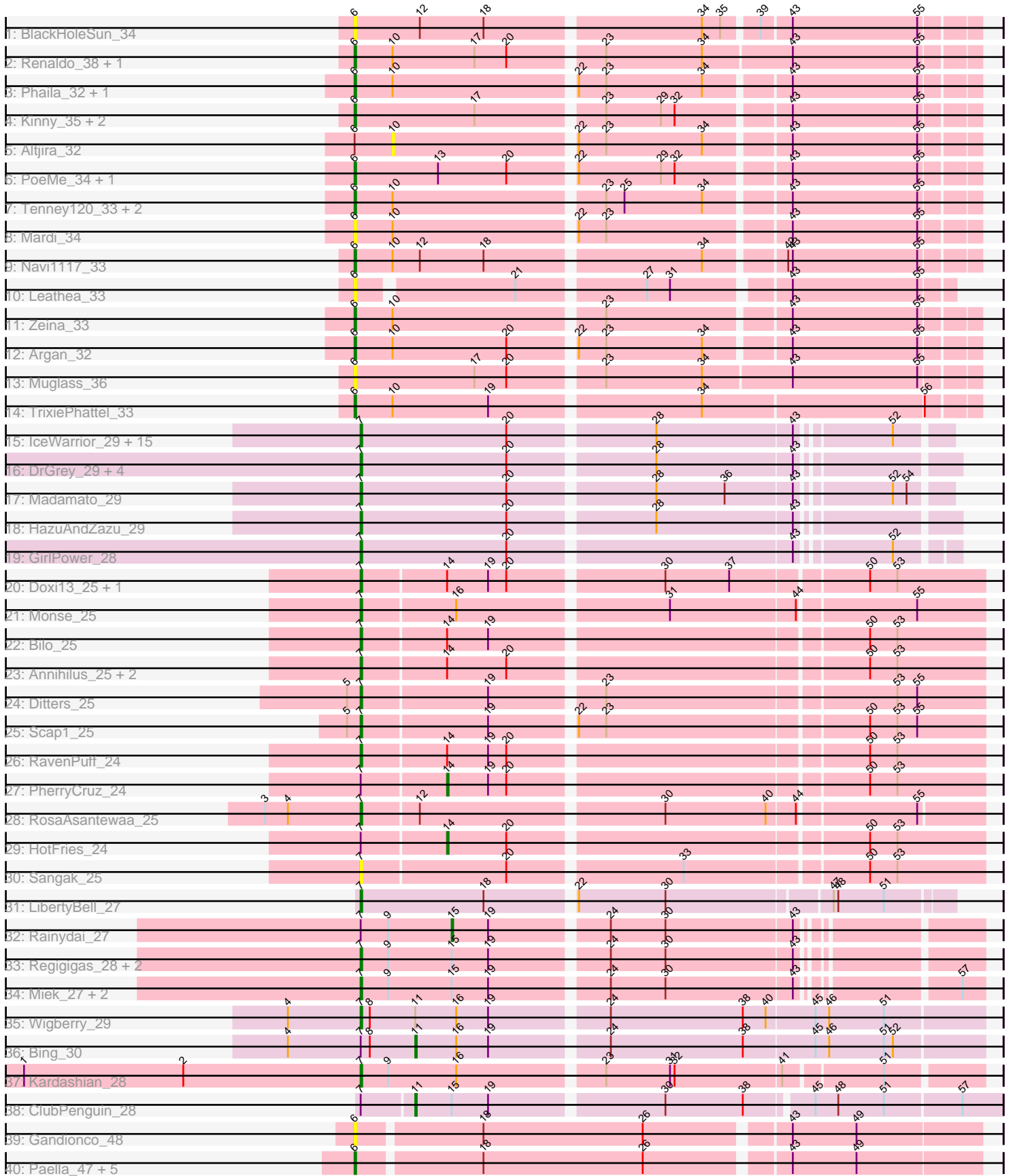


Pham 304960



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 304960 Report

This analysis was run 06/08/26 on database version 649.

Pham number 304960 has 78 members, 14 are drafts.

Phages represented in each track:

- Track 1 : BlackHoleSun_34
- Track 2 : Renaldo_38, Biscute_34
- Track 3 : Phaila_32, GantcherGoblin_32
- Track 4 : Kinny_35, Barbonzobean_38, Lewando_36
- Track 5 : Altjira_32
- Track 6 : PoeMe_34, Stardrop_33
- Track 7 : Tenney120_33, KevinMinion_33, Uzumaki_33
- Track 8 : Mardi_34
- Track 9 : Navi1117_33
- Track 10 : Leathea_33
- Track 11 : Zeina_33
- Track 12 : Argan_32
- Track 13 : Muglass_36
- Track 14 : TrixiePhattel_33
- Track 15 : IceWarrior_29, OlympicHelado_29, Hoshi_29, Indigenous_29, FidgetOrca_29, CherryBlossom_29, TaidaOne_29, TieDye_28, Rima_29, Esketit_29, Namu_29, TonyStarch_29, Spectropatronm_29, Meibysrarus_29, Maya_29, Jaylociraptor_29
- Track 16 : DrGrey_29, Espio_29, FrodoSwaggins_29, Popy_29, Soshi_29
- Track 17 : Madamato_29
- Track 18 : HazuAndZazu_29
- Track 19 : GirlPower_28
- Track 20 : Doxi13_25, GoblinVoyage_25
- Track 21 : Monse_25
- Track 22 : Bilo_25
- Track 23 : Annihilus_25, Moozy_25, SheRa_25
- Track 24 : Ditters_25
- Track 25 : Scap1_25
- Track 26 : RavenPuff_24
- Track 27 : PherryCruz_24
- Track 28 : RosaAsantewaa_25
- Track 29 : HotFries_24
- Track 30 : Sangak_25
- Track 31 : LibertyBell_27
- Track 32 : Rainydai_27
- Track 33 : Regigigas_28, CricKo_27, Thiqqums_27
- Track 34 : Miek_27, FromIndy_28, SendItCS_26

- Track 35 : Wigberry_29
- Track 36 : Bing_30
- Track 37 : Kardashian_28
- Track 38 : ClubPenguin_28
- Track 39 : Gandionco_48
- Track 40 : Paella_47, Marianna39_48, JeNeSaisPas_46, Elver_47, Kureo_48, Qui_47

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 42 of the 64 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Annihilus_25, Bilo_25, CherryBlossom_29, CricKo_27, Ditters_25, Doxi13_25, DrGrey_29, Esketit_29, Espio_29, FidgetOrca_29, FrodoSwaggins_29, FromIndy_28, GirlPower_28, GoblinVoyage_25, HazuAndZazu_29, Hoshi_29, IceWarrior_29, Indigenous_29, Jaylociraptor_29, Kardashian_28, LibertyBell_27, Madamato_29, Maya_29, Meibysrarus_29, Miek_27, Monse_25, Moozy_25, Namu_29, OlympicHelado_29, Popy_29, RavenPuff_24, Regigigas_28, Rima_29, RosaAsantewaa_25, Sangak_25, Scap1_25, SendItCS_26, SheRa_25, Soshi_29, Spectropatronm_29, TaidaOne_29, Thiqqums_27, TieDye_28, TonyStarch_29, Wigberry_29,

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

- Bing_30, ClubPenguin_28, HotFries_24, PherryCruz_24, Rainydai_27,

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

- Altjira_32, Argan_32, Barbonzobean_38, Biscute_34, BlackHoleSun_34, Elver_47, Gandionco_48, GantcherGoblin_32, JeNeSaisPas_46, KevinMinion_33, Kinny_35, Kureo_48, Leathea_33, Lewando_36, Mardi_34, Marianna39_48, Muglass_36, Navi1117_33, Paella_47, Phaila_32, PoeMe_34, Qui_47, Renaldo_38, Stardrop_33, Tenney120_33, TrixiePhattel_33, Uzumaki_33, Zeina_33,

Summary by start number:

Start 6:

- Found in 28 of 78 (35.9%) of genes in pham
- Manual Annotations of this start: 17 of 64
- Called 96.4% of time when present
- Phage (with cluster) where this start called: Argan_32 (AU6), Barbonzobean_38 (AU6), Biscute_34 (AU6), BlackHoleSun_34 (AU6), Elver_47 (FK), Gandionco_48 (FK), GantcherGoblin_32 (AU6), JeNeSaisPas_46 (FK), KevinMinion_33 (AU6), Kinny_35 (AU6), Kureo_48 (FK), Leathea_33 (AU6), Lewando_36 (AU6), Mardi_34 (AU6), Marianna39_48 (FK), Muglass_36 (AU6), Navi1117_33 (AU6), Paella_47 (FK), Phaila_32 (AU6), PoeMe_34 (AU6), Qui_47 (FK), Renaldo_38 (AU6), Stardrop_33 (AU6), Tenney120_33 (AU6), TrixiePhattel_33 (AU6), Uzumaki_33 (AU6), Zeina_33 (AU6),

Start 7:

- Found in 50 of 78 (64.1%) of genes in pham
- Manual Annotations of this start: 42 of 64
- Called 90.0% of time when present
- Phage (with cluster) where this start called: Annihilus_25 (BI2), Bilo_25 (BI2), CherryBlossom_29 (BI1), CricKo_27 (BI4), Ditters_25 (BI2), Doxi13_25 (BI2), DrGrey_29 (BI1), Esketit_29 (BI1), Espio_29 (BI1), FidgetOrca_29 (BI1), FrodoSwaggins_29 (BI1), FromIndy_28 (BI4), GirlPower_28 (BI1), GoblinVoyage_25 (BI2), HazuAndZazu_29 (BI1), Hoshi_29 (BI1), IceWarrior_29 (BI1), Indigenous_29 (BI1), Jaylociraptor_29 (BI1), Kardashian_28 (BI6), LibertyBell_27 (BI3), Madamato_29 (BI1), Maya_29 (BI1), Meibysrurus_29 (BI1), Miek_27 (BI4), Monse_25 (BI2), Moozy_25 (BI2), Namu_29 (BI1), OlympicHelado_29 (BI1), Popy_29 (BI1), RavenPuff_24 (BI2), Regigigas_28 (BI4), Rima_29 (BI1), RosaAsantewaa_25 (BI2), Sangak_25 (BI2), Scap1_25 (BI2), SendItCS_26 (BI4), SheRa_25 (BI2), Soshi_29 (BI1), Spectropatronm_29 (BI1), TaidaOne_29 (BI1), Thiqqums_27 (BI4), TieDye_28 (BI1), TonyStarch_29 (BI1), Wigberry_29 (BI5),

Start 10:

- Found in 13 of 78 (16.7%) of genes in pham
- No Manual Annotations of this start.
- Called 7.7% of time when present
- Phage (with cluster) where this start called: Altjira_32 (AU6),

Start 11:

- Found in 3 of 78 (3.8%) of genes in pham
- Manual Annotations of this start: 2 of 64
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Bing_30 (BI5), ClubPenguin_28 (BI7),

Start 14:

- Found in 9 of 78 (11.5%) of genes in pham
- Manual Annotations of this start: 2 of 64
- Called 22.2% of time when present
- Phage (with cluster) where this start called: HotFries_24 (BI2), PherryCruz_24 (BI2),

Start 15:

- Found in 8 of 78 (10.3%) of genes in pham
- Manual Annotations of this start: 1 of 64
- Called 12.5% of time when present
- Phage (with cluster) where this start called: Rainydai_27 (BI4),

Summary by clusters:

There are 9 clusters represented in this pham: BI5, AU6, BI6, BI7, BI4, FK, BI2, BI3, BI1,

Info for manual annotations of cluster AU6:

- Start number 6 was manually annotated 14 times for cluster AU6.

Info for manual annotations of cluster BI1:

- Start number 7 was manually annotated 24 times for cluster BI1.

Info for manual annotations of cluster BI2:

- Start number 7 was manually annotated 11 times for cluster BI2.

- Start number 14 was manually annotated 2 times for cluster BI2.

Info for manual annotations of cluster BI3:

- Start number 7 was manually annotated 1 time for cluster BI3.

Info for manual annotations of cluster BI4:

- Start number 7 was manually annotated 4 times for cluster BI4.
- Start number 15 was manually annotated 1 time for cluster BI4.

Info for manual annotations of cluster BI5:

- Start number 7 was manually annotated 1 time for cluster BI5.
- Start number 11 was manually annotated 1 time for cluster BI5.

Info for manual annotations of cluster BI6:

- Start number 7 was manually annotated 1 time for cluster BI6.

Info for manual annotations of cluster BI7:

- Start number 11 was manually annotated 1 time for cluster BI7.

Info for manual annotations of cluster FK:

- Start number 6 was manually annotated 3 times for cluster FK.

Gene Information:

Gene: Altjira_32 Start: 27735, Stop: 28097, Start Num: 10

Candidate Starts for Altjira_32:

(Start: 6 @27711 has 17 MA's), (10, 27735), (22, 27849), (23, 27867), (34, 27930), (43, 27981), (55, 28062),

Gene: Annihilus_25 Start: 22331, Stop: 22720, Start Num: 7

Candidate Starts for Annihilus_25:

(Start: 7 @22331 has 42 MA's), (Start: 14 @22385 has 2 MA's), (20, 22424), (50, 22646), (53, 22664),

Gene: Argan_32 Start: 26978, Stop: 27364, Start Num: 6

Candidate Starts for Argan_32:

(Start: 6 @26978 has 17 MA's), (10, 27002), (20, 27077), (22, 27116), (23, 27134), (34, 27197), (43, 27248), (55, 27329),

Gene: Barbonzobean_38 Start: 28548, Stop: 28934, Start Num: 6

Candidate Starts for Barbonzobean_38:

(Start: 6 @28548 has 17 MA's), (17, 28626), (23, 28704), (29, 28740), (32, 28749), (43, 28818), (55, 28899),

Gene: Bilo_25 Start: 22822, Stop: 23211, Start Num: 7

Candidate Starts for Bilo_25:

(Start: 7 @22822 has 42 MA's), (Start: 14 @22876 has 2 MA's), (19, 22903), (50, 23137), (53, 23155),

Gene: Bing_30 Start: 25162, Stop: 25521, Start Num: 11

Candidate Starts for Bing_30:

(4, 25078), (Start: 7 @25126 has 42 MA's), (8, 25132), (Start: 11 @25162 has 2 MA's), (16, 25189), (19, 25210), (24, 25282), (38, 25369), (45, 25414), (46, 25423), (51, 25459), (52, 25465),

Gene: Biscute_34 Start: 28599, Stop: 28991, Start Num: 6

Candidate Starts for Biscute_34:

(Start: 6 @28599 has 17 MA's), (10, 28623), (17, 28677), (20, 28698), (23, 28755), (34, 28818), (43, 28875), (55, 28956),

Gene: BlackHoleSun_34 Start: 26685, Stop: 27071, Start Num: 6

Candidate Starts for BlackHoleSun_34:

(Start: 6 @26685 has 17 MA's), (12, 26727), (18, 26769), (34, 26904), (35, 26916), (39, 26937), (43, 26955), (55, 27036),

Gene: CherryBlossom_29 Start: 25276, Stop: 25635, Start Num: 7

Candidate Starts for CherryBlossom_29:

(Start: 7 @25276 has 42 MA's), (20, 25372), (28, 25462), (43, 25549), (52, 25603),

Gene: ClubPenguin_28 Start: 24936, Stop: 25301, Start Num: 11

Candidate Starts for ClubPenguin_28:

(Start: 7 @24903 has 42 MA's), (Start: 11 @24936 has 2 MA's), (Start: 15 @24960 has 1 MA's), (19, 24984), (30, 25092), (38, 25143), (45, 25182), (48, 25197), (51, 25227), (57, 25275),

Gene: CricKo_27 Start: 24163, Stop: 24540, Start Num: 7

Candidate Starts for CricKo_27:

(Start: 7 @24163 has 42 MA's), (9, 24181), (Start: 15 @24223 has 1 MA's), (19, 24247), (24, 24319), (30, 24355), (43, 24436),

Gene: Ditters_25 Start: 22781, Stop: 23170, Start Num: 7

Candidate Starts for Ditters_25:

(5, 22772), (Start: 7 @22781 has 42 MA's), (19, 22862), (23, 22931), (53, 23114), (55, 23126),

Gene: Doxi13_25 Start: 22302, Stop: 22691, Start Num: 7

Candidate Starts for Doxi13_25:

(Start: 7 @22302 has 42 MA's), (Start: 14 @22356 has 2 MA's), (19, 22383), (20, 22395), (30, 22491), (37, 22533), (50, 22617), (53, 22635),

Gene: DrGrey_29 Start: 25776, Stop: 26141, Start Num: 7

Candidate Starts for DrGrey_29:

(Start: 7 @25776 has 42 MA's), (20, 25872), (28, 25962), (43, 26049),

Gene: Elver_47 Start: 37243, Stop: 37635, Start Num: 6

Candidate Starts for Elver_47:

(Start: 6 @37243 has 17 MA's), (18, 37321), (26, 37426), (43, 37513), (49, 37555),

Gene: Esketit_29 Start: 25259, Stop: 25618, Start Num: 7

Candidate Starts for Esketit_29:

(Start: 7 @25259 has 42 MA's), (20, 25355), (28, 25445), (43, 25532), (52, 25586),

Gene: Espio_29 Start: 25777, Stop: 26142, Start Num: 7

Candidate Starts for Espio_29:

(Start: 7 @25777 has 42 MA's), (20, 25873), (28, 25963), (43, 26050),

Gene: FidgetOrca_29 Start: 25265, Stop: 25624, Start Num: 7

Candidate Starts for FidgetOrca_29:

(Start: 7 @25265 has 42 MA's), (20, 25361), (28, 25451), (43, 25538), (52, 25592),

Gene: FrodoSwaggins_29 Start: 25776, Stop: 26141, Start Num: 7
Candidate Starts for FrodoSwaggins_29:
(Start: 7 @25776 has 42 MA's), (20, 25872), (28, 25962), (43, 26049),

Gene: FromIndy_28 Start: 24151, Stop: 24528, Start Num: 7
Candidate Starts for FromIndy_28:
(Start: 7 @24151 has 42 MA's), (9, 24169), (Start: 15 @24211 has 1 MA's), (19, 24235), (24, 24307),
(30, 24343), (43, 24424), (57, 24514),

Gene: Gandionco_48 Start: 37766, Stop: 38158, Start Num: 6
Candidate Starts for Gandionco_48:
(Start: 6 @37766 has 17 MA's), (18, 37844), (26, 37949), (43, 38036), (49, 38078),

Gene: GantcherGoblin_32 Start: 27017, Stop: 27403, Start Num: 6
Candidate Starts for GantcherGoblin_32:
(Start: 6 @27017 has 17 MA's), (10, 27041), (22, 27155), (23, 27173), (34, 27236), (43, 27287), (55,
27368),

Gene: GirlPower_28 Start: 26747, Stop: 27109, Start Num: 7
Candidate Starts for GirlPower_28:
(Start: 7 @26747 has 42 MA's), (20, 26843), (43, 27020), (52, 27074),

Gene: GoblinVoyage_25 Start: 22302, Stop: 22691, Start Num: 7
Candidate Starts for GoblinVoyage_25:
(Start: 7 @22302 has 42 MA's), (Start: 14 @22356 has 2 MA's), (19, 22383), (20, 22395), (30, 22491),
(37, 22533), (50, 22617), (53, 22635),

Gene: HazuAndZazu_29 Start: 25777, Stop: 26142, Start Num: 7
Candidate Starts for HazuAndZazu_29:
(Start: 7 @25777 has 42 MA's), (20, 25873), (28, 25963), (43, 26050),

Gene: Hoshi_29 Start: 25259, Stop: 25618, Start Num: 7
Candidate Starts for Hoshi_29:
(Start: 7 @25259 has 42 MA's), (20, 25355), (28, 25445), (43, 25532), (52, 25586),

Gene: HotFries_24 Start: 22355, Stop: 22690, Start Num: 14
Candidate Starts for HotFries_24:
(Start: 7 @22301 has 42 MA's), (Start: 14 @22355 has 2 MA's), (20, 22394), (50, 22616), (53, 22634),

Gene: IceWarrior_29 Start: 25259, Stop: 25618, Start Num: 7
Candidate Starts for IceWarrior_29:
(Start: 7 @25259 has 42 MA's), (20, 25355), (28, 25445), (43, 25532), (52, 25586),

Gene: Indigenous_29 Start: 25259, Stop: 25618, Start Num: 7
Candidate Starts for Indigenous_29:
(Start: 7 @25259 has 42 MA's), (20, 25355), (28, 25445), (43, 25532), (52, 25586),

Gene: Jaylociraptor_29 Start: 25259, Stop: 25618, Start Num: 7
Candidate Starts for Jaylociraptor_29:
(Start: 7 @25259 has 42 MA's), (20, 25355), (28, 25445), (43, 25532), (52, 25586),

Gene: JeNeSaisPas_46 Start: 37778, Stop: 38170, Start Num: 6

Candidate Starts for JeNeSaisPas_46:

(Start: 6 @37778 has 17 MA's), (18, 37856), (26, 37961), (43, 38048), (49, 38090),

Gene: Kardashian_28 Start: 25209, Stop: 25595, Start Num: 7

Candidate Starts for Kardashian_28:

(1, 24987), (2, 25092), (Start: 7 @25209 has 42 MA's), (9, 25227), (16, 25272), (23, 25362), (31, 25404), (32, 25407), (41, 25476), (51, 25536),

Gene: KevinMinion_33 Start: 28111, Stop: 28497, Start Num: 6

Candidate Starts for KevinMinion_33:

(Start: 6 @28111 has 17 MA's), (10, 28135), (23, 28267), (25, 28279), (34, 28330), (43, 28381), (55, 28462),

Gene: Kinny_35 Start: 28866, Stop: 29252, Start Num: 6

Candidate Starts for Kinny_35:

(Start: 6 @28866 has 17 MA's), (17, 28944), (23, 29022), (29, 29058), (32, 29067), (43, 29136), (55, 29217),

Gene: Kureo_48 Start: 36588, Stop: 36980, Start Num: 6

Candidate Starts for Kureo_48:

(Start: 6 @36588 has 17 MA's), (18, 36666), (26, 36771), (43, 36858), (49, 36900),

Gene: Leathea_33 Start: 26912, Stop: 27271, Start Num: 6

Candidate Starts for Leathea_33:

(Start: 6 @26912 has 17 MA's), (21, 27008), (27, 27086), (31, 27101), (43, 27170), (55, 27251),

Gene: Lewando_36 Start: 28935, Stop: 29321, Start Num: 6

Candidate Starts for Lewando_36:

(Start: 6 @28935 has 17 MA's), (17, 29013), (23, 29091), (29, 29127), (32, 29136), (43, 29205), (55, 29286),

Gene: LibertyBell_27 Start: 24107, Stop: 24475, Start Num: 7

Candidate Starts for LibertyBell_27:

(Start: 7 @24107 has 42 MA's), (18, 24188), (22, 24242), (30, 24299), (47, 24401), (48, 24404), (51, 24434),

Gene: Madamoto_29 Start: 25237, Stop: 25596, Start Num: 7

Candidate Starts for Madamoto_29:

(Start: 7 @25237 has 42 MA's), (20, 25333), (28, 25423), (36, 25468), (43, 25510), (52, 25564), (54, 25573),

Gene: Mardi_34 Start: 27545, Stop: 27931, Start Num: 6

Candidate Starts for Mardi_34:

(Start: 6 @27545 has 17 MA's), (10, 27569), (22, 27683), (23, 27701), (43, 27815), (55, 27896),

Gene: Marianna39_48 Start: 37765, Stop: 38157, Start Num: 6

Candidate Starts for Marianna39_48:

(Start: 6 @37765 has 17 MA's), (18, 37843), (26, 37948), (43, 38035), (49, 38077),

Gene: Maya_29 Start: 25273, Stop: 25632, Start Num: 7

Candidate Starts for Maya_29:

(Start: 7 @25273 has 42 MA's), (20, 25369), (28, 25459), (43, 25546), (52, 25600),

Gene: Meibysrarus_29 Start: 25259, Stop: 25618, Start Num: 7
Candidate Starts for Meibysrarus_29:
(Start: 7 @25259 has 42 MA's), (20, 25355), (28, 25445), (43, 25532), (52, 25586),

Gene: Miek_27 Start: 24163, Stop: 24540, Start Num: 7
Candidate Starts for Miek_27:
(Start: 7 @24163 has 42 MA's), (9, 24181), (Start: 15 @24223 has 1 MA's), (19, 24247), (24, 24319),
(30, 24355), (43, 24436), (57, 24526),

Gene: Monse_25 Start: 22333, Stop: 22722, Start Num: 7
Candidate Starts for Monse_25:
(Start: 7 @22333 has 42 MA's), (16, 22393), (31, 22525), (44, 22606), (55, 22678),

Gene: Moozy_25 Start: 22318, Stop: 22707, Start Num: 7
Candidate Starts for Moozy_25:
(Start: 7 @22318 has 42 MA's), (Start: 14 @22372 has 2 MA's), (20, 22411), (50, 22633), (53, 22651),

Gene: Muglass_36 Start: 28503, Stop: 28895, Start Num: 6
Candidate Starts for Muglass_36:
(Start: 6 @28503 has 17 MA's), (17, 28581), (20, 28602), (23, 28659), (34, 28722), (43, 28779), (55,
28860),

Gene: Namo_29 Start: 25265, Stop: 25624, Start Num: 7
Candidate Starts for Namo_29:
(Start: 7 @25265 has 42 MA's), (20, 25361), (28, 25451), (43, 25538), (52, 25592),

Gene: Navi1117_33 Start: 27244, Stop: 27630, Start Num: 6
Candidate Starts for Navi1117_33:
(Start: 6 @27244 has 17 MA's), (10, 27268), (12, 27286), (18, 27328), (34, 27463), (42, 27511), (43,
27514), (55, 27595),

Gene: OlympicHelado_29 Start: 25265, Stop: 25624, Start Num: 7
Candidate Starts for OlympicHelado_29:
(Start: 7 @25265 has 42 MA's), (20, 25361), (28, 25451), (43, 25538), (52, 25592),

Gene: Paella_47 Start: 37245, Stop: 37637, Start Num: 6
Candidate Starts for Paella_47:
(Start: 6 @37245 has 17 MA's), (18, 37323), (26, 37428), (43, 37515), (49, 37557),

Gene: Phaila_32 Start: 26595, Stop: 26981, Start Num: 6
Candidate Starts for Phaila_32:
(Start: 6 @26595 has 17 MA's), (10, 26619), (22, 26733), (23, 26751), (34, 26814), (43, 26865), (55,
26946),

Gene: PherryCruz_24 Start: 22357, Stop: 22692, Start Num: 14
Candidate Starts for PherryCruz_24:
(Start: 7 @22303 has 42 MA's), (Start: 14 @22357 has 2 MA's), (19, 22384), (20, 22396), (50, 22618),
(53, 22636),

Gene: PoeMe_34 Start: 27873, Stop: 28259, Start Num: 6
Candidate Starts for PoeMe_34:
(Start: 6 @27873 has 17 MA's), (13, 27927), (20, 27972), (22, 28011), (29, 28065), (32, 28074), (43,
28143), (55, 28224),

Gene: Popy_29 Start: 25776, Stop: 26141, Start Num: 7
Candidate Starts for Popy_29:
(Start: 7 @25776 has 42 MA's), (20, 25872), (28, 25962), (43, 26049),

Gene: Qui_47 Start: 37245, Stop: 37637, Start Num: 6
Candidate Starts for Qui_47:
(Start: 6 @37245 has 17 MA's), (18, 37323), (26, 37428), (43, 37515), (49, 37557),

Gene: Rainydai_27 Start: 24223, Stop: 24540, Start Num: 15
Candidate Starts for Rainydai_27:
(Start: 7 @24163 has 42 MA's), (9, 24181), (Start: 15 @24223 has 1 MA's), (19, 24247), (24, 24319),
(30, 24355), (43, 24436),

Gene: RavenPuff_24 Start: 22303, Stop: 22692, Start Num: 7
Candidate Starts for RavenPuff_24:
(Start: 7 @22303 has 42 MA's), (Start: 14 @22357 has 2 MA's), (19, 22384), (20, 22396), (50, 22618),
(53, 22636),

Gene: Regigigas_28 Start: 24163, Stop: 24540, Start Num: 7
Candidate Starts for Regigigas_28:
(Start: 7 @24163 has 42 MA's), (9, 24181), (Start: 15 @24223 has 1 MA's), (19, 24247), (24, 24319),
(30, 24355), (43, 24436),

Gene: Renaldo_38 Start: 28944, Stop: 29336, Start Num: 6
Candidate Starts for Renaldo_38:
(Start: 6 @28944 has 17 MA's), (10, 28968), (17, 29022), (20, 29043), (23, 29100), (34, 29163), (43,
29220), (55, 29301),

Gene: Rima_29 Start: 25265, Stop: 25624, Start Num: 7
Candidate Starts for Rima_29:
(Start: 7 @25265 has 42 MA's), (20, 25361), (28, 25451), (43, 25538), (52, 25592),

Gene: RosaAsantewaa_25 Start: 22174, Stop: 22560, Start Num: 7
Candidate Starts for RosaAsantewaa_25:
(3, 22111), (4, 22126), (Start: 7 @22174 has 42 MA's), (12, 22210), (30, 22363), (40, 22429), (44,
22447), (55, 22519),

Gene: Sangak_25 Start: 22303, Stop: 22692, Start Num: 7
Candidate Starts for Sangak_25:
(Start: 7 @22303 has 42 MA's), (20, 22396), (33, 22504), (50, 22618), (53, 22636),

Gene: Scap1_25 Start: 22251, Stop: 22640, Start Num: 7
Candidate Starts for Scap1_25:
(5, 22242), (Start: 7 @22251 has 42 MA's), (19, 22332), (22, 22383), (23, 22401), (50, 22566), (53,
22584), (55, 22596),

Gene: SendItCS_26 Start: 24163, Stop: 24540, Start Num: 7
Candidate Starts for SendItCS_26:
(Start: 7 @24163 has 42 MA's), (9, 24181), (Start: 15 @24223 has 1 MA's), (19, 24247), (24, 24319),
(30, 24355), (43, 24436), (57, 24526),

Gene: SheRa_25 Start: 22302, Stop: 22691, Start Num: 7

Candidate Starts for SheRa_25:

(Start: 7 @22302 has 42 MA's), (Start: 14 @22356 has 2 MA's), (20, 22395), (50, 22617), (53, 22635),

Gene: Soshi_29 Start: 25782, Stop: 26147, Start Num: 7

Candidate Starts for Soshi_29:

(Start: 7 @25782 has 42 MA's), (20, 25878), (28, 25968), (43, 26055),

Gene: Spectropatronm_29 Start: 25259, Stop: 25618, Start Num: 7

Candidate Starts for Spectropatronm_29:

(Start: 7 @25259 has 42 MA's), (20, 25355), (28, 25445), (43, 25532), (52, 25586),

Gene: Stardrop_33 Start: 27569, Stop: 27955, Start Num: 6

Candidate Starts for Stardrop_33:

(Start: 6 @27569 has 17 MA's), (13, 27623), (20, 27668), (22, 27707), (29, 27761), (32, 27770), (43, 27839), (55, 27920),

Gene: TaidaOne_29 Start: 25907, Stop: 26266, Start Num: 7

Candidate Starts for TaidaOne_29:

(Start: 7 @25907 has 42 MA's), (20, 26003), (28, 26093), (43, 26180), (52, 26234),

Gene: Tenney120_33 Start: 27306, Stop: 27692, Start Num: 6

Candidate Starts for Tenney120_33:

(Start: 6 @27306 has 17 MA's), (10, 27330), (23, 27462), (25, 27474), (34, 27525), (43, 27576), (55, 27657),

Gene: Thiqqums_27 Start: 24163, Stop: 24540, Start Num: 7

Candidate Starts for Thiqqums_27:

(Start: 7 @24163 has 42 MA's), (9, 24181), (Start: 15 @24223 has 1 MA's), (19, 24247), (24, 24319), (30, 24355), (43, 24436),

Gene: TieDye_28 Start: 24951, Stop: 25310, Start Num: 7

Candidate Starts for TieDye_28:

(Start: 7 @24951 has 42 MA's), (20, 25047), (28, 25137), (43, 25224), (52, 25278),

Gene: TonyStarch_29 Start: 25265, Stop: 25624, Start Num: 7

Candidate Starts for TonyStarch_29:

(Start: 7 @25265 has 42 MA's), (20, 25361), (28, 25451), (43, 25538), (52, 25592),

Gene: TrixiePhattel_33 Start: 27141, Stop: 27533, Start Num: 6

Candidate Starts for TrixiePhattel_33:

(Start: 6 @27141 has 17 MA's), (10, 27165), (19, 27228), (34, 27360), (56, 27501),

Gene: Uzumaki_33 Start: 27836, Stop: 28222, Start Num: 6

Candidate Starts for Uzumaki_33:

(Start: 6 @27836 has 17 MA's), (10, 27860), (23, 27992), (25, 28004), (34, 28055), (43, 28106), (55, 28187),

Gene: Wigberry_29 Start: 24678, Stop: 25073, Start Num: 7

Candidate Starts for Wigberry_29:

(4, 24630), (Start: 7 @24678 has 42 MA's), (8, 24684), (Start: 11 @24714 has 2 MA's), (16, 24741), (19, 24762), (24, 24834), (38, 24921), (40, 24936), (45, 24966), (46, 24975), (51, 25011),

Gene: Zeina_33 Start: 27217, Stop: 27603, Start Num: 6

Candidate Starts for Zeina_33:

(Start: 6 @27217 has 17 MA's), (10, 27241), (23, 27373), (43, 27487), (55, 27568),