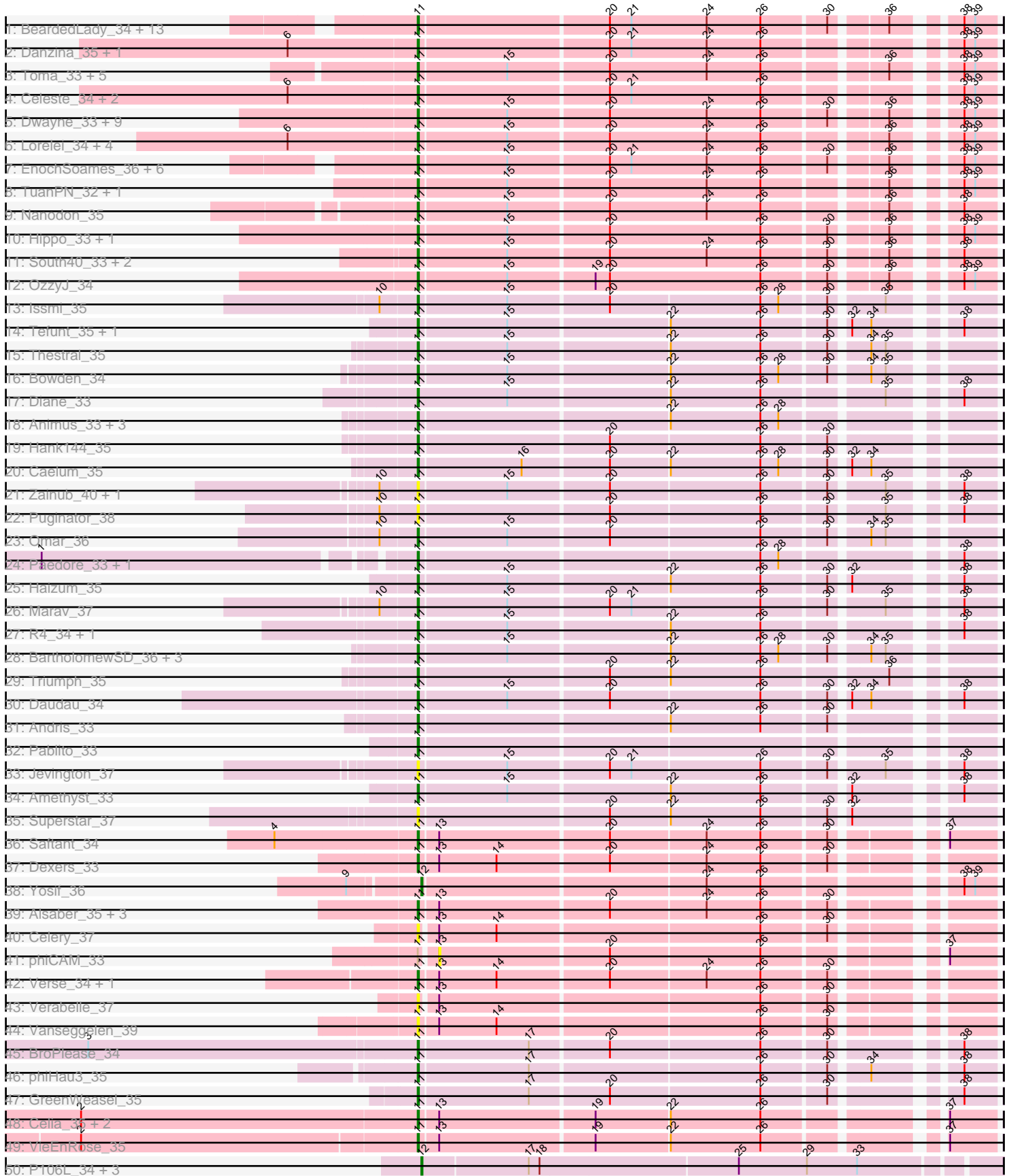
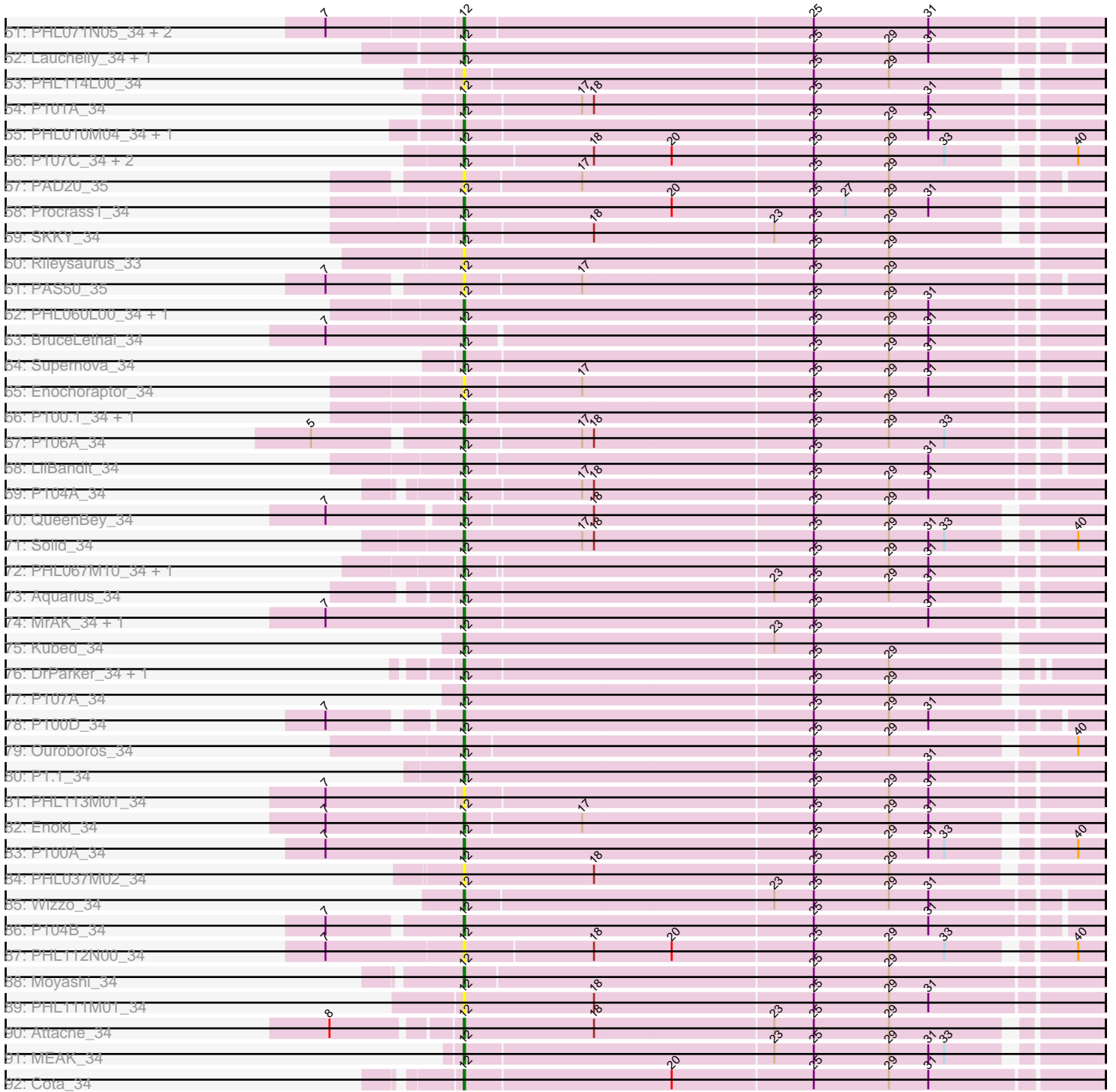


Pham 159016



Pham 159016



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 159016 Report

This analysis was run 04/28/24 on database version 559.

WARNING: Pham size does not match number of genes in report. Either unphamerated genes have been added (by you) or starterator has removed genes due to invalid start codon.

Pham number 159016 has 166 members, 29 are drafts.

Phages represented in each track:

- Track 1 : BeardedLady_34, Nerdos_33, Caliburn_33, Legacy_33, Esperer_33, SunsetPointe_33, Leviticus_33, Aaronocolus_33, Phettuccine_33, Hydra_35, Bovely_33, Ozzie_33, Indigo_32, Unstoppable_33
- Track 2 : Danzina_35, Zemlya_35
- Track 3 : Toma_33, Goby_33, Sujidade_34, Godpower_34, Lannister_35, Lika_33
- Track 4 : Celeste_34, Brataylor_36, Dattran_35
- Track 5 : Dwayne_33, Snorlax_33, Chucky_33, Emaanora_36, BarryBee_36, SarahRose_33, Triste_33, Whatever_33, TagePghter_35, Asten_33
- Track 6 : Lorelei_34, Rana_34, Maneekul_33, Yasdnil_33, Nabi_34
- Track 7 : EnochSoames_36, Izzy_34, Jash_34, BryanRecycles_34, Rusticus_34, Eddasa_34, Oliynyk_34
- Track 8 : TuanPN_32, Ejemplo_32
- Track 9 : Nanodon_35
- Track 10 : Hippo_33, Werner_33
- Track 11 : South40_33, Katalie_33, RedBear_34
- Track 12 : OzzyJ_34
- Track 13 : Issmi_35
- Track 14 : Tefunt_35, Nishikigoi_35
- Track 15 : Thestral_35
- Track 16 : Bowden_34
- Track 17 : Diane_33
- Track 18 : Animus_33, SqueakyClean_33, Janus_34, GirlDinner_35
- Track 19 : Hank144_35
- Track 20 : Caelum_35
- Track 21 : Zainub_40, Paolo_38
- Track 22 : Puginator_38
- Track 23 : Omar_36
- Track 24 : Paedore_33, Loofah_34
- Track 25 : Haizum_35
- Track 26 : Marav_37
- Track 27 : R4_34, ELB20_32
- Track 28 : BartholomewSD_36, TinaBelcher_34, TrvxScott_33, Alvy_36
- Track 29 : Triumph_35

- Track 30 : Daudau_34
- Track 31 : Andris_33
- Track 32 : Pablito_33
- Track 33 : Jevington_37
- Track 34 : Amethyst_33
- Track 35 : Superstar_37
- Track 36 : Saftant_34
- Track 37 : Dexers_33
- Track 38 : Yosif_36
- Track 39 : Alsaber_35, Conan_37, ElGato_36, Provolone_35
- Track 40 : Celery_37
- Track 41 : phiCAM_33
- Track 42 : Verse_34, Amela_34
- Track 43 : Verabelle_37
- Track 44 : Vanseggelen_39
- Track 45 : BroPlease_34
- Track 46 : phiHau3_35
- Track 47 : GreenWeasel_35
- Track 48 : Celia_35, Urza_35, Itza_35
- Track 49 : VieEnRose_35
- Track 50 : P106L_34, P106M_34, P106I_34, P106C_35
- Track 51 : PHL071N05_34, Keiki_34, Pirate_34
- Track 52 : Lauchelly_34, P9.1_34
- Track 53 : PHL114L00_34
- Track 54 : P101A_34
- Track 55 : PHL010M04_34, Leviosa_34
- Track 56 : P107C_34, ATCC29399BC_34, ATCC29399BT_34
- Track 57 : PAD20_35
- Track 58 : Procrass1_34
- Track 59 : SKKY_34
- Track 60 : Rileysaurus_33
- Track 61 : PAS50_35
- Track 62 : PHL060L00_34, P14.4_34
- Track 63 : BruceLethal_34
- Track 64 : Supernova_34
- Track 65 : Enochoraptor_34
- Track 66 : P100.1_34, PA6_35
- Track 67 : P106A_34
- Track 68 : LilBandit_34
- Track 69 : P104A_34
- Track 70 : QueenBey_34
- Track 71 : Solid_34
- Track 72 : PHL067M10_34, P105_34
- Track 73 : Aquarius_34
- Track 74 : MrAK_34, Stormborn_34
- Track 75 : Kubed_34
- Track 76 : DrParker_34, P108C_34
- Track 77 : P107A_34
- Track 78 : P100D_34
- Track 79 : Ouroboros_34
- Track 80 : P1.1_34
- Track 81 : PHL113M01_34
- Track 82 : Enoki_34

- Track 83 : P100A_34
- Track 84 : PHL037M02_34
- Track 85 : Wizzo_34
- Track 86 : P104B_34
- Track 87 : PHL112N00_34
- Track 88 : Moyashi_34
- Track 89 : PHL111M01_34
- Track 90 : Attacne_34
- Track 91 : MEAK_34
- Track 92 : Cota_34

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

The start number called the most often in the published annotations is 11, it was called in 93 of the 137 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Aaronocolus_33, Alsaber_35, Alvy_36, Amela_34, Amethyst_33, Andris_33, Animus_33, Asten_33, BarryBee_36, BartholomewSD_36, BeardedLady_34, Bovely_33, Bowden_34, Brataylor_36, BroPlease_34, BryanRecycles_34, Caelum_35, Caliburn_33, Celery_37, Celeste_34, Celia_35, Chucky_33, Conan_37, Danzina_35, Dattran_35, Daudau_34, Dexers_33, Diane_33, Dwayne_33, ELB20_32, Eddasa_34, Ejemplo_32, ElGato_36, Emaanora_36, EnochSoames_36, Esperer_33, GirlDinner_35, Goby_33, Godpower_34, GreenWeasel_35, Haizum_35, Hank144_35, Hippo_33, Hydra_35, Indigo_32, Issmi_35, Itza_35, Izzy_34, Janus_34, Jash_34, Jevington_37, Katalie_33, Lannister_35, Legacy_33, Leviticus_33, Lika_33, Loofah_34, Lorelei_34, Maneekul_33, Marav_37, Nabi_34, Nanodon_35, Nerdos_33, Nishikigoi_35, Oliynyk_34, Omar_36, Ozzie_33, OzzyJ_34, Pablito_33, Paedore_33, Paolo_38, Phettuccine_33, Provolone_35, Puginator_38, R4_34, Rana_34, RedBear_34, Rusticus_34, Saftant_34, SarahRose_33, Snorlax_33, South40_33, SqueakyClean_33, Sujidade_34, SunsetPointe_33, Superstar_37, TagePhighter_35, Tefunt_35, Thestral_35, TinaBelcher_34, Toma_33, Triste_33, Triumph_35, TrvxScott_33, TuanPN_32, Unstoppable_33, Urza_35, Vanseggelen_39, Verabelle_37, Verse_34, VieEnRose_35, Werner_33, Whatever_33, Yasdnil_33, Zainub_40, Zemlya_35, phiHau3_35,

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

- phiCAM_33,

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

- ATCC29399BC_34, ATCC29399BT_34, Aquarius_34, Attacne_34, BruceLethal_34, Cota_34, DrParker_34, Enochoraptor_34, Enoki_34, Keiki_34, Kubed_34, Lauchelly_34, Leviosa_34, LilBandit_34, MEAK_34, Moyashi_34, MrAK_34, Ouroboros_34, P1.1_34, P100.1_34, P100A_34, P100D_34, P101A_34, P104A_34, P104B_34, P105_34, P106A_34, P106C_35, P106I_34, P106L_34, P106M_34, P107A_34, P107C_34, P108C_34, P14.4_34, P9.1_34, PA6_35, PAD20_35, PAS50_35, PHL010M04_34, PHL037M02_34, PHL060L00_34, PHL067M10_34, PHL071N05_34, PHL111M01_34, PHL112N00_34, PHL113M01_34, PHL114L00_34, Pirate_34, Procrass1_34, QueenBey_34, Rileysaurus_33, SKKY_34, Solid_34, Stormborn_34, Supernova_34, Wizzo_34, Yosif_36,

Summary by start number:

Start 11:

- Found in 108 of 166 (65.1%) of genes in pham
- Manual Annotations of this start: 93 of 137
- Called 99.1% of time when present
- Phage (with cluster) where this start called: Aaronocolus_33 (BD1), Alsaber_35 (BD3), Alvy_36 (BD2), Amela_34 (BD3), Amethyst_33 (BD2), Andris_33 (BD2), Animus_33 (BD2), Asten_33 (BD1), BarryBee_36 (BD1), BartholomewSD_36 (BD2), BeardedLady_34 (BD1), Bovely_33 (BD1), Bowden_34 (BD2), Brataylor_36 (BD1), BroPlease_34 (BD4), BryanRecycles_34 (BD1), Caelum_35 (BD2), Caliburn_33 (BD1), Celery_37 (BD3), Celeste_34 (BD1), Celia_35 (BD6), Chucky_33 (BD1), Conan_37 (BD3), Danzina_35 (BD1), Dattran_35 (BD1), Daudau_34 (BD2), Dexters_33 (BD3), Diane_33 (BD2), Dwayne_33 (BD1), ELB20_32 (BD2), Eddasa_34 (BD1), Ejemplo_32 (BD1), ElGato_36 (BD3), Emaanora_36 (BD1), EnochSoames_36 (BD1), Esperer_33 (BD1), GirlDinner_35 (BD2), Goby_33 (BD1), Godpower_34 (BD1), GreenWeasel_35 (BD4), Haizum_35 (BD2), Hank144_35 (BD2), Hippo_33 (BD1), Hydra_35 (BD1), Indigo_32 (BD1), Issmi_35 (BD2), Itza_35 (BD6), Izzy_34 (BD1), Janus_34 (BD2), Jash_34 (BD1), Jevington_37 (BD2), Katalie_33 (BD1), Lannister_35 (BD1), Legacy_33 (BD1), Leviticus_33 (BD1), Lika_33 (BD1), Loofah_34 (BD2), Lorelei_34 (BD1), Maneekul_33 (BD1), Marav_37 (BD2), Nabi_34 (BD1), Nanodon_35 (BD1), Nerdos_33 (BD1), Nishikigoi_35 (BD2), Oliynyk_34 (BD1), Omar_36 (BD2), Ozzie_33 (BD1), OzzyJ_34 (BD1), Pablito_33 (BD2), Paedore_33 (BD2), Paolo_38 (BD2), Phettuccine_33 (BD1), Provolone_35 (BD3), Puginator_38 (BD2), R4_34 (BD2), Rana_34 (BD1), RedBear_34 (BD1), Rusticus_34 (BD1), Saftant_34 (BD3), SarahRose_33 (BD1), Snorlax_33 (BD1), South40_33 (BD1), SqueakyClean_33 (BD2), Sujidade_34 (BD1), SunsetPointe_33 (BD1), Superstar_37 (BD2), TAgePhighter_35 (BD1), Tefunt_35 (BD2), Thestral_35 (BD2), TinaBelcher_34 (BD2), Toma_33 (BD1), Triste_33 (BD1), Triumph_35 (BD2), TrvxScott_33 (BD2), TuanPN_32 (BD1), Unstoppable_33 (BD1), Urza_35 (BD6), Vanseggelen_39 (BD3), Verabelle_37 (BD3), Verse_34 (BD3), VieEnRose_35 (BD6), Werner_33 (BD1), Whatever_33 (BD1), Yasdnil_33 (BD1), Zainub_40 (BD2), Zemlya_35 (BD1), phiHau3_35 (BD4),

Start 12:

- Found in 58 of 166 (34.9%) of genes in pham
- Manual Annotations of this start: 44 of 137
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ATCC29399BC_34 (BU), ATCC29399BT_34 (BU), Aquarius_34 (BU), Attacne_34 (BU), BruceLethal_34 (BU), Cota_34 (BU), DrParker_34 (BU), Enochoraptor_34 (BU), Enoki_34 (BU), Keiki_34 (BU), Kubed_34 (BU), Lauchelly_34 (BU), Leviosa_34 (BU), LilBandit_34 (BU), MEAK_34 (BU), Moyashi_34 (BU), MrAK_34 (BU), Ouroboros_34 (BU), P1.1_34 (BU), P100.1_34 (BU), P100A_34 (BU), P100D_34 (BU), P101A_34 (BU), P104A_34 (BU), P104B_34 (BU), P105_34 (BU), P106A_34 (BU), P106C_35 (BU), P106I_34 (BU), P106L_34 (BU), P106M_34 (BU), P107A_34 (BU), P107C_34 (BU), P108C_34 (BU), P14.4_34 (BU), P9.1_34 (BU), PA6_35 (BU), PAD20_35 (BU), PAS50_35 (BU), PHL010M04_34 (BU), PHL037M02_34 (BU), PHL060L00_34 (BU), PHL067M10_34 (BU), PHL071N05_34 (BU), PHL111M01_34 (BU), PHL112N00_34 (BU), PHL113M01_34 (BU), PHL114L00_34 (BU), Pirate_34 (BU), Procrass1_34 (BU), QueenBey_34 (BU), Rileysaurus_33 (BU), SKKY_34 (BU), Solid_34 (BU), Stormborn_34 (BU), Supernova_34 (BU), Wizzo_34 (BU), Yosif_36 (BD3),

Start 13:

- Found in 16 of 166 (9.6%) of genes in pham
- No Manual Annotations of this start.
- Called 6.2% of time when present
- Phage (with cluster) where this start called: phiCAM_33 (BD3),

Summary by clusters:

There are 6 clusters represented in this pham: BD4, BU, BD6, BD1, BD3, BD2,

Info for manual annotations of cluster BD1:

- Start number 11 was manually annotated 54 times for cluster BD1.

Info for manual annotations of cluster BD2:

- Start number 11 was manually annotated 26 times for cluster BD2.

Info for manual annotations of cluster BD3:

- Start number 11 was manually annotated 6 times for cluster BD3.
- Start number 12 was manually annotated 1 time for cluster BD3.

Info for manual annotations of cluster BD4:

- Start number 11 was manually annotated 3 times for cluster BD4.

Info for manual annotations of cluster BD6:

- Start number 11 was manually annotated 4 times for cluster BD6.

Info for manual annotations of cluster BU:

- Start number 12 was manually annotated 43 times for cluster BU.

Gene Information:

Gene: ATCC29399BC_34 Start: 23243, Stop: 22785, Start Num: 12

Candidate Starts for ATCC29399BC_34:

(Start: 12 @23243 has 44 MA's), (18, 23147), (20, 23090), (25, 22985), (29, 22928), (33, 22886), (40, 22805),

Gene: ATCC29399BT_34 Start: 23243, Stop: 22785, Start Num: 12

Candidate Starts for ATCC29399BT_34:

(Start: 12 @23243 has 44 MA's), (18, 23147), (20, 23090), (25, 22985), (29, 22928), (33, 22886), (40, 22805),

Gene: Aaronocolus_33 Start: 25192, Stop: 25629, Start Num: 11

Candidate Starts for Aaronocolus_33:

(Start: 11 @25192 has 93 MA's), (20, 25345), (21, 25363), (24, 25426), (26, 25471), (30, 25522), (36, 25561), (38, 25603), (39, 25612),

Gene: Alsaber_35 Start: 27047, Stop: 27481, Start Num: 11

Candidate Starts for Alsaber_35:

(Start: 11 @27047 has 93 MA's), (13, 27062), (20, 27200), (24, 27278), (26, 27323), (30, 27374),

Gene: Alvy_36 Start: 26522, Stop: 26959, Start Num: 11
Candidate Starts for Alvy_36:
(Start: 11 @26522 has 93 MA's), (15, 26594), (22, 26723), (26, 26798), (28, 26813), (30, 26849), (34, 26876), (35, 26888),

Gene: Amela_34 Start: 27877, Stop: 28311, Start Num: 11
Candidate Starts for Amela_34:
(Start: 11 @27877 has 93 MA's), (13, 27892), (14, 27940), (20, 28030), (24, 28108), (26, 28153), (30, 28204),

Gene: Amethyst_33 Start: 25879, Stop: 26316, Start Num: 11
Candidate Starts for Amethyst_33:
(Start: 11 @25879 has 93 MA's), (15, 25951), (22, 26080), (26, 26155), (32, 26218), (38, 26290),

Gene: Andris_33 Start: 25934, Stop: 26371, Start Num: 11
Candidate Starts for Andris_33:
(Start: 11 @25934 has 93 MA's), (22, 26135), (26, 26210), (30, 26261),

Gene: Animus_33 Start: 26379, Stop: 26816, Start Num: 11
Candidate Starts for Animus_33:
(Start: 11 @26379 has 93 MA's), (22, 26580), (26, 26655), (28, 26670),

Gene: Aquarius_34 Start: 22714, Stop: 22256, Start Num: 12
Candidate Starts for Aquarius_34:
(Start: 12 @22714 has 44 MA's), (23, 22486), (25, 22456), (29, 22399), (31, 22369),

Gene: Asten_33 Start: 25553, Stop: 25990, Start Num: 11
Candidate Starts for Asten_33:
(Start: 11 @25553 has 93 MA's), (15, 25625), (20, 25706), (24, 25787), (26, 25832), (30, 25883), (36, 25922), (38, 25964), (39, 25973),

Gene: Attacne_34 Start: 22739, Stop: 22278, Start Num: 12
Candidate Starts for Attacne_34:
(8, 22826), (Start: 12 @22739 has 44 MA's), (18, 22640), (23, 22508), (25, 22478), (29, 22421),

Gene: BarryBee_36 Start: 25563, Stop: 26000, Start Num: 11
Candidate Starts for BarryBee_36:
(Start: 11 @25563 has 93 MA's), (15, 25635), (20, 25716), (24, 25797), (26, 25842), (30, 25893), (36, 25932), (38, 25974), (39, 25983),

Gene: BartholomewSD_36 Start: 26522, Stop: 26959, Start Num: 11
Candidate Starts for BartholomewSD_36:
(Start: 11 @26522 has 93 MA's), (15, 26594), (22, 26723), (26, 26798), (28, 26813), (30, 26849), (34, 26876), (35, 26888),

Gene: BeardedLady_34 Start: 25445, Stop: 25882, Start Num: 11
Candidate Starts for BeardedLady_34:
(Start: 11 @25445 has 93 MA's), (20, 25598), (21, 25616), (24, 25679), (26, 25724), (30, 25775), (36, 25814), (38, 25856), (39, 25865),

Gene: Bovely_33 Start: 25198, Stop: 25635, Start Num: 11
Candidate Starts for Bovely_33:

(Start: 11 @25198 has 93 MA's), (20, 25351), (21, 25369), (24, 25432), (26, 25477), (30, 25528), (36, 25567), (38, 25609), (39, 25618),

Gene: Bowden_34 Start: 26434, Stop: 26871, Start Num: 11

Candidate Starts for Bowden_34:

(Start: 11 @26434 has 93 MA's), (15, 26506), (22, 26635), (26, 26710), (28, 26725), (30, 26761), (34, 26788), (35, 26800),

Gene: Brataylor_36 Start: 26528, Stop: 26965, Start Num: 11

Candidate Starts for Brataylor_36:

(6, 26423), (Start: 11 @26528 has 93 MA's), (20, 26681), (21, 26699), (26, 26807), (38, 26939), (39, 26948),

Gene: BroPlease_34 Start: 25712, Stop: 26149, Start Num: 11

Candidate Starts for BroPlease_34:

(3, 25442), (Start: 11 @25712 has 93 MA's), (17, 25802), (20, 25865), (26, 25988), (30, 26039), (38, 26123),

Gene: BruceLethal_34 Start: 23258, Stop: 22791, Start Num: 12

Candidate Starts for BruceLethal_34:

(7, 23363), (Start: 12 @23258 has 44 MA's), (25, 23003), (29, 22946), (31, 22916),

Gene: BryanRecycles_34 Start: 25549, Stop: 25986, Start Num: 11

Candidate Starts for BryanRecycles_34:

(Start: 11 @25549 has 93 MA's), (15, 25621), (20, 25702), (21, 25720), (24, 25783), (26, 25828), (30, 25879), (36, 25918), (38, 25960), (39, 25969),

Gene: Caelum_35 Start: 26140, Stop: 26577, Start Num: 11

Candidate Starts for Caelum_35:

(Start: 11 @26140 has 93 MA's), (16, 26224), (20, 26293), (22, 26341), (26, 26416), (28, 26431), (30, 26467), (32, 26479), (34, 26494),

Gene: Caliburn_33 Start: 25175, Stop: 25612, Start Num: 11

Candidate Starts for Caliburn_33:

(Start: 11 @25175 has 93 MA's), (20, 25328), (21, 25346), (24, 25409), (26, 25454), (30, 25505), (36, 25544), (38, 25586), (39, 25595),

Gene: Celery_37 Start: 26972, Stop: 27403, Start Num: 11

Candidate Starts for Celery_37:

(Start: 11 @26972 has 93 MA's), (13, 26984), (14, 27032), (26, 27245), (30, 27296),

Gene: Celeste_34 Start: 25997, Stop: 26434, Start Num: 11

Candidate Starts for Celeste_34:

(6, 25892), (Start: 11 @25997 has 93 MA's), (20, 26150), (21, 26168), (26, 26276), (38, 26408), (39, 26417),

Gene: Celia_35 Start: 26276, Stop: 26713, Start Num: 11

Candidate Starts for Celia_35:

(2, 25997), (Start: 11 @26276 has 93 MA's), (13, 26291), (19, 26417), (22, 26477), (26, 26552), (37, 26675),

Gene: Chucky_33 Start: 25567, Stop: 26004, Start Num: 11

Candidate Starts for Chucky_33:

(Start: 11 @25567 has 93 MA's), (15, 25639), (20, 25720), (24, 25801), (26, 25846), (30, 25897), (36, 25936), (38, 25978), (39, 25987),

Gene: Conan_37 Start: 26943, Stop: 27377, Start Num: 11

Candidate Starts for Conan_37:

(Start: 11 @26943 has 93 MA's), (13, 26958), (20, 27096), (24, 27174), (26, 27219), (30, 27270),

Gene: Cota_34 Start: 23305, Stop: 22835, Start Num: 12

Candidate Starts for Cota_34:

(Start: 12 @23305 has 44 MA's), (20, 23152), (25, 23047), (29, 22990), (31, 22960),

Gene: Danzina_35 Start: 26298, Stop: 26735, Start Num: 11

Candidate Starts for Danzina_35:

(6, 26193), (Start: 11 @26298 has 93 MA's), (20, 26451), (21, 26469), (24, 26532), (26, 26577), (38, 26709), (39, 26718),

Gene: Dattran_35 Start: 26104, Stop: 26541, Start Num: 11

Candidate Starts for Dattran_35:

(6, 25999), (Start: 11 @26104 has 93 MA's), (20, 26257), (21, 26275), (26, 26383), (38, 26515), (39, 26524),

Gene: Daudau_34 Start: 26267, Stop: 26704, Start Num: 11

Candidate Starts for Daudau_34:

(Start: 11 @26267 has 93 MA's), (15, 26339), (20, 26420), (26, 26543), (30, 26594), (32, 26606), (34, 26621), (38, 26678),

Gene: Dexers_33 Start: 26969, Stop: 27403, Start Num: 11

Candidate Starts for Dexers_33:

(Start: 11 @26969 has 93 MA's), (13, 26984), (14, 27032), (20, 27122), (24, 27200), (26, 27245), (30, 27296),

Gene: Diane_33 Start: 26149, Stop: 26589, Start Num: 11

Candidate Starts for Diane_33:

(Start: 11 @26149 has 93 MA's), (15, 26224), (22, 26353), (26, 26428), (35, 26518), (38, 26563),

Gene: DrParker_34 Start: 23332, Stop: 22880, Start Num: 12

Candidate Starts for DrParker_34:

(Start: 12 @23332 has 44 MA's), (25, 23074), (29, 23017),

Gene: Dwayne_33 Start: 25554, Stop: 25991, Start Num: 11

Candidate Starts for Dwayne_33:

(Start: 11 @25554 has 93 MA's), (15, 25626), (20, 25707), (24, 25788), (26, 25833), (30, 25884), (36, 25923), (38, 25965), (39, 25974),

Gene: ELB20_32 Start: 26533, Stop: 26970, Start Num: 11

Candidate Starts for ELB20_32:

(Start: 11 @26533 has 93 MA's), (15, 26605), (22, 26734), (26, 26809), (38, 26944),

Gene: Eddasa_34 Start: 25549, Stop: 25986, Start Num: 11

Candidate Starts for Eddasa_34:

(Start: 11 @25549 has 93 MA's), (15, 25621), (20, 25702), (21, 25720), (24, 25783), (26, 25828), (30, 25879), (36, 25918), (38, 25960), (39, 25969),

Gene: Ejemplo_32 Start: 25494, Stop: 25931, Start Num: 11
Candidate Starts for Ejemplo_32:
(Start: 11 @25494 has 93 MA's), (15, 25566), (20, 25647), (24, 25728), (26, 25773), (36, 25863), (38, 25905), (39, 25914),

Gene: ElGato_36 Start: 26607, Stop: 27041, Start Num: 11
Candidate Starts for ElGato_36:
(Start: 11 @26607 has 93 MA's), (13, 26622), (20, 26760), (24, 26838), (26, 26883), (30, 26934),

Gene: Emaanora_36 Start: 25512, Stop: 25949, Start Num: 11
Candidate Starts for Emaanora_36:
(Start: 11 @25512 has 93 MA's), (15, 25584), (20, 25665), (24, 25746), (26, 25791), (30, 25842), (36, 25881), (38, 25923), (39, 25932),

Gene: EnochSoames_36 Start: 25544, Stop: 25981, Start Num: 11
Candidate Starts for EnochSoames_36:
(Start: 11 @25544 has 93 MA's), (15, 25616), (20, 25697), (21, 25715), (24, 25778), (26, 25823), (30, 25874), (36, 25913), (38, 25955), (39, 25964),

Gene: Enochoraptor_34 Start: 23268, Stop: 22804, Start Num: 12
Candidate Starts for Enochoraptor_34:
(Start: 12 @23268 has 44 MA's), (17, 23181), (25, 23010), (29, 22953), (31, 22923),

Gene: Enoki_34 Start: 23278, Stop: 22820, Start Num: 12
Candidate Starts for Enoki_34:
(7, 23380), (Start: 12 @23278 has 44 MA's), (17, 23191), (25, 23020), (29, 22963), (31, 22933),

Gene: Esperer_33 Start: 25011, Stop: 25448, Start Num: 11
Candidate Starts for Esperer_33:
(Start: 11 @25011 has 93 MA's), (20, 25164), (21, 25182), (24, 25245), (26, 25290), (30, 25341), (36, 25380), (38, 25422), (39, 25431),

Gene: GirlDinner_35 Start: 25880, Stop: 26317, Start Num: 11
Candidate Starts for GirlDinner_35:
(Start: 11 @25880 has 93 MA's), (22, 26081), (26, 26156), (28, 26171),

Gene: Goby_33 Start: 26001, Stop: 26438, Start Num: 11
Candidate Starts for Goby_33:
(Start: 11 @26001 has 93 MA's), (15, 26073), (20, 26154), (24, 26235), (26, 26280), (36, 26370), (38, 26412), (39, 26421),

Gene: Godpower_34 Start: 25996, Stop: 26433, Start Num: 11
Candidate Starts for Godpower_34:
(Start: 11 @25996 has 93 MA's), (15, 26068), (20, 26149), (24, 26230), (26, 26275), (36, 26365), (38, 26407), (39, 26416),

Gene: GreenWeasel_35 Start: 25718, Stop: 26155, Start Num: 11
Candidate Starts for GreenWeasel_35:
(Start: 11 @25718 has 93 MA's), (17, 25808), (20, 25871), (26, 25994), (30, 26045), (38, 26129),

Gene: Haizum_35 Start: 26221, Stop: 26658, Start Num: 11
Candidate Starts for Haizum_35:

(Start: 11 @26221 has 93 MA's), (15, 26293), (22, 26422), (26, 26497), (30, 26548), (32, 26560), (38, 26632),

Gene: Hank144_35 Start: 26294, Stop: 26731, Start Num: 11

Candidate Starts for Hank144_35:

(Start: 11 @26294 has 93 MA's), (20, 26447), (26, 26570), (30, 26621),

Gene: Hippo_33 Start: 25563, Stop: 26000, Start Num: 11

Candidate Starts for Hippo_33:

(Start: 11 @25563 has 93 MA's), (15, 25635), (20, 25716), (26, 25842), (30, 25893), (36, 25932), (38, 25974), (39, 25983),

Gene: Hydra_35 Start: 25723, Stop: 26160, Start Num: 11

Candidate Starts for Hydra_35:

(Start: 11 @25723 has 93 MA's), (20, 25876), (21, 25894), (24, 25957), (26, 26002), (30, 26053), (36, 26092), (38, 26134), (39, 26143),

Gene: Indigo_32 Start: 25191, Stop: 25628, Start Num: 11

Candidate Starts for Indigo_32:

(Start: 11 @25191 has 93 MA's), (20, 25344), (21, 25362), (24, 25425), (26, 25470), (30, 25521), (36, 25560), (38, 25602), (39, 25611),

Gene: Issmi_35 Start: 26847, Stop: 27284, Start Num: 11

Candidate Starts for Issmi_35:

(10, 26817), (Start: 11 @26847 has 93 MA's), (15, 26919), (20, 27000), (26, 27123), (28, 27138), (30, 27174), (35, 27213),

Gene: Itza_35 Start: 26190, Stop: 26627, Start Num: 11

Candidate Starts for Itza_35:

(2, 25911), (Start: 11 @26190 has 93 MA's), (13, 26205), (19, 26331), (22, 26391), (26, 26466), (37, 26589),

Gene: Izzy_34 Start: 25596, Stop: 26033, Start Num: 11

Candidate Starts for Izzy_34:

(Start: 11 @25596 has 93 MA's), (15, 25668), (20, 25749), (21, 25767), (24, 25830), (26, 25875), (30, 25926), (36, 25965), (38, 26007), (39, 26016),

Gene: Janus_34 Start: 26220, Stop: 26657, Start Num: 11

Candidate Starts for Janus_34:

(Start: 11 @26220 has 93 MA's), (22, 26421), (26, 26496), (28, 26511),

Gene: Jash_34 Start: 25549, Stop: 25986, Start Num: 11

Candidate Starts for Jash_34:

(Start: 11 @25549 has 93 MA's), (15, 25621), (20, 25702), (21, 25720), (24, 25783), (26, 25828), (30, 25879), (36, 25918), (38, 25960), (39, 25969),

Gene: Jevington_37 Start: 26636, Stop: 27073, Start Num: 11

Candidate Starts for Jevington_37:

(Start: 11 @26636 has 93 MA's), (15, 26708), (20, 26789), (21, 26807), (26, 26912), (30, 26963), (35, 27002), (38, 27047),

Gene: Katalie_33 Start: 25728, Stop: 26165, Start Num: 11

Candidate Starts for Katalie_33:

(Start: 11 @25728 has 93 MA's), (15, 25800), (20, 25881), (24, 25962), (26, 26007), (30, 26058), (36, 26097), (38, 26139),

Gene: Keiki_34 Start: 23206, Stop: 22736, Start Num: 12

Candidate Starts for Keiki_34:

(7, 23302), (Start: 12 @23206 has 44 MA's), (25, 22948), (31, 22861),

Gene: Kubed_34 Start: 23258, Stop: 22791, Start Num: 12

Candidate Starts for Kubed_34:

(Start: 12 @23258 has 44 MA's), (23, 23027), (25, 22997),

Gene: Lannister_35 Start: 26214, Stop: 26651, Start Num: 11

Candidate Starts for Lannister_35:

(Start: 11 @26214 has 93 MA's), (15, 26286), (20, 26367), (24, 26448), (26, 26493), (36, 26583), (38, 26625), (39, 26634),

Gene: Lauchelly_34 Start: 23298, Stop: 22831, Start Num: 12

Candidate Starts for Lauchelly_34:

(Start: 12 @23298 has 44 MA's), (25, 23037), (29, 22980), (31, 22950),

Gene: Legacy_33 Start: 25166, Stop: 25603, Start Num: 11

Candidate Starts for Legacy_33:

(Start: 11 @25166 has 93 MA's), (20, 25319), (21, 25337), (24, 25400), (26, 25445), (30, 25496), (36, 25535), (38, 25577), (39, 25586),

Gene: Leviosa_34 Start: 23289, Stop: 22831, Start Num: 12

Candidate Starts for Leviosa_34:

(Start: 12 @23289 has 44 MA's), (25, 23031), (29, 22974), (31, 22944),

Gene: Leviticus_33 Start: 25195, Stop: 25632, Start Num: 11

Candidate Starts for Leviticus_33:

(Start: 11 @25195 has 93 MA's), (20, 25348), (21, 25366), (24, 25429), (26, 25474), (30, 25525), (36, 25564), (38, 25606), (39, 25615),

Gene: Lika_33 Start: 25999, Stop: 26436, Start Num: 11

Candidate Starts for Lika_33:

(Start: 11 @25999 has 93 MA's), (15, 26071), (20, 26152), (24, 26233), (26, 26278), (36, 26368), (38, 26410), (39, 26419),

Gene: LilBandit_34 Start: 23088, Stop: 22624, Start Num: 12

Candidate Starts for LilBandit_34:

(Start: 12 @23088 has 44 MA's), (25, 22830), (31, 22743),

Gene: Loofah_34 Start: 26403, Stop: 26840, Start Num: 11

Candidate Starts for Loofah_34:

(1, 26115), (Start: 11 @26403 has 93 MA's), (26, 26679), (28, 26694), (38, 26814),

Gene: Lorelei_34 Start: 26060, Stop: 26497, Start Num: 11

Candidate Starts for Lorelei_34:

(6, 25955), (Start: 11 @26060 has 93 MA's), (15, 26132), (20, 26213), (24, 26294), (26, 26339), (36, 26429), (38, 26471), (39, 26480),

Gene: MEAK_34 Start: 22951, Stop: 22493, Start Num: 12

Candidate Starts for MEAK_34:

(Start: 12 @22951 has 44 MA's), (23, 22723), (25, 22693), (29, 22636), (31, 22606), (33, 22594),

Gene: Maneekul_33 Start: 25585, Stop: 26022, Start Num: 11

Candidate Starts for Maneekul_33:

(6, 25480), (Start: 11 @25585 has 93 MA's), (15, 25657), (20, 25738), (24, 25819), (26, 25864), (36, 25954), (38, 25996), (39, 26005),

Gene: Marav_37 Start: 26960, Stop: 27397, Start Num: 11

Candidate Starts for Marav_37:

(10, 26930), (Start: 11 @26960 has 93 MA's), (15, 27032), (20, 27113), (21, 27131), (26, 27236), (30, 27287), (35, 27326), (38, 27371),

Gene: Moyashi_34 Start: 23073, Stop: 22603, Start Num: 12

Candidate Starts for Moyashi_34:

(Start: 12 @23073 has 44 MA's), (25, 22815), (29, 22758),

Gene: MrAK_34 Start: 23078, Stop: 22608, Start Num: 12

Candidate Starts for MrAK_34:

(7, 23180), (Start: 12 @23078 has 44 MA's), (25, 22820), (31, 22733),

Gene: Nabi_34 Start: 26060, Stop: 26497, Start Num: 11

Candidate Starts for Nabi_34:

(6, 25955), (Start: 11 @26060 has 93 MA's), (15, 26132), (20, 26213), (24, 26294), (26, 26339), (36, 26429), (38, 26471), (39, 26480),

Gene: Nanodon_35 Start: 25821, Stop: 26258, Start Num: 11

Candidate Starts for Nanodon_35:

(Start: 11 @25821 has 93 MA's), (15, 25893), (20, 25974), (24, 26055), (26, 26100), (36, 26190), (38, 26232),

Gene: Nerdos_33 Start: 25189, Stop: 25626, Start Num: 11

Candidate Starts for Nerdos_33:

(Start: 11 @25189 has 93 MA's), (20, 25342), (21, 25360), (24, 25423), (26, 25468), (30, 25519), (36, 25558), (38, 25600), (39, 25609),

Gene: Nishikigoi_35 Start: 26221, Stop: 26658, Start Num: 11

Candidate Starts for Nishikigoi_35:

(Start: 11 @26221 has 93 MA's), (15, 26293), (22, 26422), (26, 26497), (30, 26548), (32, 26560), (34, 26575), (38, 26632),

Gene: Oliynyk_34 Start: 25549, Stop: 25986, Start Num: 11

Candidate Starts for Oliynyk_34:

(Start: 11 @25549 has 93 MA's), (15, 25621), (20, 25702), (21, 25720), (24, 25783), (26, 25828), (30, 25879), (36, 25918), (38, 25960), (39, 25969),

Gene: Omar_36 Start: 26466, Stop: 26903, Start Num: 11

Candidate Starts for Omar_36:

(10, 26436), (Start: 11 @26466 has 93 MA's), (15, 26538), (20, 26619), (26, 26742), (30, 26793), (34, 26820), (35, 26832),

Gene: Ouroboros_34 Start: 23273, Stop: 22809, Start Num: 12

Candidate Starts for Ouroboros_34:

(Start: 12 @23273 has 44 MA's), (25, 23015), (29, 22958), (40, 22829),

Gene: Ozzie_33 Start: 25175, Stop: 25612, Start Num: 11

Candidate Starts for Ozzie_33:

(Start: 11 @25175 has 93 MA's), (20, 25328), (21, 25346), (24, 25409), (26, 25454), (30, 25505), (36, 25544), (38, 25586), (39, 25595),

Gene: OzzyJ_34 Start: 25554, Stop: 25991, Start Num: 11

Candidate Starts for OzzyJ_34:

(Start: 11 @25554 has 93 MA's), (15, 25626), (19, 25695), (20, 25707), (26, 25833), (30, 25884), (36, 25923), (38, 25965), (39, 25974),

Gene: P1.1_34 Start: 23309, Stop: 22836, Start Num: 12

Candidate Starts for P1.1_34:

(Start: 12 @23309 has 44 MA's), (25, 23048), (31, 22961),

Gene: P100.1_34 Start: 23345, Stop: 22875, Start Num: 12

Candidate Starts for P100.1_34:

(Start: 12 @23345 has 44 MA's), (25, 23087), (29, 23030),

Gene: P100A_34 Start: 23284, Stop: 22823, Start Num: 12

Candidate Starts for P100A_34:

(7, 23389), (Start: 12 @23284 has 44 MA's), (25, 23023), (29, 22966), (31, 22936), (33, 22924), (40, 22843),

Gene: P100D_34 Start: 23278, Stop: 22811, Start Num: 12

Candidate Starts for P100D_34:

(7, 23362), (Start: 12 @23278 has 44 MA's), (25, 23017), (29, 22960), (31, 22930),

Gene: P101A_34 Start: 23307, Stop: 22837, Start Num: 12

Candidate Starts for P101A_34:

(Start: 12 @23307 has 44 MA's), (17, 23220), (18, 23211), (25, 23049), (31, 22962),

Gene: P104A_34 Start: 23080, Stop: 22610, Start Num: 12

Candidate Starts for P104A_34:

(Start: 12 @23080 has 44 MA's), (17, 22993), (18, 22984), (25, 22822), (29, 22765), (31, 22735),

Gene: P104B_34 Start: 23273, Stop: 22806, Start Num: 12

Candidate Starts for P104B_34:

(7, 23363), (Start: 12 @23273 has 44 MA's), (25, 23012), (31, 22925),

Gene: P105_34 Start: 22941, Stop: 22471, Start Num: 12

Candidate Starts for P105_34:

(Start: 12 @22941 has 44 MA's), (25, 22683), (29, 22626), (31, 22596),

Gene: P106A_34 Start: 23357, Stop: 22893, Start Num: 12

Candidate Starts for P106A_34:

(5, 23462), (Start: 12 @23357 has 44 MA's), (17, 23270), (18, 23261), (25, 23099), (29, 23042), (33, 23000),

Gene: P106C_35 Start: 23295, Stop: 22831, Start Num: 12

Candidate Starts for P106C_35:

(Start: 12 @23295 has 44 MA's), (17, 23208), (18, 23199), (25, 23037), (29, 22980), (33, 22938),

Gene: P106I_34 Start: 23124, Stop: 22660, Start Num: 12
Candidate Starts for P106I_34:
(Start: 12 @23124 has 44 MA's), (17, 23037), (18, 23028), (25, 22866), (29, 22809), (33, 22767),

Gene: P106L_34 Start: 23295, Stop: 22831, Start Num: 12
Candidate Starts for P106L_34:
(Start: 12 @23295 has 44 MA's), (17, 23208), (18, 23199), (25, 23037), (29, 22980), (33, 22938),

Gene: P106M_34 Start: 23295, Stop: 22831, Start Num: 12
Candidate Starts for P106M_34:
(Start: 12 @23295 has 44 MA's), (17, 23208), (18, 23199), (25, 23037), (29, 22980), (33, 22938),

Gene: P107A_34 Start: 23308, Stop: 22841, Start Num: 12
Candidate Starts for P107A_34:
(Start: 12 @23308 has 44 MA's), (25, 23047), (29, 22990),

Gene: P107C_34 Start: 23243, Stop: 22785, Start Num: 12
Candidate Starts for P107C_34:
(Start: 12 @23243 has 44 MA's), (18, 23147), (20, 23090), (25, 22985), (29, 22928), (33, 22886), (40, 22805),

Gene: P108C_34 Start: 23267, Stop: 22797, Start Num: 12
Candidate Starts for P108C_34:
(Start: 12 @23267 has 44 MA's), (25, 23009), (29, 22952),

Gene: P14.4_34 Start: 23271, Stop: 22798, Start Num: 12
Candidate Starts for P14.4_34:
(Start: 12 @23271 has 44 MA's), (25, 23010), (29, 22953), (31, 22923),

Gene: P9.1_34 Start: 23296, Stop: 22832, Start Num: 12
Candidate Starts for P9.1_34:
(Start: 12 @23296 has 44 MA's), (25, 23038), (29, 22981), (31, 22951),

Gene: PA6_35 Start: 23261, Stop: 22791, Start Num: 12
Candidate Starts for PA6_35:
(Start: 12 @23261 has 44 MA's), (25, 23003), (29, 22946),

Gene: PAD20_35 Start: 23036, Stop: 22572, Start Num: 12
Candidate Starts for PAD20_35:
(Start: 12 @23036 has 44 MA's), (17, 22949), (25, 22778), (29, 22721),

Gene: PAS50_35 Start: 23201, Stop: 22737, Start Num: 12
Candidate Starts for PAS50_35:
(7, 23291), (Start: 12 @23201 has 44 MA's), (17, 23114), (25, 22943), (29, 22886),

Gene: PHL010M04_34 Start: 23275, Stop: 22805, Start Num: 12
Candidate Starts for PHL010M04_34:
(Start: 12 @23275 has 44 MA's), (25, 23017), (29, 22960), (31, 22930),

Gene: PHL037M02_34 Start: 23263, Stop: 22802, Start Num: 12
Candidate Starts for PHL037M02_34:
(Start: 12 @23263 has 44 MA's), (18, 23164), (25, 23002), (29, 22945),

Gene: PHL060L00_34 Start: 23119, Stop: 22646, Start Num: 12
Candidate Starts for PHL060L00_34:
(Start: 12 @23119 has 44 MA's), (25, 22858), (29, 22801), (31, 22771),

Gene: PHL067M10_34 Start: 23228, Stop: 22761, Start Num: 12
Candidate Starts for PHL067M10_34:
(Start: 12 @23228 has 44 MA's), (25, 22973), (29, 22916), (31, 22886),

Gene: PHL071N05_34 Start: 23295, Stop: 22825, Start Num: 12
Candidate Starts for PHL071N05_34:
(7, 23391), (Start: 12 @23295 has 44 MA's), (25, 23037), (31, 22950),

Gene: PHL111M01_34 Start: 22996, Stop: 22523, Start Num: 12
Candidate Starts for PHL111M01_34:
(Start: 12 @22996 has 44 MA's), (18, 22897), (25, 22735), (29, 22678), (31, 22648),

Gene: PHL112N00_34 Start: 23288, Stop: 22830, Start Num: 12
Candidate Starts for PHL112N00_34:
(7, 23390), (Start: 12 @23288 has 44 MA's), (18, 23192), (20, 23135), (25, 23030), (29, 22973), (33, 22931), (40, 22850),

Gene: PHL113M01_34 Start: 23042, Stop: 22572, Start Num: 12
Candidate Starts for PHL113M01_34:
(7, 23144), (Start: 12 @23042 has 44 MA's), (25, 22784), (29, 22727), (31, 22697),

Gene: PHL114L00_34 Start: 23244, Stop: 22786, Start Num: 12
Candidate Starts for PHL114L00_34:
(Start: 12 @23244 has 44 MA's), (25, 22986), (29, 22929),

Gene: Pablito_33 Start: 25796, Stop: 26233, Start Num: 11
Candidate Starts for Pablito_33:
(Start: 11 @25796 has 93 MA's),

Gene: Paedore_33 Start: 26388, Stop: 26825, Start Num: 11
Candidate Starts for Paedore_33:
(1, 26100), (Start: 11 @26388 has 93 MA's), (26, 26664), (28, 26679), (38, 26799),

Gene: Paolo_38 Start: 26802, Stop: 27239, Start Num: 11
Candidate Starts for Paolo_38:
(10, 26772), (Start: 11 @26802 has 93 MA's), (15, 26874), (20, 26955), (26, 27078), (30, 27129), (35, 27168), (38, 27213),

Gene: Phettuccine_33 Start: 25191, Stop: 25628, Start Num: 11
Candidate Starts for Phettuccine_33:
(Start: 11 @25191 has 93 MA's), (20, 25344), (21, 25362), (24, 25425), (26, 25470), (30, 25521), (36, 25560), (38, 25602), (39, 25611),

Gene: Pirate_34 Start: 23191, Stop: 22721, Start Num: 12
Candidate Starts for Pirate_34:
(7, 23287), (Start: 12 @23191 has 44 MA's), (25, 22933), (31, 22846),

Gene: Procrass1_34 Start: 23257, Stop: 22796, Start Num: 12

Candidate Starts for Procrass1_34:

(Start: 12 @23257 has 44 MA's), (20, 23101), (25, 22996), (27, 22972), (29, 22939), (31, 22909),

Gene: Provolone_35 Start: 26598, Stop: 27032, Start Num: 11

Candidate Starts for Provolone_35:

(Start: 11 @26598 has 93 MA's), (13, 26613), (20, 26751), (24, 26829), (26, 26874), (30, 26925),

Gene: Puginator_38 Start: 26823, Stop: 27260, Start Num: 11

Candidate Starts for Puginator_38:

(10, 26793), (Start: 11 @26823 has 93 MA's), (20, 26976), (26, 27099), (30, 27150), (35, 27189), (38, 27234),

Gene: QueenBey_34 Start: 23243, Stop: 22779, Start Num: 12

Candidate Starts for QueenBey_34:

(7, 23339), (Start: 12 @23243 has 44 MA's), (18, 23147), (25, 22985), (29, 22928),

Gene: R4_34 Start: 26543, Stop: 26980, Start Num: 11

Candidate Starts for R4_34:

(Start: 11 @26543 has 93 MA's), (15, 26615), (22, 26744), (26, 26819), (38, 26954),

Gene: Rana_34 Start: 26060, Stop: 26497, Start Num: 11

Candidate Starts for Rana_34:

(6, 25955), (Start: 11 @26060 has 93 MA's), (15, 26132), (20, 26213), (24, 26294), (26, 26339), (36, 26429), (38, 26471), (39, 26480),

Gene: RedBear_34 Start: 25728, Stop: 26165, Start Num: 11

Candidate Starts for RedBear_34:

(Start: 11 @25728 has 93 MA's), (15, 25800), (20, 25881), (24, 25962), (26, 26007), (30, 26058), (36, 26097), (38, 26139),

Gene: Rileysaurus_33 Start: 23292, Stop: 22816, Start Num: 12

Candidate Starts for Rileysaurus_33:

(Start: 12 @23292 has 44 MA's), (25, 23031), (29, 22974),

Gene: Rusticus_34 Start: 25549, Stop: 25986, Start Num: 11

Candidate Starts for Rusticus_34:

(Start: 11 @25549 has 93 MA's), (15, 25621), (20, 25702), (21, 25720), (24, 25783), (26, 25828), (30, 25879), (36, 25918), (38, 25960), (39, 25969),

Gene: SKKY_34 Start: 23028, Stop: 22570, Start Num: 12

Candidate Starts for SKKY_34:

(Start: 12 @23028 has 44 MA's), (18, 22932), (23, 22800), (25, 22770), (29, 22713),

Gene: Saftant_34 Start: 27161, Stop: 27595, Start Num: 11

Candidate Starts for Saftant_34:

(4, 27047), (Start: 11 @27161 has 93 MA's), (13, 27176), (20, 27314), (24, 27392), (26, 27437), (30, 27488), (37, 27557),

Gene: SarahRose_33 Start: 25563, Stop: 26000, Start Num: 11

Candidate Starts for SarahRose_33:

(Start: 11 @25563 has 93 MA's), (15, 25635), (20, 25716), (24, 25797), (26, 25842), (30, 25893), (36, 25932), (38, 25974), (39, 25983),

Gene: Snorlax_33 Start: 25566, Stop: 26003, Start Num: 11
Candidate Starts for Snorlax_33:
(Start: 11 @25566 has 93 MA's), (15, 25638), (20, 25719), (24, 25800), (26, 25845), (30, 25896), (36, 25935), (38, 25977), (39, 25986),

Gene: Solid_34 Start: 23262, Stop: 22801, Start Num: 12
Candidate Starts for Solid_34:
(Start: 12 @23262 has 44 MA's), (17, 23172), (18, 23163), (25, 23001), (29, 22944), (31, 22914), (33, 22902), (40, 22821),

Gene: South40_33 Start: 25728, Stop: 26165, Start Num: 11
Candidate Starts for South40_33:
(Start: 11 @25728 has 93 MA's), (15, 25800), (20, 25881), (24, 25962), (26, 26007), (30, 26058), (36, 26097), (38, 26139),

Gene: SqueakyClean_33 Start: 26311, Stop: 26748, Start Num: 11
Candidate Starts for SqueakyClean_33:
(Start: 11 @26311 has 93 MA's), (22, 26512), (26, 26587), (28, 26602),

Gene: Stormborn_34 Start: 22885, Stop: 22415, Start Num: 12
Candidate Starts for Stormborn_34:
(7, 22987), (Start: 12 @22885 has 44 MA's), (25, 22627), (31, 22540),

Gene: Sujidade_34 Start: 26284, Stop: 26721, Start Num: 11
Candidate Starts for Sujidade_34:
(Start: 11 @26284 has 93 MA's), (15, 26356), (20, 26437), (24, 26518), (26, 26563), (36, 26653), (38, 26695), (39, 26704),

Gene: SunsetPointe_33 Start: 25182, Stop: 25619, Start Num: 11
Candidate Starts for SunsetPointe_33:
(Start: 11 @25182 has 93 MA's), (20, 25335), (21, 25353), (24, 25416), (26, 25461), (30, 25512), (36, 25551), (38, 25593), (39, 25602),

Gene: Supernova_34 Start: 23049, Stop: 22579, Start Num: 12
Candidate Starts for Supernova_34:
(Start: 12 @23049 has 44 MA's), (25, 22791), (29, 22734), (31, 22704),

Gene: Superstar_37 Start: 27336, Stop: 27773, Start Num: 11
Candidate Starts for Superstar_37:
(Start: 11 @27336 has 93 MA's), (20, 27489), (22, 27537), (26, 27612), (30, 27663), (32, 27675),

Gene: TagePighther_35 Start: 25566, Stop: 26003, Start Num: 11
Candidate Starts for TagePighther_35:
(Start: 11 @25566 has 93 MA's), (15, 25638), (20, 25719), (24, 25800), (26, 25845), (30, 25896), (36, 25935), (38, 25977), (39, 25986),

Gene: Tefunt_35 Start: 26224, Stop: 26661, Start Num: 11
Candidate Starts for Tefunt_35:
(Start: 11 @26224 has 93 MA's), (15, 26296), (22, 26425), (26, 26500), (30, 26551), (32, 26563), (34, 26578), (38, 26635),

Gene: Thestral_35 Start: 26426, Stop: 26863, Start Num: 11
Candidate Starts for Thestral_35:

(Start: 11 @26426 has 93 MA's), (15, 26498), (22, 26627), (26, 26702), (30, 26753), (34, 26780), (35, 26792),

Gene: TinaBelcher_34 Start: 26373, Stop: 26810, Start Num: 11

Candidate Starts for TinaBelcher_34:

(Start: 11 @26373 has 93 MA's), (15, 26445), (22, 26574), (26, 26649), (28, 26664), (30, 26700), (34, 26727), (35, 26739),

Gene: Toma_33 Start: 26001, Stop: 26438, Start Num: 11

Candidate Starts for Toma_33:

(Start: 11 @26001 has 93 MA's), (15, 26073), (20, 26154), (24, 26235), (26, 26280), (36, 26370), (38, 26412), (39, 26421),

Gene: Triste_33 Start: 25554, Stop: 25991, Start Num: 11

Candidate Starts for Triste_33:

(Start: 11 @25554 has 93 MA's), (15, 25626), (20, 25707), (24, 25788), (26, 25833), (30, 25884), (36, 25923), (38, 25965), (39, 25974),

Gene: Triumph_35 Start: 26118, Stop: 26555, Start Num: 11

Candidate Starts for Triumph_35:

(Start: 11 @26118 has 93 MA's), (20, 26271), (22, 26319), (26, 26394), (36, 26487),

Gene: TrvxScott_33 Start: 26419, Stop: 26856, Start Num: 11

Candidate Starts for TrvxScott_33:

(Start: 11 @26419 has 93 MA's), (15, 26491), (22, 26620), (26, 26695), (28, 26710), (30, 26746), (34, 26773), (35, 26785),

Gene: TuanPN_32 Start: 25494, Stop: 25931, Start Num: 11

Candidate Starts for TuanPN_32:

(Start: 11 @25494 has 93 MA's), (15, 25566), (20, 25647), (24, 25728), (26, 25773), (36, 25863), (38, 25905), (39, 25914),

Gene: Unstoppable_33 Start: 25186, Stop: 25623, Start Num: 11

Candidate Starts for Unstoppable_33:

(Start: 11 @25186 has 93 MA's), (20, 25339), (21, 25357), (24, 25420), (26, 25465), (30, 25516), (36, 25555), (38, 25597), (39, 25606),

Gene: Urza_35 Start: 26211, Stop: 26648, Start Num: 11

Candidate Starts for Urza_35:

(2, 25932), (Start: 11 @26211 has 93 MA's), (13, 26226), (19, 26352), (22, 26412), (26, 26487), (37, 26610),

Gene: Vanseggelen_39 Start: 26727, Stop: 27161, Start Num: 11

Candidate Starts for Vanseggelen_39:

(Start: 11 @26727 has 93 MA's), (13, 26742), (14, 26790), (26, 27003), (30, 27054),

Gene: Verabelle_37 Start: 27114, Stop: 27545, Start Num: 11

Candidate Starts for Verabelle_37:

(Start: 11 @27114 has 93 MA's), (13, 27126), (26, 27387), (30, 27438),

Gene: Verse_34 Start: 27871, Stop: 28305, Start Num: 11

Candidate Starts for Verse_34:

(Start: 11 @27871 has 93 MA's), (13, 27886), (14, 27934), (20, 28024), (24, 28102), (26, 28147), (30, 28198),

Gene: VieEnRose_35 Start: 26282, Stop: 26719, Start Num: 11

Candidate Starts for VieEnRose_35:

(2, 26006), (Start: 11 @26282 has 93 MA's), (13, 26297), (19, 26423), (22, 26483), (26, 26558), (37, 26681),

Gene: Werner_33 Start: 25564, Stop: 26001, Start Num: 11

Candidate Starts for Werner_33:

(Start: 11 @25564 has 93 MA's), (15, 25636), (20, 25717), (26, 25843), (30, 25894), (36, 25933), (38, 25975), (39, 25984),

Gene: Whatever_33 Start: 25564, Stop: 26001, Start Num: 11

Candidate Starts for Whatever_33:

(Start: 11 @25564 has 93 MA's), (15, 25636), (20, 25717), (24, 25798), (26, 25843), (30, 25894), (36, 25933), (38, 25975), (39, 25984),

Gene: Wizzo_34 Start: 22762, Stop: 22298, Start Num: 12

Candidate Starts for Wizzo_34:

(Start: 12 @22762 has 44 MA's), (23, 22534), (25, 22504), (29, 22447), (31, 22417),

Gene: Yasdnii_33 Start: 25613, Stop: 26050, Start Num: 11

Candidate Starts for Yasdnii_33:

(6, 25508), (Start: 11 @25613 has 93 MA's), (15, 25685), (20, 25766), (24, 25847), (26, 25892), (36, 25982), (38, 26024), (39, 26033),

Gene: Yosif_36 Start: 27669, Stop: 28103, Start Num: 12

Candidate Starts for Yosif_36:

(9, 27615), (Start: 12 @27669 has 44 MA's), (24, 27897), (26, 27942), (38, 28077), (39, 28086),

Gene: Zainub_40 Start: 26763, Stop: 27200, Start Num: 11

Candidate Starts for Zainub_40:

(10, 26733), (Start: 11 @26763 has 93 MA's), (15, 26835), (20, 26916), (26, 27039), (30, 27090), (35, 27129), (38, 27174),

Gene: Zemlya_35 Start: 26104, Stop: 26541, Start Num: 11

Candidate Starts for Zemlya_35:

(6, 25999), (Start: 11 @26104 has 93 MA's), (20, 26257), (21, 26275), (24, 26338), (26, 26383), (38, 26515), (39, 26524),

Gene: phiCAM_33 Start: 29004, Stop: 29423, Start Num: 13

Candidate Starts for phiCAM_33:

(Start: 11 @28992 has 93 MA's), (13, 29004), (20, 29142), (26, 29265), (37, 29385),

Gene: phiHau3_35 Start: 25683, Stop: 26120, Start Num: 11

Candidate Starts for phiHau3_35:

(Start: 11 @25683 has 93 MA's), (17, 25773), (26, 25959), (30, 26010), (34, 26037), (38, 26094),