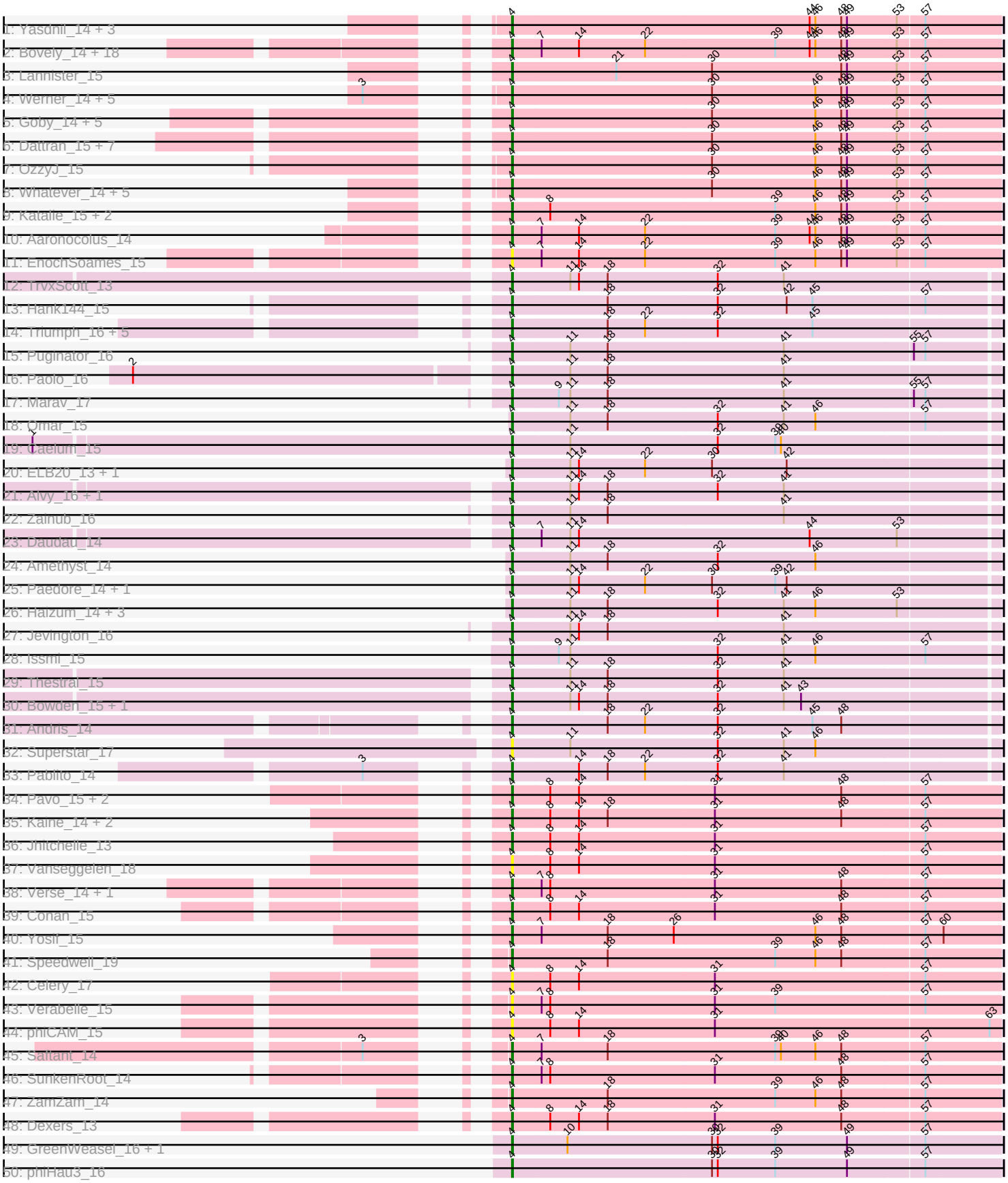
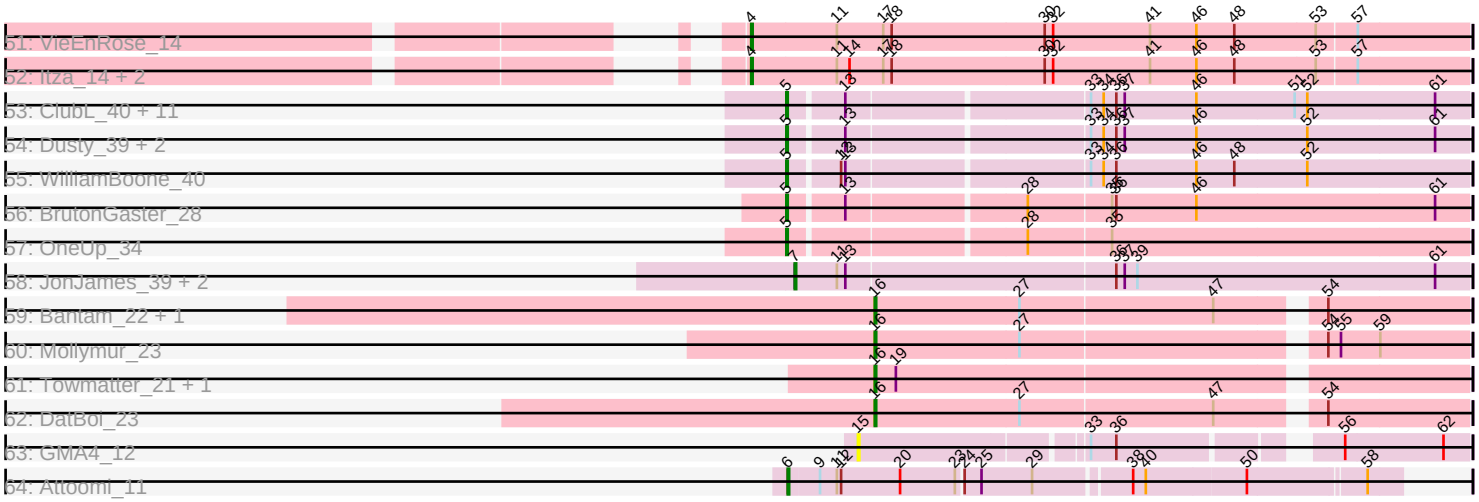
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1: Yasuhil_14 + 3
2: Bovely_14 + 18
3: Lannister_15
4: Werner_14 + 5
5: Goby_14 + 5
6: Dattran_15 + 7
7: OzzyJ_15
8: Whatever_14 + 5
9: Katalie_15 + 2
10: Aaronocolus_14
11: EnochSoames_15
12: TrvxScott_13
13: Hank144_15
14: Triumph_16 + 5
15: Puginator_16
16: Paolo_16
17: Marav_17
18: Omar_15
19: Caelum_15
20: ELB20_13 + 1
21: Alvy_16 + 1
22: Zainub_16
23: Daudau_14
24: Amethyst_14
25: Paedore_14 + 1
26: Haizum_14 + 3
27: Jevington_16
28: Issmi_15
29: Thestral_15
30: Bowden_15 + 1
31: Andris_14
32: Superstar_17
33: Pablito_14
34: Pavo_15 + 2
35: Kaine_14 + 2
36: Jnitchelle_13
37: Vanseggelen_18
38: Verse_14 + 1
39: Conan_15
40: Yosif_15
41: Speedwell_19
42: Celery_17
43: Verabelle_15
44: phiCAM_15
45: Saffant_14
46: SunkenRoot_14
47: ZamZam_14
48: Dexers_13
49: GreenWeasel_16 + 1
50: phiHau3_16

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51: VieEnRose_14
52: Itza_14 + 2
53: ClubL_40 + 11
54: Dusty_39 + 2
55: WilliamBoone_40
56: BrutonGaster_28
57: OneUp_34
58: JonJames_39 + 2
59: Bantam_22 + 1
60: Mollymur_23
61: Towmatter_21 + 1
62: DatBoi_23
63: GMA4_12
64: Attoomi_11

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 347353 Report

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

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 347353 has 146 members, 8 are drafts.

Phages represented in each track:
• Track 1 : Yasdnil_14, Maneekul_14, TuanPN_14, Ejemplo_14
• Track 2 : Bovely_14, Esperer_14, SunsetPointe_14, Izzy_15, Indigo_14, BryanRecycles_15, Oliynyk_15, Rusticus_15, Nerdos_14, Eddasa_15, Ozzie_14, Caliburn_14, Hydra_16, Leviticus_14, Unstoppable_14, Legacy_14, BeardedLady_15, Phettuccine_14, Jash_15
• Track 3 : Lannister_15
• Track 4 : Werner_14, Hippo_14, Snorlax_14, BarryBee_16, Emaanora_16, Dwayne_14
• Track 5 : Goby_14, Godpower_15, Sujidade_15, Lika_14, Danzina_15, Toma_14
• Track 6 : Dattran_15, Brataylor_15, Nanodon_16, Zemlya_15, Nabi_14, Lorelei_14, Rana_14, Celeste_14
• Track 7 : OzzyJ_15
• Track 8 : Whatever_14, SarahRose_14, TagePhighter_15, Chucky_14, Asten_14, Triste_14
• Track 9 : Katalie_15, RedBear_16, South40_15
• Track 10 : Aaronocolus_14
• Track 11 : EnochSoames_15
• Track 12 : TrvxScott_13
• Track 13 : Hank144_15
• Track 14 : Triumph_16, GirlDinner_14, Janus_15, Axiom_15, Animus_15, SqueakyClean_15
• Track 15 : Puginator_16
• Track 16 : Paolo_16
• Track 17 : Marav_17
• Track 18 : Omar_15
• Track 19 : Caelum_15
• Track 20 : ELB20_13, R4_14
• Track 21 : Alvy_16, BartholomewSD_16
• Track 22 : Zainub_16
• Track 23 : Daudau_14
• Track 24 : Amethyst_14
• Track 25 : Paedore_14, Loofah_15
• Track 26 : Haizum_14, Nishikigoi_14, Diane_14, Tefunt_14

• Track 27 : Jevington_16
• Track 28 : Issmi_15
• Track 29 : Thestral_15
• Track 30 : Bowden_15, TinaBelcher_14
• Track 31 : Andris_14
• Track 32 : Superstar_17
• Track 33 : Pablito_14
• Track 34 : Pavo_15, ElGato_15, Provolone_15
• Track 35 : Kaine_14, Alsaber_15, Sudan_14
• Track 36 : Jhitchelle_13
• Track 37 : Vanseggelen_18
• Track 38 : Verse_14, Amela_14
• Track 39 : Conan_15
• Track 40 : Yosif_15
• Track 41 : Speedwell_19
• Track 42 : Celery_17
• Track 43 : Verabelle_15
• Track 44 : phiCAM_15
• Track 45 : Saftant_14
• Track 46 : SunkenRoot_14
• Track 47 : ZamZam_14
• Track 48 : Dexers_13
• Track 49 : GreenWeasel_16, BroPlease_15
• Track 50 : phiHau3_16
• Track 51 : VieEnRose_14
• Track 52 : Itza_14, Celia_14, Urza_14
• Track 53 : ClubL_40, Geeche_39, Miskis_38, Lozinak_40, Engineer_41, Toniann_40, Bachita_42, Smoothie_41, Cucurbita_42, Aphelion_40, Norvs_41, PhinkBoden_40
• Track 54 : Dusty_39, Abscondus_39, Culver_40
• Track 55 : WilliamBoone_40
• Track 56 : BrutonGaster_28
• Track 57 : OneUp_34
• Track 58 : JonJames_39, Cardigan_38, Yvonnetastic_37
• Track 59 : Bantam_22, SpeedDemon_230
• Track 60 : Mollymur_23
• Track 61 : Towmatter_21, Daredevil_22
• Track 62 : DatBoi_23
• Track 63 : GMA4_12
• Track 64 : Attoomi_11

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

The start number called the most often in the published annotations is 4, it was called in 111 of the 138 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Aaronocolus_14, Alsaber_15, Alvy_16, Amela_14, Amethyst_14, Andris_14, Animus_15, Asten_14, Axiom_15, BarryBee_16, BartholomewSD_16, BeardedLady_15, Bovely_14, Bowden_15, Brataylor_15, BroPlease_15,

BryanRecycles_15, Caelum_15, Caliburn_14, Celery_17, Celeste_14, Celia_14, Chucky_14, Conan_15, Danzina_15, Dattran_15, Daudau_14, Dexers_13, Diane_14, Dwayne_14, ELB20_13, Eddasa_15, Ejemplo_14, ElGato_15, Emaanora_16, EnochSoames_15, Esperer_14, GirlDinner_14, Goby_14, Godpower_15, GreenWeasel_16, Haizum_14, Hank144_15, Hippo_14, Hydra_16, Indigo_14, Issmi_15, Itza_14, Izzy_15, Janus_15, Jash_15, Jevington_16, Jhitchelle_13, Kaine_14, Katalie_15, Lannister_15, Legacy_14, Leviticus_14, Lika_14, Loofah_15, Lorelei_14, Maneekul_14, Marav_17, Nabi_14, Nanodon_16, Nerdos_14, Nishikigoi_14, Oliynyk_15, Omar_15, Ozzie_14, OzzyJ_15, Pablito_14, Paedore_14, Paolo_16, Pavo_15, Phettuccine_14, Provolone_15, Puginator_16, R4_14, Rana_14, RedBear_16, Rusticus_15, Saftant_14, SarahRose_14, Snorlax_14, South40_15, Speedwell_19, SqueakyClean_15, Sudan_14, Sujidade_15, SunkenRoot_14, SunsetPointe_14, Superstar_17, TagePhighter_15, Tefunt_14, Thestral_15, TinaBelcher_14, Toma_14, Triste_14, Triumph_16, TrvxScott_13, TuanPN_14, Unstoppable_14, Urza_14, Vanseggelen_18, Verabelle_15, Verse_14, VieEnRose_14, Werner_14, Whatever_14, Yasdnil_14, Yosif_15, Zainub_16, ZamZam_14, Zemlya_15, phiCAM_15, phiHau3_16,

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

Genes that do not have the "Most Annotated" start:
• Abscondus_39, Aphelion_40, Attoomi_11, Bachita_42, Bantam_22, BrutonGaster_28, Cardigan_38, ClubL_40, Cucurbita_42, Culver_40, Daredevil_22, DatBoi_23, Dusty_39, Engineer_41, GMA4_12, Geeche_39, JonJames_39, Lozinak_40, Miskis_38, Mollymur_23, Norvs_41, OneUp_34, PhinkBoden_40, Smoothie_41, SpeedDemon_230, Toniann_40, Towmatter_21, WilliamBoone_40, Yvonnetastic_37,

Summary by start number:

Start 4:
• Found in 117 of 146 (80.1%) of genes in pham
• Manual Annotations of this start: 111 of 138
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Aaronocolus_14 (BD1), Alsaber_15 (BD3), Alvy_16 (BD2), Amela_14 (BD3), Amethyst_14 (BD2), Andris_14 (BD2), Animus_15 (BD2), Asten_14 (BD1), Axiom_15 (BD2), BarryBee_16 (BD1), BartholomewSD_16 (BD2), BeardedLady_15 (BD1), Bovely_14 (BD1), Bowden_15 (BD2), Brataylor_15 (BD1), BroPlease_15 (BD4), BryanRecycles_15 (BD1), Caelum_15 (BD2), Caliburn_14 (BD1), Celery_17 (BD3), Celeste_14 (BD1), Celia_14 (BD6), Chucky_14 (BD1), Conan_15 (BD3), Danzina_15 (BD1), Dattran_15 (BD1), Daudau_14 (BD2), Dexers_13 (BD3), Diane_14 (BD2), Dwayne_14 (BD1), ELB20_13 (BD2), Eddasa_15 (BD1), Ejemplo_14 (BD1), ElGato_15 (BD3), Emaanora_16 (BD1), EnochSoames_15 (BD1), Esperer_14 (BD1), GirlDinner_14 (BD2), Goby_14 (BD1), Godpower_15 (BD1), GreenWeasel_16 (BD4), Haizum_14 (BD2), Hank144_15 (BD2), Hippo_14 (BD1), Hydra_16 (BD1), Indigo_14 (BD1), Issmi_15 (BD2), Itza_14 (BD6), Izzy_15 (BD1), Janus_15 (BD2), Jash_15 (BD1), Jevington_16 (BD2), Jhitchelle_13 (BD3), Kaine_14 (BD3), Katalie_15 (BD1), Lannister_15 (BD1), Legacy_14 (BD1), Leviticus_14 (BD1), Lika_14 (BD1), Loofah_15 (BD2), Lorelei_14 (BD1), Maneekul_14 (BD1), Marav_17 (BD2), Nabi_14 (BD1), Nanodon_16 (BD1), Nerdos_14 (BD1), Nishikigoi_14 (BD2), Oliynyk_15 (BD1), Omar_15 (BD2), Ozzie_14 (BD1), OzzyJ_15 (BD1), Pablito_14 (BD2), Paedore_14 (BD2), Paolo_16 (BD2),

Pavo_15 (BD3), Phettuccine_14 (BD1), Provolone_15 (BD3), Puginator_16 (BD2), R4_14 (BD2), Rana_14 (BD1), RedBear_16 (BD1), Rusticus_15 (BD1), Saftant_14 (BD3), SarahRose_14 (BD1), Snorlax_14 (BD1), South40_15 (BD1), Speedwell_19 (BD3), SqueakyClean_15 (BD2), Sudan_14 (BD3), Sujidade_15 (BD1), SunkenRoot_14 (BD3), SunsetPointe_14 (BD1), Superstar_17 (BD2), TagePhighter_15 (BD1), Tefunt_14 (BD2), Thestral_15 (BD2), TinaBelcher_14 (BD2), Toma_14 (BD1), Triste_14 (BD1), Triumph_16 (BD2), TrvxScott_13 (BD2), TuanPN_14 (BD1), Unstoppable_14 (BD1), Urza_14 (BD6), Vanseggelen_18 (BD3), Verabelle_15 (BD3), Verse_14 (BD3), VieEnRose_14 (BD6), Werner_14 (BD1), Whatever_14 (BD1), Yasdnil_14 (BD1), Yosif_15 (BD3), Zainub_16 (BD2), ZamZam_14 (BD3), Zemlya_15 (BD1), phiCAM_15 (BD3), phiHau3_16 (BD4),

Start 5:
• Found in 18 of 146 (12.3%) of genes in pham
• Manual Annotations of this start: 17 of 138
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Abscondus_39 (CQ1), Aphelion_40 (CQ1), Bachita_42 (CQ1), BrutonGaster_28 (CQ2), ClubL_40 (CQ1), Cucurbita_42 (CQ1), Culver_40 (CQ1), Dusty_39 (CQ1), Engineer_41 (CQ1), Geeche_39 (CQ1), Lozinak_40 (CQ1), Miskis_38 (CQ1), Norvs_41 (CQ1), OneUp_34 (CQ2), PhinkBoden_40 (CQ1), Smoothie_41 (CQ1), Toniann_40 (CQ1), WilliamBoone_40 (CQ1),

Start 6:
• Found in 1 of 146 (0.7%) of genes in pham
• Manual Annotations of this start: 1 of 138
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Attoomi_11 (singleton),

Start 7:
• Found in 31 of 146 (21.2%) of genes in pham
• Manual Annotations of this start: 3 of 138
• Called 9.7% of time when present
• Phage (with cluster) where this start called: Cardigan_38 (DD), JonJames_39 (DD), Yvonnetastic_37 (DD),

Start 15:
• Found in 1 of 146 (0.7%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: GMA4_12 (singleton),

Start 16:
• Found in 6 of 146 (4.1%) of genes in pham
• Manual Annotations of this start: 6 of 138
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bantam_22 (DL), Daredevil_22 (DL), DatBoi_23 (DL), Mollymur_23 (DL), SpeedDemon_230 (DL), Towmatter_21 (DL),

Summary by clusters:

There are 10 clusters represented in this pham: DL, DD, singleton, BD4, BD6, BD1, BD3, BD2, CQ2, CQ1,

Info for manual annotations of cluster BD1:
•Start number 4 was manually annotated 55 times for cluster BD1.

Info for manual annotations of cluster BD2:
•Start number 4 was manually annotated 33 times for cluster BD2.

Info for manual annotations of cluster BD3:
•Start number 4 was manually annotated 16 times for cluster BD3.

Info for manual annotations of cluster BD4:
•Start number 4 was manually annotated 3 times for cluster BD4.

Info for manual annotations of cluster BD6:
•Start number 4 was manually annotated 4 times for cluster BD6.

Info for manual annotations of cluster CQ1:
•Start number 5 was manually annotated 15 times for cluster CQ1.

Info for manual annotations of cluster CQ2:
•Start number 5 was manually annotated 2 times for cluster CQ2.

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

Info for manual annotations of cluster DL:
•Start number 16 was manually annotated 6 times for cluster DL.

Gene Information:

Gene: Aaronocolus_14 Start: 9577, Stop: 10080, Start Num: 4
Candidate Starts for Aaronocolus_14:
(Start: 4 @9577 has 111 MA's), (Start: 7 @9607 has 3 MA's), (14, 9646), (22, 9715), (39, 9850), (44, 9886), (46, 9892), (48, 9919), (49, 9925), (53, 9976), (57, 10003),

Gene: Abscondus_39 Start: 16671, Stop: 17135, Start Num: 5
Candidate Starts for Abscondus_39:
(Start: 5 @16671 has 17 MA's), (13, 16707), (33, 16869), (34, 16878), (36, 16887), (37, 16893), (46, 16944), (52, 17022), (61, 17112),

Gene: Alsaber_15 Start: 9636, Stop: 10139, Start Num: 4
Candidate Starts for Alsaber_15:
(Start: 4 @9636 has 111 MA's), (8, 9675), (14, 9705), (18, 9735), (31, 9846), (48, 9978), (57, 10062),

Gene: Alvy_16 Start: 9584, Stop: 10081, Start Num: 4
Candidate Starts for Alvy_16:
(Start: 4 @9584 has 111 MA's), (11, 9644), (14, 9653), (18, 9683), (32, 9797), (41, 9866),

Gene: Amela_14 Start: 9742, Stop: 10245, Start Num: 4
Candidate Starts for Amela_14:

(Start: 4 @9742 has 111 MA's), (Start: 7 @9772 has 3 MA's), (8, 9781), (31, 9952), (48, 10084), (57, 10168),

Gene: Amethyst_14 Start: 9406, Stop: 9903, Start Num: 4
Candidate Starts for Amethyst_14:
(Start: 4 @9406 has 111 MA's), (11, 9466), (18, 9505), (32, 9619), (46, 9721),

Gene: Andris_14 Start: 9391, Stop: 9888, Start Num: 4
Candidate Starts for Andris_14:
(Start: 4 @9391 has 111 MA's), (18, 9490), (22, 9529), (32, 9604), (45, 9703), (48, 9733),

Gene: Animus_15 Start: 9744, Stop: 10241, Start Num: 4
Candidate Starts for Animus_15:
(Start: 4 @9744 has 111 MA's), (18, 9843), (22, 9882), (32, 9957), (45, 10056),

Gene: Aphelion_40 Start: 16940, Stop: 17404, Start Num: 5
Candidate Starts for Aphelion_40:
(Start: 5 @16940 has 17 MA's), (13, 16976), (33, 17138), (34, 17147), (36, 17156), (37, 17162), (46, 17213), (51, 17282), (52, 17291), (61, 17381),

Gene: Asten_14 Start: 9533, Stop: 10036, Start Num: 4
Candidate Starts for Asten_14:
(Start: 4 @9533 has 111 MA's), (30, 9740), (46, 9848), (48, 9875), (49, 9881), (53, 9932), (57, 9959),

Gene: Attoomi_11 Start: 7560, Stop: 7970, Start Num: 6
Candidate Starts for Attoomi_11:
(Start: 6 @7560 has 1 MA's), (9, 7581), (11, 7593), (12, 7596), (20, 7638), (23, 7677), (24, 7680), (25, 7692), (29, 7728), (38, 7791), (40, 7800), (50, 7869), (58, 7947),

Gene: Axiom_15 Start: 9429, Stop: 9926, Start Num: 4
Candidate Starts for Axiom_15:
(Start: 4 @9429 has 111 MA's), (18, 9528), (22, 9567), (32, 9642), (45, 9741),

Gene: Bachita_42 Start: 17373, Stop: 17837, Start Num: 5
Candidate Starts for Bachita_42:
(Start: 5 @17373 has 17 MA's), (13, 17409), (33, 17571), (34, 17580), (36, 17589), (37, 17595), (46, 17646), (51, 17715), (52, 17724), (61, 17814),

Gene: Bantam_22 Start: 14375, Stop: 14773, Start Num: 16
Candidate Starts for Bantam_22:
(Start: 16 @14375 has 6 MA's), (27, 14477), (47, 14612), (54, 14675),

Gene: BarryBee_16 Start: 9540, Stop: 10043, Start Num: 4
Candidate Starts for BarryBee_16:
(3, 9459), (Start: 4 @9540 has 111 MA's), (30, 9747), (46, 9855), (48, 9882), (49, 9888), (53, 9939), (57, 9966),

Gene: BartholomewSD_16 Start: 9584, Stop: 10081, Start Num: 4
Candidate Starts for BartholomewSD_16:
(Start: 4 @9584 has 111 MA's), (11, 9644), (14, 9653), (18, 9683), (32, 9797), (41, 9866),

Gene: BeardedLady_15 Start: 9824, Stop: 10327, Start Num: 4
Candidate Starts for BeardedLady_15:

(Start: 4 @9824 has 111 MA's), (Start: 7 @9854 has 3 MA's), (14, 9893), (22, 9962), (39, 10097), (44, 10133), (46, 10139), (48, 10166), (49, 10172), (53, 10223), (57, 10250),

Gene: Bovely_14 Start: 9583, Stop: 10086, Start Num: 4
Candidate Starts for Bovely_14:
(Start: 4 @9583 has 111 MA's), (Start: 7 @9613 has 3 MA's), (14, 9652), (22, 9721), (39, 9856), (44, 9892), (46, 9898), (48, 9925), (49, 9931), (53, 9982), (57, 10009),

Gene: Bowden_15 Start: 9501, Stop: 9998, Start Num: 4
Candidate Starts for Bowden_15:
(Start: 4 @9501 has 111 MA's), (11, 9561), (14, 9570), (18, 9600), (32, 9714), (41, 9783), (43, 9801),

Gene: Brataylor_15 Start: 9546, Stop: 10049, Start Num: 4
Candidate Starts for Brataylor_15:
(Start: 4 @9546 has 111 MA's), (30, 9753), (46, 9861), (48, 9888), (49, 9894), (53, 9945), (57, 9972),

Gene: BroPlease_15 Start: 9718, Stop: 10221, Start Num: 4
Candidate Starts for BroPlease_15:
(Start: 4 @9718 has 111 MA's), (10, 9775), (30, 9925), (32, 9931), (39, 9991), (49, 10066), (57, 10144),

Gene: BrutonGaster_28 Start: 13565, Stop: 14029, Start Num: 5
Candidate Starts for BrutonGaster_28:
(Start: 5 @13565 has 17 MA's), (13, 13601), (28, 13721), (35, 13778), (36, 13781), (46, 13838), (61, 14006),

Gene: BryanRecycles_15 Start: 9740, Stop: 10243, Start Num: 4
Candidate Starts for BryanRecycles_15:
(Start: 4 @9740 has 111 MA's), (Start: 7 @9770 has 3 MA's), (14, 9809), (22, 9878), (39, 10013), (44, 10049), (46, 10055), (48, 10082), (49, 10088), (53, 10139), (57, 10166),

Gene: Caelum_15 Start: 9377, Stop: 9874, Start Num: 4
Candidate Starts for Caelum_15:
(1, 8885), (Start: 4 @9377 has 111 MA's), (11, 9437), (32, 9590), (39, 9650), (40, 9656),

Gene: Caliburn_14 Start: 9557, Stop: 10060, Start Num: 4
Candidate Starts for Caliburn_14:
(Start: 4 @9557 has 111 MA's), (Start: 7 @9587 has 3 MA's), (14, 9626), (22, 9695), (39, 9830), (44, 9866), (46, 9872), (48, 9899), (49, 9905), (53, 9956), (57, 9983),

Gene: Cardigan_38 Start: 18553, Stop: 19023, Start Num: 7
Candidate Starts for Cardigan_38:
(Start: 7 @18553 has 3 MA's), (11, 18583), (13, 18589), (36, 18775), (37, 18781), (39, 18790), (61, 19000),

Gene: Celery_17 Start: 9591, Stop: 10094, Start Num: 4
Candidate Starts for Celery_17:
(Start: 4 @9591 has 111 MA's), (8, 9630), (14, 9660), (31, 9801), (57, 10017),

Gene: Celeste_14 Start: 9544, Stop: 10047, Start Num: 4
Candidate Starts for Celeste_14:
(Start: 4 @9544 has 111 MA's), (30, 9751), (46, 9859), (48, 9886), (49, 9892), (53, 9943), (57, 9970),

Gene: Celia_14 Start: 9861, Stop: 10364, Start Num: 4

Candidate Starts for Celia_14:
(Start: 4 @9861 has 111 MA's), (11, 9921), (14, 9930), (17, 9954), (18, 9960), (30, 10068), (32, 10074), (41, 10143), (46, 10176), (48, 10203), (53, 10260), (57, 10287),

Gene: Chucky_14 Start: 9541, Stop: 10044, Start Num: 4
Candidate Starts for Chucky_14:
(Start: 4 @9541 has 111 MA's), (30, 9748), (46, 9856), (48, 9883), (49, 9889), (53, 9940), (57, 9967),

Gene: ClubL_40 Start: 16862, Stop: 17326, Start Num: 5
Candidate Starts for ClubL_40:
(Start: 5 @16862 has 17 MA's), (13, 16898), (33, 17060), (34, 17069), (36, 17078), (37, 17084), (46, 17135), (51, 17204), (52, 17213), (61, 17303),

Gene: Conan_15 Start: 9343, Stop: 9846, Start Num: 4
Candidate Starts for Conan_15:
(Start: 4 @9343 has 111 MA's), (8, 9382), (14, 9412), (31, 9553), (48, 9685), (57, 9769),

Gene: Cucurbita_42 Start: 18232, Stop: 18696, Start Num: 5
Candidate Starts for Cucurbita_42:
(Start: 5 @18232 has 17 MA's), (13, 18268), (33, 18430), (34, 18439), (36, 18448), (37, 18454), (46, 18505), (51, 18574), (52, 18583), (61, 18673),

Gene: Culver_40 Start: 16671, Stop: 17135, Start Num: 5
Candidate Starts for Culver_40:
(Start: 5 @16671 has 17 MA's), (13, 16707), (33, 16869), (34, 16878), (36, 16887), (37, 16893), (46, 16944), (52, 17022), (61, 17112),

Gene: Danzina_15 Start: 9748, Stop: 10251, Start Num: 4
Candidate Starts for Danzina_15:
(Start: 4 @9748 has 111 MA's), (30, 9955), (46, 10063), (48, 10090), (49, 10096), (53, 10147), (57, 10174),

Gene: Daredevil_22 Start: 13210, Stop: 13608, Start Num: 16
Candidate Starts for Daredevil_22:
(Start: 16 @13210 has 6 MA's), (19, 13225),

Gene: DatBoi_23 Start: 15166, Stop: 15564, Start Num: 16
Candidate Starts for DatBoi_23:
(Start: 16 @15166 has 6 MA's), (27, 15268), (47, 15403), (54, 15466),

Gene: Dattran_15 Start: 9543, Stop: 10046, Start Num: 4
Candidate Starts for Dattran_15:
(Start: 4 @9543 has 111 MA's), (30, 9750), (46, 9858), (48, 9885), (49, 9891), (53, 9942), (57, 9969),

Gene: Daudau_14 Start: 9488, Stop: 9985, Start Num: 4
Candidate Starts for Daudau_14:
(Start: 4 @9488 has 111 MA's), (Start: 7 @9518 has 3 MA's), (11, 9548), (14, 9557), (44, 9797), (53, 9887),

Gene: Dexers_13 Start: 9339, Stop: 9842, Start Num: 4
Candidate Starts for Dexers_13:
(Start: 4 @9339 has 111 MA's), (8, 9378), (14, 9408), (18, 9438), (31, 9549), (48, 9681), (57, 9765),

Gene: Diane_14 Start: 9405, Stop: 9902, Start Num: 4
Candidate Starts for Diane_14:
(Start: 4 @9405 has 111 MA's), (11, 9465), (18, 9504), (32, 9618), (41, 9687), (46, 9720), (53, 9804),

Gene: Dusty_39 Start: 16671, Stop: 17135, Start Num: 5
Candidate Starts for Dusty_39:
(Start: 5 @16671 has 17 MA's), (13, 16707), (33, 16869), (34, 16878), (36, 16887), (37, 16893), (46, 16944), (52, 17022), (61, 17112),

Gene: Dwayne_14 Start: 9540, Stop: 10043, Start Num: 4
Candidate Starts for Dwayne_14:
(3, 9459), (Start: 4 @9540 has 111 MA's), (30, 9747), (46, 9855), (48, 9882), (49, 9888), (53, 9939), (57, 9966),

Gene: ELB20_13 Start: 9516, Stop: 10013, Start Num: 4
Candidate Starts for ELB20_13:
(Start: 4 @9516 has 111 MA's), (11, 9576), (14, 9585), (22, 9654), (30, 9723), (42, 9801),

Gene: Eddasa_15 Start: 9740, Stop: 10243, Start Num: 4
Candidate Starts for Eddasa_15:
(Start: 4 @9740 has 111 MA's), (Start: 7 @9770 has 3 MA's), (14, 9809), (22, 9878), (39, 10013), (44, 10049), (46, 10055), (48, 10082), (49, 10088), (53, 10139), (57, 10166),

Gene: Ejemplo_14 Start: 9543, Stop: 10046, Start Num: 4
Candidate Starts for Ejemplo_14:
(Start: 4 @9543 has 111 MA's), (44, 9852), (46, 9858), (48, 9885), (49, 9891), (53, 9942), (57, 9969),

Gene: ElGato_15 Start: 9346, Stop: 9849, Start Num: 4
Candidate Starts for ElGato_15:
(Start: 4 @9346 has 111 MA's), (8, 9385), (14, 9415), (31, 9556), (48, 9688), (57, 9772),

Gene: Emaanora_16 Start: 9540, Stop: 10043, Start Num: 4
Candidate Starts for Emaanora_16:
(3, 9459), (Start: 4 @9540 has 111 MA's), (30, 9747), (46, 9855), (48, 9882), (49, 9888), (53, 9939), (57, 9966),

Gene: Engineer_41 Start: 16888, Stop: 17352, Start Num: 5
Candidate Starts for Engineer_41:
(Start: 5 @16888 has 17 MA's), (13, 16924), (33, 17086), (34, 17095), (36, 17104), (37, 17110), (46, 17161), (51, 17230), (52, 17239), (61, 17329),

Gene: EnochSoames_15 Start: 9736, Stop: 10239, Start Num: 4
Candidate Starts for EnochSoames_15:
(Start: 4 @9736 has 111 MA's), (Start: 7 @9766 has 3 MA's), (14, 9805), (22, 9874), (39, 10009), (46, 10051), (48, 10078), (49, 10084), (53, 10135), (57, 10162),

Gene: Esperer_14 Start: 9577, Stop: 10080, Start Num: 4
Candidate Starts for Esperer_14:
(Start: 4 @9577 has 111 MA's), (Start: 7 @9607 has 3 MA's), (14, 9646), (22, 9715), (39, 9850), (44, 9886), (46, 9892), (48, 9919), (49, 9925), (53, 9976), (57, 10003),

Gene: GMA4_12 Start: 8487, Stop: 8873, Start Num: 15
Candidate Starts for GMA4_12:

(15, 8487), (33, 8637), (36, 8655), (56, 8787), (62, 8856),

Gene: Geeche_39 Start: 16762, Stop: 17226, Start Num: 5
Candidate Starts for Geeche_39:
(Start: 5 @16762 has 17 MA's), (13, 16798), (33, 16960), (34, 16969), (36, 16978), (37, 16984), (46, 17035), (51, 17104), (52, 17113), (61, 17203),

Gene: GirlDinner_14 Start: 9406, Stop: 9903, Start Num: 4
Candidate Starts for GirlDinner_14:
(Start: 4 @9406 has 111 MA's), (18, 9505), (22, 9544), (32, 9619), (45, 9718),

Gene: Goby_14 Start: 9546, Stop: 10049, Start Num: 4
Candidate Starts for Goby_14:
(Start: 4 @9546 has 111 MA's), (30, 9753), (46, 9861), (48, 9888), (49, 9894), (53, 9945), (57, 9972),

Gene: Godpower_15 Start: 9561, Stop: 10064, Start Num: 4
Candidate Starts for Godpower_15:
(Start: 4 @9561 has 111 MA's), (30, 9768), (46, 9876), (48, 9903), (49, 9909), (53, 9960), (57, 9987),

Gene: GreenWeasel_16 Start: 9727, Stop: 10230, Start Num: 4
Candidate Starts for GreenWeasel_16:
(Start: 4 @9727 has 111 MA's), (10, 9784), (30, 9934), (32, 9940), (39, 10000), (49, 10075), (57, 10153),

Gene: Haizum_14 Start: 9435, Stop: 9932, Start Num: 4
Candidate Starts for Haizum_14:
(Start: 4 @9435 has 111 MA's), (11, 9495), (18, 9534), (32, 9648), (41, 9717), (46, 9750), (53, 9834),

Gene: Hank144_15 Start: 9675, Stop: 10175, Start Num: 4
Candidate Starts for Hank144_15:
(Start: 4 @9675 has 111 MA's), (18, 9774), (32, 9888), (42, 9960), (45, 9987), (57, 10101),

Gene: Hippo_14 Start: 9540, Stop: 10043, Start Num: 4
Candidate Starts for Hippo_14:
(3, 9459), (Start: 4 @9540 has 111 MA's), (30, 9747), (46, 9855), (48, 9882), (49, 9888), (53, 9939), (57, 9966),

Gene: Hydra_16 Start: 10105, Stop: 10608, Start Num: 4
Candidate Starts for Hydra_16:
(Start: 4 @10105 has 111 MA's), (Start: 7 @10135 has 3 MA's), (14, 10174), (22, 10243), (39, 10378), (44, 10414), (46, 10420), (48, 10447), (49, 10453), (53, 10504), (57, 10531),

Gene: Indigo_14 Start: 9577, Stop: 10080, Start Num: 4
Candidate Starts for Indigo_14:
(Start: 4 @9577 has 111 MA's), (Start: 7 @9607 has 3 MA's), (14, 9646), (22, 9715), (39, 9850), (44, 9886), (46, 9892), (48, 9919), (49, 9925), (53, 9976), (57, 10003),

Gene: Issmi_15 Start: 9706, Stop: 10203, Start Num: 4
Candidate Starts for Issmi_15:
(Start: 4 @9706 has 111 MA's), (9, 9754), (11, 9766), (32, 9919), (41, 9988), (46, 10021), (57, 10132),

Gene: Itza_14 Start: 9784, Stop: 10287, Start Num: 4
Candidate Starts for Itza_14:

(Start: 4 @9784 has 111 MA's), (11, 9844), (14, 9853), (17, 9877), (18, 9883), (30, 9991), (32, 9997), (41, 10066), (46, 10099), (48, 10126), (53, 10183), (57, 10210),

Gene: Izzy_15 Start: 9787, Stop: 10290, Start Num: 4
Candidate Starts for Izzy_15:
(Start: 4 @9787 has 111 MA's), (Start: 7 @9817 has 3 MA's), (14, 9856), (22, 9925), (39, 10060), (44, 10096), (46, 10102), (48, 10129), (49, 10135), (53, 10186), (57, 10213),

Gene: Janus_15 Start: 9744, Stop: 10241, Start Num: 4
Candidate Starts for Janus_15:
(Start: 4 @9744 has 111 MA's), (18, 9843), (22, 9882), (32, 9957), (45, 10056),

Gene: Jash_15 Start: 9740, Stop: 10243, Start Num: 4
Candidate Starts for Jash_15:
(Start: 4 @9740 has 111 MA's), (Start: 7 @9770 has 3 MA's), (14, 9809), (22, 9878), (39, 10013), (44, 10049), (46, 10055), (48, 10082), (49, 10088), (53, 10139), (57, 10166),

Gene: Jevington_16 Start: 10032, Stop: 10529, Start Num: 4
Candidate Starts for Jevington_16:
(Start: 4 @10032 has 111 MA's), (11, 10092), (14, 10101), (18, 10131), (41, 10314),

Gene: Jhitchelle_13 Start: 9274, Stop: 9777, Start Num: 4
Candidate Starts for Jhitchelle_13:
(Start: 4 @9274 has 111 MA's), (8, 9313), (14, 9343), (31, 9484), (57, 9700),

Gene: JonJames_39 Start: 20768, Stop: 21238, Start Num: 7
Candidate Starts for JonJames_39:
(Start: 7 @20768 has 3 MA's), (11, 20798), (13, 20804), (36, 20990), (37, 20996), (39, 21005), (61, 21215),

Gene: Kaine_14 Start: 9339, Stop: 9842, Start Num: 4
Candidate Starts for Kaine_14:
(Start: 4 @9339 has 111 MA's), (8, 9378), (14, 9408), (18, 9438), (31, 9549), (48, 9681), (57, 9765),

Gene: Katalie_15 Start: 9816, Stop: 10319, Start Num: 4
Candidate Starts for Katalie_15:
(Start: 4 @9816 has 111 MA's), (8, 9855), (39, 10089), (46, 10131), (48, 10158), (49, 10164), (53, 10215), (57, 10242),

Gene: Lannister_15 Start: 9564, Stop: 10067, Start Num: 4
Candidate Starts for Lannister_15:
(Start: 4 @9564 has 111 MA's), (21, 9672), (30, 9771), (48, 9906), (49, 9912), (53, 9963), (57, 9990),

Gene: Legacy_14 Start: 9548, Stop: 10051, Start Num: 4
Candidate Starts for Legacy_14:
(Start: 4 @9548 has 111 MA's), (Start: 7 @9578 has 3 MA's), (14, 9617), (22, 9686), (39, 9821), (44, 9857), (46, 9863), (48, 9890), (49, 9896), (53, 9947), (57, 9974),

Gene: Leviticus_14 Start: 9577, Stop: 10080, Start Num: 4
Candidate Starts for Leviticus_14:
(Start: 4 @9577 has 111 MA's), (Start: 7 @9607 has 3 MA's), (14, 9646), (22, 9715), (39, 9850), (44, 9886), (46, 9892), (48, 9919), (49, 9925), (53, 9976), (57, 10003),

Gene: Lika_14 Start: 9562, Stop: 10065, Start Num: 4
Candidate Starts for Lika_14:
(Start: 4 @9562 has 111 MA's), (30, 9769), (46, 9877), (48, 9904), (49, 9910), (53, 9961), (57, 9988),

Gene: Loofah_15 Start: 9547, Stop: 10044, Start Num: 4
Candidate Starts for Loofah_15:
(Start: 4 @9547 has 111 MA's), (11, 9607), (14, 9616), (22, 9685), (30, 9754), (39, 9820), (42, 9832),

Gene: Lorelei_14 Start: 9534, Stop: 10037, Start Num: 4
Candidate Starts for Lorelei_14:
(Start: 4 @9534 has 111 MA's), (30, 9741), (46, 9849), (48, 9876), (49, 9882), (53, 9933), (57, 9960),

Gene: Lozinak_40 Start: 16943, Stop: 17407, Start Num: 5
Candidate Starts for Lozinak_40:
(Start: 5 @16943 has 17 MA's), (13, 16979), (33, 17141), (34, 17150), (36, 17159), (37, 17165), (46, 17216), (51, 17285), (52, 17294), (61, 17384),

Gene: Maneekul_14 Start: 9542, Stop: 10045, Start Num: 4
Candidate Starts for Maneekul_14:
(Start: 4 @9542 has 111 MA's), (44, 9851), (46, 9857), (48, 9884), (49, 9890), (53, 9941), (57, 9968),

Gene: Marav_17 Start: 10382, Stop: 10879, Start Num: 4
Candidate Starts for Marav_17:
(Start: 4 @10382 has 111 MA's), (9, 10430), (11, 10442), (18, 10481), (41, 10664), (55, 10796), (57, 10808),

Gene: Miskis_38 Start: 16706, Stop: 17170, Start Num: 5
Candidate Starts for Miskis_38:
(Start: 5 @16706 has 17 MA's), (13, 16742), (33, 16904), (34, 16913), (36, 16922), (37, 16928), (46, 16979), (51, 17048), (52, 17057), (61, 17147),

Gene: Mollymur_23 Start: 15213, Stop: 15611, Start Num: 16
Candidate Starts for Mollymur_23:
(Start: 16 @15213 has 6 MA's), (27, 15315), (54, 15513), (55, 15522), (59, 15549),

Gene: Nabi_14 Start: 9534, Stop: 10037, Start Num: 4
Candidate Starts for Nabi_14:
(Start: 4 @9534 has 111 MA's), (30, 9741), (46, 9849), (48, 9876), (49, 9882), (53, 9933), (57, 9960),

Gene: Nanodon_16 Start: 9736, Stop: 10239, Start Num: 4
Candidate Starts for Nanodon_16:
(Start: 4 @9736 has 111 MA's), (30, 9943), (46, 10051), (48, 10078), (49, 10084), (53, 10135), (57, 10162),

Gene: Nerdos_14 Start: 9577, Stop: 10080, Start Num: 4
Candidate Starts for Nerdos_14:
(Start: 4 @9577 has 111 MA's), (Start: 7 @9607 has 3 MA's), (14, 9646), (22, 9715), (39, 9850), (44, 9886), (46, 9892), (48, 9919), (49, 9925), (53, 9976), (57, 10003),

Gene: Nishikigoi_14 Start: 9435, Stop: 9932, Start Num: 4
Candidate Starts for Nishikigoi_14:
(Start: 4 @9435 has 111 MA's), (11, 9495), (18, 9534), (32, 9648), (41, 9717), (46, 9750), (53, 9834),

Gene: Norvs_41 Start: 16945, Stop: 17409, Start Num: 5
Candidate Starts for Norvs_41:
(Start: 5 @16945 has 17 MA's), (13, 16981), (33, 17143), (34, 17152), (36, 17161), (37, 17167), (46, 17218), (51, 17287), (52, 17296), (61, 17386),

Gene: Oliynyk_15 Start: 9740, Stop: 10243, Start Num: 4
Candidate Starts for Oliynyk_15:
(Start: 4 @9740 has 111 MA's), (Start: 7 @9770 has 3 MA's), (14, 9809), (22, 9878), (39, 10013), (44, 10049), (46, 10055), (48, 10082), (49, 10088), (53, 10139), (57, 10166),

Gene: Omar_15 Start: 9669, Stop: 10166, Start Num: 4
Candidate Starts for Omar_15:
(Start: 4 @9669 has 111 MA's), (11, 9729), (18, 9768), (32, 9882), (41, 9951), (46, 9984), (57, 10095),

Gene: OneUp_34 Start: 14654, Stop: 15118, Start Num: 5
Candidate Starts for OneUp_34:
(Start: 5 @14654 has 17 MA's), (28, 14810), (35, 14867),

Gene: Ozzie_14 Start: 9557, Stop: 10060, Start Num: 4
Candidate Starts for Ozzie_14:
(Start: 4 @9557 has 111 MA's), (Start: 7 @9587 has 3 MA's), (14, 9626), (22, 9695), (39, 9830), (44, 9866), (46, 9872), (48, 9899), (49, 9905), (53, 9956), (57, 9983),

Gene: OzzyJ_15 Start: 9534, Stop: 10037, Start Num: 4
Candidate Starts for OzzyJ_15:
(Start: 4 @9534 has 111 MA's), (30, 9741), (46, 9849), (48, 9876), (49, 9882), (53, 9933), (57, 9960),

Gene: Pablito_14 Start: 9405, Stop: 9902, Start Num: 4
Candidate Starts for Pablito_14:
(3, 9321), (Start: 4 @9405 has 111 MA's), (14, 9474), (18, 9504), (22, 9543), (32, 9618), (41, 9687),

Gene: Paedore_14 Start: 9547, Stop: 10044, Start Num: 4
Candidate Starts for Paedore_14:
(Start: 4 @9547 has 111 MA's), (11, 9607), (14, 9616), (22, 9685), (30, 9754), (39, 9820), (42, 9832),

Gene: Paolo_16 Start: 10047, Stop: 10544, Start Num: 4
Candidate Starts for Paolo_16:
(2, 9681), (Start: 4 @10047 has 111 MA's), (11, 10107), (18, 10146), (41, 10329),

Gene: Pavo_15 Start: 9616, Stop: 10119, Start Num: 4
Candidate Starts for Pavo_15:
(Start: 4 @9616 has 111 MA's), (8, 9655), (14, 9685), (31, 9826), (48, 9958), (57, 10042),

Gene: Phettuccine_14 Start: 9577, Stop: 10080, Start Num: 4
Candidate Starts for Phettuccine_14:
(Start: 4 @9577 has 111 MA's), (Start: 7 @9607 has 3 MA's), (14, 9646), (22, 9715), (39, 9850), (44, 9886), (46, 9892), (48, 9919), (49, 9925), (53, 9976), (57, 10003),

Gene: PhinkBoden_40 Start: 17326, Stop: 17790, Start Num: 5
Candidate Starts for PhinkBoden_40:
(Start: 5 @17326 has 17 MA's), (13, 17362), (33, 17524), (34, 17533), (36, 17542), (37, 17548), (46, 17599), (51, 17668), (52, 17677), (61, 17767),

Gene: Provolone_15 Start: 9346, Stop: 9849, Start Num: 4
Candidate Starts for Provolone_15:
(Start: 4 @9346 has 111 MA's), (8, 9385), (14, 9415), (31, 9556), (48, 9688), (57, 9772),

Gene: Puginator_16 Start: 10005, Stop: 10502, Start Num: 4
Candidate Starts for Puginator_16:
(Start: 4 @10005 has 111 MA's), (11, 10065), (18, 10104), (41, 10287), (55, 10419), (57, 10431),

Gene: R4_14 Start: 9527, Stop: 10024, Start Num: 4
Candidate Starts for R4_14:
(Start: 4 @9527 has 111 MA's), (11, 9587), (14, 9596), (22, 9665), (30, 9734), (42, 9812),

Gene: Rana_14 Start: 9534, Stop: 10037, Start Num: 4
Candidate Starts for Rana_14:
(Start: 4 @9534 has 111 MA's), (30, 9741), (46, 9849), (48, 9876), (49, 9882), (53, 9933), (57, 9960),

Gene: RedBear_16 Start: 9816, Stop: 10319, Start Num: 4
Candidate Starts for RedBear_16:
(Start: 4 @9816 has 111 MA's), (8, 9855), (39, 10089), (46, 10131), (48, 10158), (49, 10164), (53, 10215), (57, 10242),

Gene: Rusticus_15 Start: 9740, Stop: 10243, Start Num: 4
Candidate Starts for Rusticus_15:
(Start: 4 @9740 has 111 MA's), (Start: 7 @9770 has 3 MA's), (14, 9809), (22, 9878), (39, 10013), (44, 10049), (46, 10055), (48, 10082), (49, 10088), (53, 10139), (57, 10166),

Gene: Saftant_14 Start: 9638, Stop: 10141, Start Num: 4
Candidate Starts for Saftant_14:
(3, 9557), (Start: 4 @9638 has 111 MA's), (Start: 7 @9668 has 3 MA's), (18, 9737), (39, 9911), (40, 9917), (46, 9953), (48, 9980), (57, 10064),

Gene: SarahRose_14 Start: 9540, Stop: 10043, Start Num: 4
Candidate Starts for SarahRose_14:
(Start: 4 @9540 has 111 MA's), (30, 9747), (46, 9855), (48, 9882), (49, 9888), (53, 9939), (57, 9966),

Gene: Smoothie_41 Start: 16943, Stop: 17407, Start Num: 5
Candidate Starts for Smoothie_41:
(Start: 5 @16943 has 17 MA's), (13, 16979), (33, 17141), (34, 17150), (36, 17159), (37, 17165), (46, 17216), (51, 17285), (52, 17294), (61, 17384),

Gene: Snorlax_14 Start: 9540, Stop: 10043, Start Num: 4
Candidate Starts for Snorlax_14:
(3, 9459), (Start: 4 @9540 has 111 MA's), (30, 9747), (46, 9855), (48, 9882), (49, 9888), (53, 9939), (57, 9966),

Gene: South40_15 Start: 9816, Stop: 10319, Start Num: 4
Candidate Starts for South40_15:
(Start: 4 @9816 has 111 MA's), (8, 9855), (39, 10089), (46, 10131), (48, 10158), (49, 10164), (53, 10215), (57, 10242),

Gene: SpeedDemon_230 Start: 14691, Stop: 15089, Start Num: 16
Candidate Starts for SpeedDemon_230:
(Start: 16 @14691 has 6 MA's), (27, 14793), (47, 14928), (54, 14991),

Gene: Speedwell_19 Start: 11362, Stop: 11865, Start Num: 4
Candidate Starts for Speedwell_19:
(Start: 4 @11362 has 111 MA's), (18, 11461), (39, 11635), (46, 11677), (48, 11704), (57, 11788),

Gene: SqueakyClean_15 Start: 9670, Stop: 10167, Start Num: 4
Candidate Starts for SqueakyClean_15:
(Start: 4 @9670 has 111 MA's), (18, 9769), (22, 9808), (32, 9883), (45, 9982),

Gene: Sudan_14 Start: 9626, Stop: 10129, Start Num: 4
Candidate Starts for Sudan_14:
(Start: 4 @9626 has 111 MA's), (8, 9665), (14, 9695), (18, 9725), (31, 9836), (48, 9968), (57, 10052),

Gene: Sujidade_15 Start: 9838, Stop: 10341, Start Num: 4
Candidate Starts for Sujidade_15:
(Start: 4 @9838 has 111 MA's), (30, 10045), (46, 10153), (48, 10180), (49, 10186), (53, 10237), (57, 10264),

Gene: SunkenRoot_14 Start: 9735, Stop: 10238, Start Num: 4
Candidate Starts for SunkenRoot_14:
(Start: 4 @9735 has 111 MA's), (Start: 7 @9765 has 3 MA's), (8, 9774), (31, 9945), (48, 10077), (57, 10161),

Gene: SunsetPointe_14 Start: 9567, Stop: 10070, Start Num: 4
Candidate Starts for SunsetPointe_14:
(Start: 4 @9567 has 111 MA's), (Start: 7 @9597 has 3 MA's), (14, 9636), (22, 9705), (39, 9840), (44, 9876), (46, 9882), (48, 9909), (49, 9915), (53, 9966), (57, 9993),

Gene: Superstar_17 Start: 10563, Stop: 11060, Start Num: 4
Candidate Starts for Superstar_17:
(Start: 4 @10563 has 111 MA's), (11, 10623), (32, 10776), (41, 10845), (46, 10878),

Gene: TagePhighter_15 Start: 9540, Stop: 10043, Start Num: 4
Candidate Starts for TagePhighter_15:
(Start: 4 @9540 has 111 MA's), (30, 9747), (46, 9855), (48, 9882), (49, 9888), (53, 9939), (57, 9966),

Gene: Tefunt_14 Start: 9435, Stop: 9932, Start Num: 4
Candidate Starts for Tefunt_14:
(Start: 4 @9435 has 111 MA's), (11, 9495), (18, 9534), (32, 9648), (41, 9717), (46, 9750), (53, 9834),

Gene: Thestral_15 Start: 9504, Stop: 10001, Start Num: 4
Candidate Starts for Thestral_15:
(Start: 4 @9504 has 111 MA's), (11, 9564), (18, 9603), (32, 9717), (41, 9786),

Gene: TinaBelcher_14 Start: 9452, Stop: 9949, Start Num: 4
Candidate Starts for TinaBelcher_14:
(Start: 4 @9452 has 111 MA's), (11, 9512), (14, 9521), (18, 9551), (32, 9665), (41, 9734), (43, 9752),

Gene: Toma_14 Start: 9546, Stop: 10049, Start Num: 4
Candidate Starts for Toma_14:
(Start: 4 @9546 has 111 MA's), (30, 9753), (46, 9861), (48, 9888), (49, 9894), (53, 9945), (57, 9972),

Gene: Toniann_40 Start: 16888, Stop: 17352, Start Num: 5

Candidate Starts for Toniann_40:
(Start: 5 @16888 has 17 MA's), (13, 16924), (33, 17086), (34, 17095), (36, 17104), (37, 17110), (46, 17161), (51, 17230), (52, 17239), (61, 17329),

Gene: Towmatter_21 Start: 13032, Stop: 13430, Start Num: 16
Candidate Starts for Towmatter_21:
(Start: 16 @13032 has 6 MA's), (19, 13047),

Gene: Triste_14 Start: 9534, Stop: 10037, Start Num: 4
Candidate Starts for Triste_14:
(Start: 4 @9534 has 111 MA's), (30, 9741), (46, 9849), (48, 9876), (49, 9882), (53, 9933), (57, 9960),

Gene: Triumph_16 Start: 9459, Stop: 9956, Start Num: 4
Candidate Starts for Triumph_16:
(Start: 4 @9459 has 111 MA's), (18, 9558), (22, 9597), (32, 9672), (45, 9771),

Gene: TrvxScott_13 Start: 9453, Stop: 9950, Start Num: 4
Candidate Starts for TrvxScott_13:
(Start: 4 @9453 has 111 MA's), (11, 9513), (14, 9522), (18, 9552), (32, 9666), (41, 9735),

Gene: TuanPN_14 Start: 9543, Stop: 10046, Start Num: 4
Candidate Starts for TuanPN_14:
(Start: 4 @9543 has 111 MA's), (44, 9852), (46, 9858), (48, 9885), (49, 9891), (53, 9942), (57, 9969),

Gene: Unstoppable_14 Start: 9568, Stop: 10071, Start Num: 4
Candidate Starts for Unstoppable_14:
(Start: 4 @9568 has 111 MA's), (Start: 7 @9598 has 3 MA's), (14, 9637), (22, 9706), (39, 9841), (44, 9877), (46, 9883), (48, 9910), (49, 9916), (53, 9967), (57, 9994),

Gene: Urza_14 Start: 9796, Stop: 10299, Start Num: 4
Candidate Starts for Urza_14:
(Start: 4 @9796 has 111 MA's), (11, 9856), (14, 9865), (17, 9889), (18, 9895), (30, 10003), (32, 10009), (41, 10078), (46, 10111), (48, 10138), (53, 10195), (57, 10222),

Gene: Vanseggelen_18 Start: 9273, Stop: 9776, Start Num: 4
Candidate Starts for Vanseggelen_18:
(Start: 4 @9273 has 111 MA's), (8, 9312), (14, 9342), (31, 9483), (57, 9699),

Gene: Verabelle_15 Start: 9620, Stop: 10123, Start Num: 4
Candidate Starts for Verabelle_15:
(Start: 4 @9620 has 111 MA's), (Start: 7 @9650 has 3 MA's), (8, 9659), (31, 9830), (39, 9893), (57, 10046),

Gene: Verse_14 Start: 9736, Stop: 10239, Start Num: 4
Candidate Starts for Verse_14:
(Start: 4 @9736 has 111 MA's), (Start: 7 @9766 has 3 MA's), (8, 9775), (31, 9946), (48, 10078), (57, 10162),

Gene: VieEnRose_14 Start: 9866, Stop: 10369, Start Num: 4
Candidate Starts for VieEnRose_14:
(Start: 4 @9866 has 111 MA's), (11, 9926), (17, 9959), (18, 9965), (30, 10073), (32, 10079), (41, 10148), (46, 10181), (48, 10208), (53, 10265), (57, 10292),

Gene: Werner_14 Start: 9541, Stop: 10044, Start Num: 4
Candidate Starts for Werner_14:
(3, 9460), (Start: 4 @9541 has 111 MA's), (30, 9748), (46, 9856), (48, 9883), (49, 9889), (53, 9940), (57, 9967),

Gene: Whatever_14 Start: 9541, Stop: 10044, Start Num: 4
Candidate Starts for Whatever_14:
(Start: 4 @9541 has 111 MA's), (30, 9748), (46, 9856), (48, 9883), (49, 9889), (53, 9940), (57, 9967),

Gene: WilliamBoone_40 Start: 16252, Stop: 16716, Start Num: 5
Candidate Starts for WilliamBoone_40:
(Start: 5 @16252 has 17 MA's), (12, 16285), (13, 16288), (33, 16450), (34, 16459), (36, 16468), (46, 16525), (48, 16552), (52, 16603),

Gene: Yasdnil_14 Start: 9539, Stop: 10042, Start Num: 4
Candidate Starts for Yasdnil_14:
(Start: 4 @9539 has 111 MA's), (44, 9848), (46, 9854), (48, 9881), (49, 9887), (53, 9938), (57, 9965),

Gene: Yosif_15 Start: 10000, Stop: 10503, Start Num: 4
Candidate Starts for Yosif_15:
(Start: 4 @10000 has 111 MA's), (Start: 7 @10030 has 3 MA's), (18, 10099), (26, 10168), (46, 10315), (48, 10342), (57, 10426), (60, 10444),

Gene: Yvonnetastic_37 Start: 18317, Stop: 18787, Start Num: 7
Candidate Starts for Yvonnetastic_37:
(Start: 7 @18317 has 3 MA's), (11, 18347), (13, 18353), (36, 18539), (37, 18545), (39, 18554), (61, 18764),

Gene: Zainub_16 Start: 10005, Stop: 10502, Start Num: 4
Candidate Starts for Zainub_16:
(Start: 4 @10005 has 111 MA's), (11, 10065), (18, 10104), (41, 10287),

Gene: ZamZam_14 Start: 9637, Stop: 10140, Start Num: 4
Candidate Starts for ZamZam_14:
(Start: 4 @9637 has 111 MA's), (18, 9736), (39, 9910), (46, 9952), (48, 9979), (57, 10063),

Gene: Zemlya_15 Start: 9554, Stop: 10057, Start Num: 4
Candidate Starts for Zemlya_15:
(Start: 4 @9554 has 111 MA's), (30, 9761), (46, 9869), (48, 9896), (49, 9902), (53, 9953), (57, 9980),

Gene: phiCAM_15 Start: 11402, Stop: 11905, Start Num: 4
Candidate Starts for phiCAM_15:
(Start: 4 @11402 has 111 MA's), (8, 11441), (14, 11471), (31, 11612), (63, 11894),

Gene: phiHau3_16 Start: 9695, Stop: 10198, Start Num: 4
Candidate Starts for phiHau3_16:
(Start: 4 @9695 has 111 MA's), (30, 9902), (32, 9908), (39, 9968), (49, 10043), (57, 10121),