_49, FromIndy_45, GirlPower_44, Hoshi_48, IceWarrior_48, Indigenous_49, Jaylociraptor_49, Kardashian_47, LibertyBell_44, Madamato_50, Maya_49, Meibysrarus_47, Miek_44, Namo_50, OlympicHelado_49, Popy_49, Rainydai_44, Regigigas_46, Rima_50, RosaAsantewaa_32, SendItCS_43, Soshi_48, Spectropatronm_49, TaidaOne_49, Thiqqums_45, TieDye_48, TonyStarch_48,

Summary by start number:

Start 6:

• Found in 33 of 73 (45.2%) of genes in pham
• Manual Annotations of this start: 31 of 65
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bing_52 (BI5), CherryBlossom_49 (BI1), ClubPenguin_48 (BI7), CricKo_45 (BI4), DrGrey_48 (BI1), Esketit_49 (BI1), FidgetOrca_49 (BI1), FrodoSwaggins_49 (BI1), FromIndy_45 (BI4), GirlPower_44 (BI1), Hoshi_48 (BI1), IceWarrior_48 (BI1), Indigenous_49 (BI1), Jaylociraptor_49 (BI1), Kardashian_47 (BI6), LibertyBell_44 (BI3), Madamato_50 (BI1), Maya_49 (BI1), Meibysrarus_47 (BI1), Miek_44 (BI4), Namo_50 (BI1), OlympicHelado_49 (BI1), Popy_49 (BI1), Rainydai_44 (BI4), Regigigas_46 (BI4), Rima_50 (BI1), SendItCS_43 (BI4), Soshi_48 (BI1), Spectropatronm_49 (BI1), TaidaOne_49 (BI1), Thiqqums_45 (BI4), TieDye_48 (BI1), TonyStarch_48 (BI1),

Start 7:

• Found in 1 of 73 (1.4%) of genes in pham
• Manual Annotations of this start: 1 of 65
• Called 100.0% of time when present
• Phage (with cluster) where this start called: RosaAsantewaa_32 (BI2),

Start 8:

• Found in 39 of 73 (53.4%) of genes in pham
• Manual Annotations of this start: 33 of 65
• Called 100.0% of time when present

- Phage (with cluster) where this start called: Annihilus_36 (BI2), Arcadia_48 (AM), Argan_46 (AU6), BarbieDoll_51 (AU6), BenitoAntonio_48 (AM), Benllo_49 (AM), Bilo_34 (BI2), Cheesy_48 (AM), Circum_50 (AM), Correa_46 (AM), Doxi13_36 (BI2), Dynamite_48 (AM), Elsa_48 (AM), GantcherGoblin_46 (AU6), GoCrazy_47 (AM), GoblinVoyage_36 (BI2), Hankly_47 (AM), Heisenberger_47 (AM), HotFries_35 (BI2), JEGGS_47 (AM), Kardesai_49 (AM), KeaneyLin_47 (AM), Leathea_47 (AU6), Lewando_49 (AU6), Mooshroom_49 (AM), Moozy_35 (BI2), Mudcat_45 (AM), NapoleonB_48 (AM), Nason_48 (AM), PherryCruz_35 (BI2), RavenPuff_35 (BI2), Renaldo_52 (AU6), Scap1_35 (BI2), Serenabean_41 (singleton), SheRa_36 (BI2), Tribby_48 (AM), Uzumaki_45 (AU6), Xenomorph_44 (AM), Zeina_48 (AU6),

Summary by clusters:

There are 10 clusters represented in this pham: singleton, AM, AU6, BI6, BI7, BI4, BI5, BI2, BI3, BI1,

Info for manual annotations of cluster AM:

- Start number 8 was manually annotated 18 times for cluster AM.

Info for manual annotations of cluster AU6:

- Start number 8 was manually annotated 5 times for cluster AU6.

Info for manual annotations of cluster BI1:

- Start number 6 was manually annotated 22 times for cluster BI1.

Info for manual annotations of cluster BI2:

- Start number 7 was manually annotated 1 time for cluster BI2.
- Start number 8 was manually annotated 10 times for cluster BI2.

Info for manual annotations of cluster BI3:

- Start number 6 was manually annotated 1 time for cluster BI3.

Info for manual annotations of cluster BI4:

- Start number 6 was manually annotated 5 times for cluster BI4.

Info for manual annotations of cluster BI5:

- Start number 6 was manually annotated 1 time for cluster BI5.

Info for manual annotations of cluster BI6:

- Start number 6 was manually annotated 1 time for cluster BI6.

Info for manual annotations of cluster BI7:

- Start number 6 was manually annotated 1 time for cluster BI7.

Gene Information:

Gene: Annihilus_36 Start: 26356, Stop: 26877, Start Num: 8

Candidate Starts for Annihilus_36:

(Start: 8 @26356 has 33 MA's), (15, 26449), (40, 26692), (41, 26695), (42, 26707), (44, 26719), (55, 26845),

Gene: Arcadia_48 Start: 31859, Stop: 32455, Start Num: 8
Candidate Starts for Arcadia_48:
(Start: 8 @31859 has 33 MA's), (23, 32048), (26, 32075), (33, 32174), (41, 32228), (43, 32243), (61, 32447),

Gene: Argan_46 Start: 32018, Stop: 32551, Start Num: 8
Candidate Starts for Argan_46:
(Start: 8 @32018 has 33 MA's), (18, 32132), (20, 32159), (25, 32189), (39, 32351), (43, 32375), (50, 32471), (57, 32513), (60, 32531),

Gene: BarbieDoll_51 Start: 33705, Stop: 34238, Start Num: 8
Candidate Starts for BarbieDoll_51:
(Start: 8 @33705 has 33 MA's), (18, 33819), (20, 33846), (25, 33876), (39, 34038), (43, 34062), (57, 34200), (60, 34218),

Gene: BenitoAntonio_48 Start: 31423, Stop: 31992, Start Num: 8
Candidate Starts for BenitoAntonio_48:
(Start: 8 @31423 has 33 MA's), (23, 31612), (26, 31639), (32, 31714), (33, 31738), (41, 31792),

Gene: Benllo_49 Start: 32107, Stop: 32676, Start Num: 8
Candidate Starts for Benllo_49:
(Start: 8 @32107 has 33 MA's), (23, 32296), (26, 32323), (32, 32398), (33, 32422), (41, 32476), (43, 32491),

Gene: Bilo_34 Start: 26468, Stop: 26989, Start Num: 8
Candidate Starts for Bilo_34:
(Start: 8 @26468 has 33 MA's), (11, 26507), (15, 26561), (40, 26804), (41, 26807), (42, 26819), (55, 26957),

Gene: Bing_52 Start: 33497, Stop: 34048, Start Num: 6
Candidate Starts for Bing_52:
(Start: 6 @33497 has 31 MA's), (9, 33509), (25, 33671), (26, 33689), (30, 33719), (41, 33854), (46, 33935), (53, 33986),

Gene: Cheesy_48 Start: 31608, Stop: 32177, Start Num: 8
Candidate Starts for Cheesy_48:
(Start: 8 @31608 has 33 MA's), (23, 31797), (26, 31824), (32, 31899), (33, 31923), (41, 31977),

Gene: CherryBlossom_49 Start: 32728, Stop: 33255, Start Num: 6
Candidate Starts for CherryBlossom_49:
(2, 32665), (Start: 6 @32728 has 31 MA's), (13, 32815), (15, 32824), (19, 32839), (24, 32896), (26, 32917), (37, 33034), (41, 33070), (46, 33148), (55, 33214), (56, 33223), (59, 33238),

Gene: Circum_50 Start: 32270, Stop: 32866, Start Num: 8
Candidate Starts for Circum_50:
(Start: 8 @32270 has 33 MA's), (23, 32459), (26, 32486), (33, 32585), (41, 32639), (43, 32654), (61, 32858),

Gene: ClubPenguin_48 Start: 32048, Stop: 32584, Start Num: 6
Candidate Starts for ClubPenguin_48:
(Start: 6 @32048 has 31 MA's), (10, 32063), (15, 32144), (29, 32276), (33, 32345), (34, 32351), (35, 32357), (42, 32414), (46, 32483), (52, 32528),

Gene: Correa_46 Start: 30727, Stop: 31323, Start Num: 8
Candidate Starts for Correa_46:
(Start: 8 @30727 has 33 MA's), (23, 30916), (26, 30943), (32, 31018), (33, 31042), (41, 31096), (43, 31111), (61, 31315),

Gene: CricKo_45 Start: 30767, Stop: 31297, Start Num: 6
Candidate Starts for CricKo_45:
(Start: 6 @30767 has 31 MA's), (13, 30857), (15, 30866), (21, 30905), (22, 30914), (27, 30962), (46, 31184), (53, 31232), (55, 31250),

Gene: Doxi13_36 Start: 26330, Stop: 26851, Start Num: 8
Candidate Starts for Doxi13_36:
(Start: 8 @26330 has 33 MA's), (11, 26369), (15, 26423), (40, 26666), (41, 26669), (42, 26681), (44, 26693), (46, 26750),

Gene: DrGrey_48 Start: 33096, Stop: 33620, Start Num: 6
Candidate Starts for DrGrey_48:
(Start: 6 @33096 has 31 MA's), (13, 33183), (15, 33192), (19, 33207), (24, 33264), (26, 33285), (37, 33402), (41, 33438), (46, 33516), (48, 33534), (52, 33558), (55, 33582), (56, 33591),

Gene: Dynamite_48 Start: 31823, Stop: 32392, Start Num: 8
Candidate Starts for Dynamite_48:
(Start: 8 @31823 has 33 MA's), (23, 32012), (26, 32039), (32, 32114), (33, 32138), (41, 32192),

Gene: Elsa_48 Start: 31859, Stop: 32455, Start Num: 8
Candidate Starts for Elsa_48:
(Start: 8 @31859 has 33 MA's), (23, 32048), (26, 32075), (33, 32174), (41, 32228), (43, 32243), (61, 32447),

Gene: Esketit_49 Start: 32839, Stop: 33366, Start Num: 6
Candidate Starts for Esketit_49:
(2, 32776), (4, 32794), (Start: 6 @32839 has 31 MA's), (13, 32926), (15, 32935), (19, 32950), (24, 33007), (26, 33028), (37, 33145), (41, 33181), (46, 33259), (55, 33325), (56, 33334), (59, 33349),

Gene: FidgetOrca_49 Start: 32832, Stop: 33359, Start Num: 6
Candidate Starts for FidgetOrca_49:
(2, 32769), (4, 32787), (Start: 6 @32832 has 31 MA's), (13, 32919), (15, 32928), (19, 32943), (24, 33000), (26, 33021), (37, 33138), (41, 33174), (46, 33252), (55, 33318), (56, 33327), (59, 33342),

Gene: FrodoSwaggins_49 Start: 33490, Stop: 34014, Start Num: 6
Candidate Starts for FrodoSwaggins_49:
(Start: 6 @33490 has 31 MA's), (13, 33577), (15, 33586), (19, 33601), (24, 33658), (26, 33679), (37, 33796), (41, 33832), (46, 33910), (48, 33928), (52, 33952), (55, 33976), (56, 33985),

Gene: FromIndy_45 Start: 30371, Stop: 30901, Start Num: 6
Candidate Starts for FromIndy_45:
(Start: 6 @30371 has 31 MA's), (13, 30461), (15, 30470), (21, 30509), (22, 30518), (27, 30566), (46, 30788), (53, 30836), (55, 30854),

Gene: GantcherGoblin_46 Start: 32217, Stop: 32750, Start Num: 8
Candidate Starts for GantcherGoblin_46:
(Start: 8 @32217 has 33 MA's), (18, 32331), (20, 32358), (25, 32388), (28, 32412), (39, 32550), (43, 32574), (50, 32670), (57, 32712), (60, 32730),

Gene: GirlPower_44 Start: 33290, Stop: 33820, Start Num: 6

Candidate Starts for GirlPower_44:

(Start: 6 @33290 has 31 MA's), (12, 33338), (13, 33377), (15, 33386), (19, 33401), (24, 33458), (25, 33461), (26, 33479), (36, 33602), (37, 33608), (41, 33644), (46, 33722), (55, 33788), (56, 33797), (58, 33809),

Gene: GoCrazy_47 Start: 31735, Stop: 32331, Start Num: 8

Candidate Starts for GoCrazy_47:

(Start: 8 @31735 has 33 MA's), (23, 31924), (26, 31951), (33, 32050), (41, 32104), (43, 32119), (61, 32323),

Gene: GoblinVoyage_36 Start: 26330, Stop: 26851, Start Num: 8

Candidate Starts for GoblinVoyage_36:

(Start: 8 @26330 has 33 MA's), (15, 26423), (40, 26666), (41, 26669), (42, 26681), (44, 26693), (46, 26750),

Gene: Hankly_47 Start: 31036, Stop: 31605, Start Num: 8

Candidate Starts for Hankly_47:

(Start: 8 @31036 has 33 MA's), (23, 31225), (26, 31252), (32, 31327), (33, 31351), (41, 31405),

Gene: Heisenberger_47 Start: 31299, Stop: 31895, Start Num: 8

Candidate Starts for Heisenberger_47:

(Start: 8 @31299 has 33 MA's), (23, 31488), (26, 31515), (32, 31590), (33, 31614), (41, 31668), (43, 31683), (61, 31887),

Gene: Hoshi_48 Start: 32436, Stop: 32963, Start Num: 6

Candidate Starts for Hoshi_48:

(2, 32373), (4, 32391), (Start: 6 @32436 has 31 MA's), (13, 32523), (15, 32532), (19, 32547), (24, 32604), (26, 32625), (37, 32742), (41, 32778), (46, 32856), (55, 32922), (56, 32931), (59, 32946),

Gene: HotFries_35 Start: 26374, Stop: 26895, Start Num: 8

Candidate Starts for HotFries_35:

(Start: 8 @26374 has 33 MA's), (15, 26467), (40, 26710), (41, 26713), (42, 26725), (44, 26737), (55, 26863),

Gene: IceWarrior_48 Start: 32518, Stop: 33045, Start Num: 6

Candidate Starts for IceWarrior_48:

(2, 32455), (Start: 6 @32518 has 31 MA's), (13, 32605), (15, 32614), (19, 32629), (24, 32686), (26, 32707), (37, 32824), (41, 32860), (46, 32938), (55, 33004), (56, 33013), (59, 33028),

Gene: Indigenous_49 Start: 32833, Stop: 33360, Start Num: 6

Candidate Starts for Indigenous_49:

(2, 32770), (4, 32788), (Start: 6 @32833 has 31 MA's), (13, 32920), (15, 32929), (19, 32944), (24, 33001), (26, 33022), (37, 33139), (41, 33175), (46, 33253), (55, 33319), (56, 33328), (59, 33343),

Gene: JEGGS_47 Start: 31353, Stop: 31949, Start Num: 8

Candidate Starts for JEGGS_47:

(Start: 8 @31353 has 33 MA's), (23, 31542), (26, 31569), (32, 31644), (33, 31668), (41, 31722), (43, 31737), (61, 31941),

Gene: Jaylociraptor_49 Start: 32832, Stop: 33359, Start Num: 6

Candidate Starts for Jaylociraptor_49:

(2, 32769), (4, 32787), (Start: 6 @32832 has 31 MA's), (13, 32919), (15, 32928), (19, 32943), (24, 33000), (26, 33021), (37, 33138), (41, 33174), (46, 33252), (55, 33318), (56, 33327), (59, 33342),

Gene: Kardashian_47 Start: 32934, Stop: 33467, Start Num: 6

Candidate Starts for Kardashian_47:

(Start: 6 @32934 has 31 MA's), (11, 32979), (15, 33033), (22, 33093), (26, 33138), (41, 33291), (46, 33360), (51, 33402), (53, 33411), (54, 33426), (56, 33438),

Gene: Kardesai_49 Start: 32007, Stop: 32576, Start Num: 8

Candidate Starts for Kardesai_49:

(Start: 8 @32007 has 33 MA's), (23, 32196), (26, 32223), (32, 32298), (33, 32322), (41, 32376),

Gene: KeaneyLin_47 Start: 31735, Stop: 32331, Start Num: 8

Candidate Starts for KeaneyLin_47:

(Start: 8 @31735 has 33 MA's), (23, 31924), (26, 31951), (33, 32050), (41, 32104), (43, 32119), (61, 32323),

Gene: Leathea_47 Start: 31879, Stop: 32409, Start Num: 8

Candidate Starts for Leathea_47:

(Start: 8 @31879 has 33 MA's), (14, 31966), (18, 31993), (20, 32020), (25, 32050), (39, 32212), (43, 32236), (57, 32371), (60, 32389),

Gene: Lewando_49 Start: 33491, Stop: 34024, Start Num: 8

Candidate Starts for Lewando_49:

(Start: 8 @33491 has 33 MA's), (18, 33605), (20, 33632), (25, 33662), (39, 33824), (43, 33848), (57, 33986), (60, 34004),

Gene: LibertyBell_44 Start: 30077, Stop: 30595, Start Num: 6

Candidate Starts for LibertyBell_44:

(Start: 6 @30077 has 31 MA's), (13, 30164), (15, 30173), (17, 30182), (26, 30266), (31, 30308), (38, 30392), (46, 30485), (51, 30527), (53, 30536), (54, 30551),

Gene: Madamoto_50 Start: 32898, Stop: 33428, Start Num: 6

Candidate Starts for Madamoto_50:

(3, 32847), (5, 32865), (Start: 6 @32898 has 31 MA's), (12, 32946), (13, 32985), (15, 32994), (19, 33009), (22, 33042), (24, 33066), (25, 33069), (26, 33087), (41, 33240), (46, 33318), (55, 33384), (56, 33393), (59, 33408),

Gene: Maya_49 Start: 32846, Stop: 33373, Start Num: 6

Candidate Starts for Maya_49:

(2, 32783), (4, 32801), (Start: 6 @32846 has 31 MA's), (13, 32933), (15, 32942), (19, 32957), (24, 33014), (26, 33035), (37, 33152), (41, 33188), (46, 33266), (55, 33332), (56, 33341), (59, 33356),

Gene: Meibysrarus_47 Start: 32209, Stop: 32736, Start Num: 6

Candidate Starts for Meibysrarus_47:

(2, 32146), (4, 32164), (Start: 6 @32209 has 31 MA's), (13, 32296), (15, 32305), (19, 32320), (24, 32377), (26, 32398), (37, 32515), (41, 32551), (46, 32629), (55, 32695), (56, 32704), (59, 32719),

Gene: Miek_44 Start: 30383, Stop: 30913, Start Num: 6

Candidate Starts for Miek_44:

(Start: 6 @30383 has 31 MA's), (13, 30473), (15, 30482), (21, 30521), (22, 30530), (27, 30578), (46, 30800), (53, 30848), (55, 30866),

Gene: Mooshroom_49 Start: 32007, Stop: 32576, Start Num: 8

Candidate Starts for Mooshroom_49:

(Start: 8 @32007 has 33 MA's), (23, 32196), (26, 32223), (32, 32298), (33, 32322), (41, 32376),

Gene: Moozy_35 Start: 26330, Stop: 26851, Start Num: 8

Candidate Starts for Moozy_35:

(Start: 8 @26330 has 33 MA's), (15, 26423), (40, 26666), (41, 26669), (42, 26681), (44, 26693), (55, 26819),

Gene: Mudcat_45 Start: 32712, Stop: 33308, Start Num: 8

Candidate Starts for Mudcat_45:

(Start: 8 @32712 has 33 MA's), (23, 32901), (26, 32928), (32, 33003), (33, 33027), (41, 33081), (43, 33096), (61, 33300),

Gene: Namo_50 Start: 33177, Stop: 33704, Start Num: 6

Candidate Starts for Namo_50:

(2, 33114), (4, 33132), (Start: 6 @33177 has 31 MA's), (13, 33264), (15, 33273), (19, 33288), (24, 33345), (26, 33366), (37, 33483), (41, 33519), (46, 33597), (55, 33663), (56, 33672), (59, 33687),

Gene: NapoleonB_48 Start: 31823, Stop: 32392, Start Num: 8

Candidate Starts for NapoleonB_48:

(Start: 8 @31823 has 33 MA's), (23, 32012), (26, 32039), (32, 32114), (33, 32138), (41, 32192),

Gene: Nason_48 Start: 31859, Stop: 32455, Start Num: 8

Candidate Starts for Nason_48:

(Start: 8 @31859 has 33 MA's), (23, 32048), (26, 32075), (33, 32174), (41, 32228), (43, 32243), (61, 32447),

Gene: OlympicHelado_49 Start: 32860, Stop: 33387, Start Num: 6

Candidate Starts for OlympicHelado_49:

(2, 32797), (4, 32815), (Start: 6 @32860 has 31 MA's), (13, 32947), (15, 32956), (19, 32971), (24, 33028), (26, 33049), (37, 33166), (41, 33202), (46, 33280), (55, 33346), (56, 33355), (59, 33370),

Gene: PherryCruz_35 Start: 26326, Stop: 26847, Start Num: 8

Candidate Starts for PherryCruz_35:

(Start: 8 @26326 has 33 MA's), (15, 26419), (40, 26662), (41, 26665), (42, 26677), (44, 26689), (46, 26746),

Gene: Popy_49 Start: 33490, Stop: 34014, Start Num: 6

Candidate Starts for Popy_49:

(Start: 6 @33490 has 31 MA's), (13, 33577), (15, 33586), (19, 33601), (24, 33658), (26, 33679), (37, 33796), (41, 33832), (46, 33910), (48, 33928), (52, 33952), (55, 33976), (56, 33985),

Gene: Rainydai_44 Start: 30767, Stop: 31297, Start Num: 6

Candidate Starts for Rainydai_44:

(Start: 6 @30767 has 31 MA's), (13, 30857), (15, 30866), (21, 30905), (22, 30914), (27, 30962), (46, 31184), (53, 31232), (55, 31250),

Gene: RavenPuff_35 Start: 26326, Stop: 26847, Start Num: 8

Candidate Starts for RavenPuff_35:

(Start: 8 @26326 has 33 MA's), (15, 26419), (40, 26662), (41, 26665), (42, 26677), (44, 26689), (46, 26746),

Gene: Regigigas_46 Start: 30768, Stop: 31298, Start Num: 6

Candidate Starts for Regigigas_46:

(Start: 6 @30768 has 31 MA's), (13, 30858), (15, 30867), (21, 30906), (22, 30915), (27, 30963), (46, 31185), (53, 31233), (55, 31251),

Gene: Renaldo_52 Start: 33800, Stop: 34333, Start Num: 8

Candidate Starts for Renaldo_52:

(Start: 8 @33800 has 33 MA's), (18, 33914), (20, 33941), (25, 33971), (39, 34133), (43, 34157), (57, 34295),

Gene: Rima_50 Start: 33177, Stop: 33704, Start Num: 6

Candidate Starts for Rima_50:

(2, 33114), (4, 33132), (Start: 6 @33177 has 31 MA's), (13, 33264), (15, 33273), (19, 33288), (24, 33345), (26, 33366), (37, 33483), (41, 33519), (46, 33597), (55, 33663), (56, 33672), (59, 33687),

Gene: RosaAsantewaa_32 Start: 25470, Stop: 25979, Start Num: 7

Candidate Starts for RosaAsantewaa_32:

(1, 25332), (Start: 7 @25470 has 1 MA's), (16, 25569), (28, 25662), (34, 25758), (40, 25806), (46, 25884), (49, 25911), (56, 25959),

Gene: Scap1_35 Start: 26203, Stop: 26724, Start Num: 8

Candidate Starts for Scap1_35:

(Start: 8 @26203 has 33 MA's), (11, 26242), (15, 26296), (41, 26542), (42, 26554),

Gene: SendItCS_43 Start: 30371, Stop: 30901, Start Num: 6

Candidate Starts for SendItCS_43:

(Start: 6 @30371 has 31 MA's), (13, 30461), (15, 30470), (21, 30509), (22, 30518), (27, 30566), (46, 30788), (53, 30836), (55, 30854),

Gene: Serenabean_41 Start: 30574, Stop: 31215, Start Num: 8

Candidate Starts for Serenabean_41:

(Start: 8 @30574 has 33 MA's), (14, 30658), (34, 30865), (40, 30913), (45, 30952), (47, 31006),

Gene: SheRa_36 Start: 26372, Stop: 26893, Start Num: 8

Candidate Starts for SheRa_36:

(Start: 8 @26372 has 33 MA's), (15, 26465), (40, 26708), (41, 26711), (42, 26723), (44, 26735), (55, 26861),

Gene: Soshi_48 Start: 33109, Stop: 33633, Start Num: 6

Candidate Starts for Soshi_48:

(2, 33046), (4, 33064), (Start: 6 @33109 has 31 MA's), (13, 33196), (15, 33205), (19, 33220), (24, 33277), (26, 33298), (37, 33415), (41, 33451), (46, 33529), (48, 33547), (52, 33571), (55, 33595), (56, 33604),

Gene: Spectropatronm_49 Start: 32839, Stop: 33366, Start Num: 6

Candidate Starts for Spectropatronm_49:

(2, 32776), (4, 32794), (Start: 6 @32839 has 31 MA's), (13, 32926), (15, 32935), (19, 32950), (24, 33007), (26, 33028), (37, 33145), (41, 33181), (46, 33259), (55, 33325), (56, 33334), (59, 33349),

Gene: TaidaOne_49 Start: 33344, Stop: 33871, Start Num: 6

Candidate Starts for TaidaOne_49:

(2, 33281), (Start: 6 @33344 has 31 MA's), (13, 33431), (15, 33440), (19, 33455), (24, 33512), (26, 33533), (37, 33650), (41, 33686), (46, 33764), (55, 33830), (56, 33839), (59, 33854),

Gene: Thiqqums_45 Start: 30767, Stop: 31297, Start Num: 6

Candidate Starts for Thiqqums_45:

(Start: 6 @30767 has 31 MA's), (13, 30857), (15, 30866), (21, 30905), (22, 30914), (27, 30962), (46, 31184), (53, 31232), (55, 31250),

Gene: TieDye_48 Start: 32432, Stop: 32959, Start Num: 6

Candidate Starts for TieDye_48:

(2, 32369), (4, 32387), (Start: 6 @32432 has 31 MA's), (13, 32519), (15, 32528), (19, 32543), (24, 32600), (26, 32621), (37, 32738), (41, 32774), (46, 32852), (55, 32918), (56, 32927), (59, 32942),

Gene: TonyStarch_48 Start: 32553, Stop: 33080, Start Num: 6

Candidate Starts for TonyStarch_48:

(2, 32490), (4, 32508), (Start: 6 @32553 has 31 MA's), (13, 32640), (15, 32649), (19, 32664), (24, 32721), (26, 32742), (37, 32859), (41, 32895), (46, 32973), (55, 33039), (56, 33048), (59, 33063),

Gene: Tribby_48 Start: 31560, Stop: 32129, Start Num: 8

Candidate Starts for Tribby_48:

(Start: 8 @31560 has 33 MA's), (23, 31749), (26, 31776), (32, 31851), (33, 31875), (41, 31929), (43, 31944),

Gene: Uzumaki_45 Start: 32211, Stop: 32744, Start Num: 8

Candidate Starts for Uzumaki_45:

(Start: 8 @32211 has 33 MA's), (18, 32325), (20, 32352), (25, 32382), (28, 32406), (39, 32544), (43, 32568), (50, 32664), (57, 32706), (60, 32724),

Gene: Xenomorph_44 Start: 31272, Stop: 31862, Start Num: 8

Candidate Starts for Xenomorph_44:

(Start: 8 @31272 has 33 MA's), (23, 31461), (26, 31488), (32, 31563), (33, 31587), (41, 31641), (43, 31656), (50, 31755),

Gene: Zeina_48 Start: 32530, Stop: 33063, Start Num: 8

Candidate Starts for Zeina_48:

(Start: 8 @32530 has 33 MA's), (18, 32644), (20, 32671), (25, 32701), (28, 32725), (39, 32863), (43, 32887), (50, 32983), (57, 33025), (60, 33043),