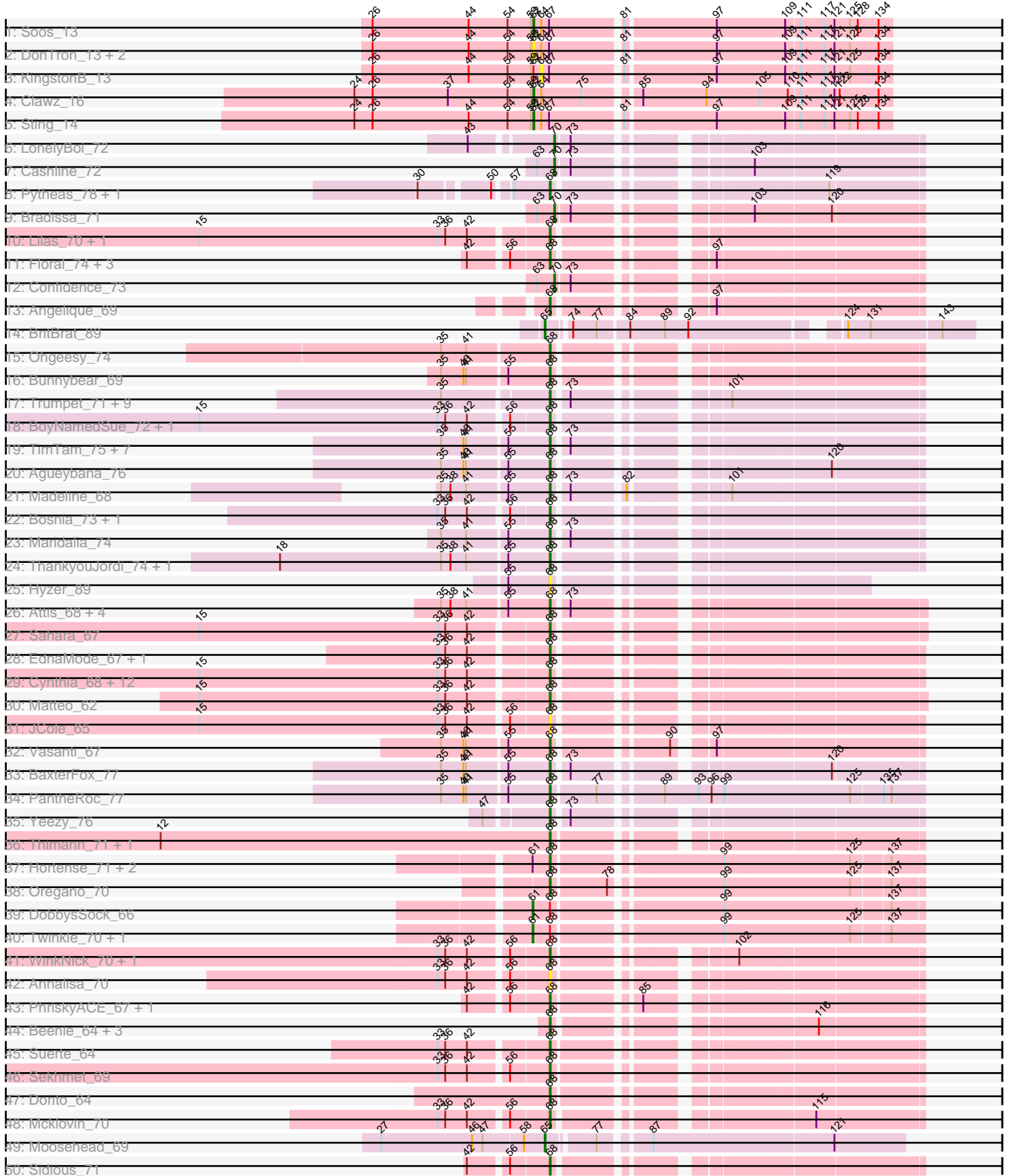
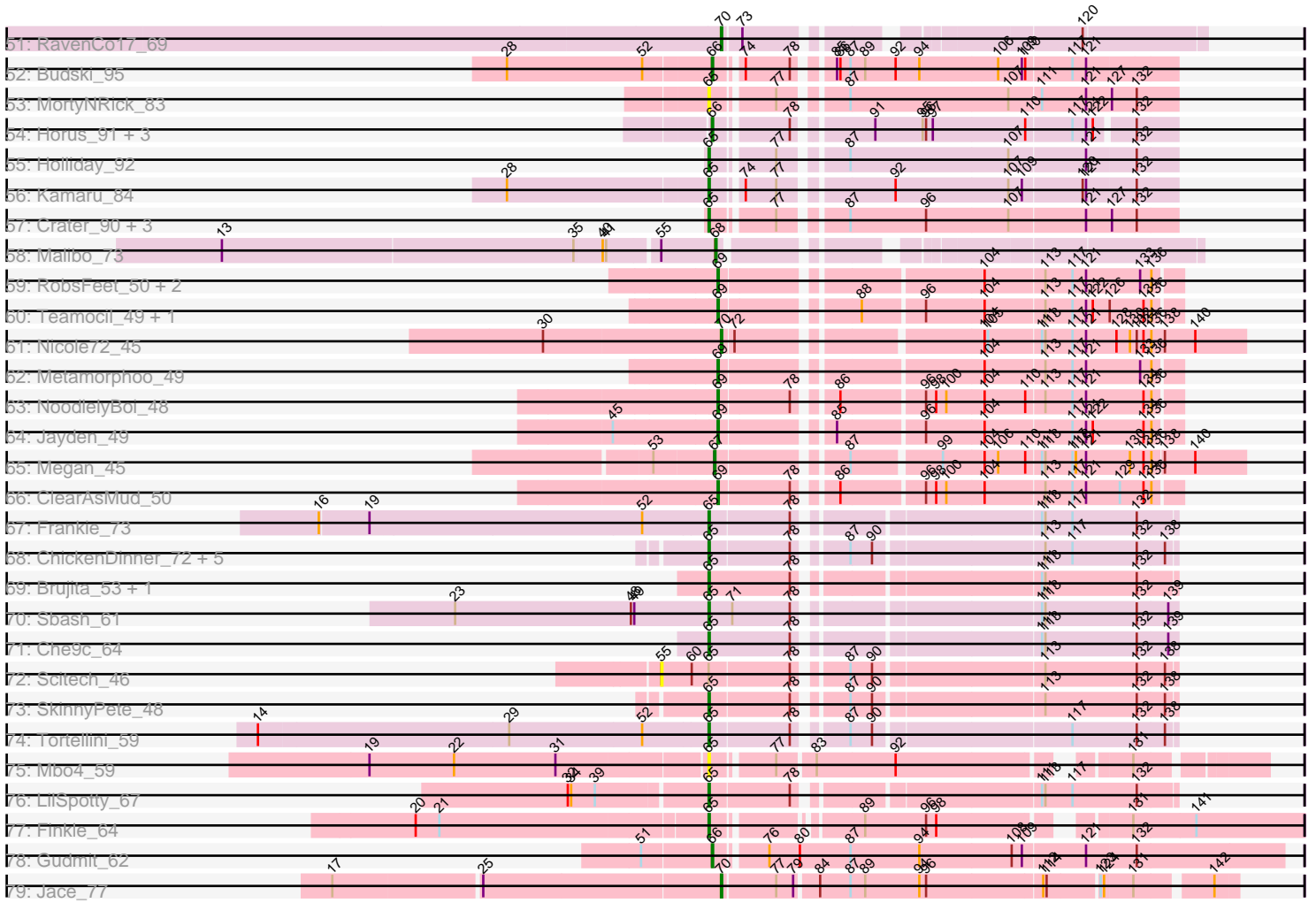


Zoomed Pham 193799



Zoomed Pham 193799



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 193799 Report

This analysis was run 11/02/24 on database version 579.

Pham number 193799 has 146 members, 14 are drafts.

Phages represented in each track:

- Track 1 : Soos_13
- Track 2 : DonTron_13, ColdSoup_15, Jollymon_15
- Track 3 : KingstonB_13
- Track 4 : Clawz_16
- Track 5 : Sting_14
- Track 6 : LonelyBoi_72
- Track 7 : Cashline_72
- Track 8 : Pytheas_78, Jablanski_77
- Track 9 : Bradissa_71
- Track 10 : Lilas_70, EnalisNailo_69
- Track 11 : Floral_74, EMsquaredA_73, Pollux_76, Marteena_72
- Track 12 : Confidence_73
- Track 13 : Angelique_69
- Track 14 : BritBrat_89
- Track 15 : Ohgeesy_74
- Track 16 : Bunnybear_69
- Track 17 : Trumpet_71, Zameen_71, Eudoria_71, Neobush_73, Antonio_70, Kita_72, Tayonia_71, Polly_68, Manasvini_73, Suscepit_71
- Track 18 : BoyNamedSue_72, AlumE_72
- Track 19 : TimTam_75, Zirinka_69, Herod_75, Eviarto_75, BatStarr_74, Hugley_73, Nymphadora_75, Bialota_69
- Track 20 : Agueybana_76
- Track 21 : Madeline_68
- Track 22 : Bosnia_73, BeeGee_76
- Track 23 : Maridalia_74
- Track 24 : ThankyouJordi_74, WelcomeAyanna_74
- Track 25 : Hyzer_89
- Track 26 : Attis_68, Yeet412_67, SoilAssassin_68, LordFarquaad_71, Nettuno_66
- Track 27 : Sahara_67
- Track 28 : EdnaMode_67, Pickett_65
- Track 29 : Cynthia_68, Gizermo_68, Bjanes7_65, Sproutie_68, Whiteclaw_68, Ebert_71, Clap_68, Mocha12_68, TuertoX_68, GemG_68, Savage_68, Haley23_68, Lamberg_64
- Track 30 : Matteo_62
- Track 31 : JCole_65
- Track 32 : Vasanti_67
- Track 33 : BaxterFox_77

- Track 34 : PantheRoc_77
- Track 35 : Yeezy_76
- Track 36 : Thimann_71, Easley_68
- Track 37 : Hortense_71, Howe_71, Adora_68
- Track 38 : Oregano_70
- Track 39 : DobbysSock_66
- Track 40 : Twinkle_70, Shlim410_69
- Track 41 : WinkNick_70, Dolores_70
- Track 42 : Annalisa_70
- Track 43 : PhriskyACE_67, Powerball_68
- Track 44 : Beenie_64, Clark_69, Samman98_71, MichaelScott_71
- Track 45 : Suerte_64
- Track 46 : Sekhmet_69
- Track 47 : Dorito_64
- Track 48 : Mcklovin_70
- Track 49 : Moosehead_69
- Track 50 : Sidious_71
- Track 51 : RavenCo17_69
- Track 52 : Budski_95
- Track 53 : MortyNRick_83
- Track 54 : Horus_91, Periwinkle_99, Leroy_90, Frickyeah_97
- Track 55 : Holliday_92
- Track 56 : Kamaru_84
- Track 57 : Crater_90, Ecliptus_97, Apricot_90, Phistory_88
- Track 58 : Malibo_73
- Track 59 : RobsFeet_50, Tyrumbra_47, Fireman_49
- Track 60 : Teamocil_49, Gina_49
- Track 61 : Nicole72_45
- Track 62 : Metamorphoo_49
- Track 63 : NoodlelyBoi_48
- Track 64 : Jayden_49
- Track 65 : Megan_45
- Track 66 : ClearAsMud_50
- Track 67 : Frankie_73
- Track 68 : ChickenDinner_72, Misha28_68, DocMcStuffins_70, Awesomesauce_70, Piper2020_71, TootsiePop_68
- Track 69 : Brujita_53, Island3_53
- Track 70 : Sbash_61
- Track 71 : Che9c_64
- Track 72 : Scitech_46
- Track 73 : SkinnyPete_48
- Track 74 : Tortellini_59
- Track 75 : Mbo4_59
- Track 76 : LilSpotty_67
- Track 77 : Finkle_64
- Track 78 : Gudmit_62
- Track 79 : Jace_77

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

The start number called the most often in the published annotations is 68, it was called in 82 of the 132 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Adora_68, Agueybana_76, AlumE_72, Angelique_69, Annalisa_70, Antonio_70, Attis_68, BatStarr_74, BaxterFox_77, BeeGee_76, Beenie_64, Bialota_69, Bjaner7_65, Bosnia_73, BoyNamedSue_72, Bunnybear_69, Clap_68, Clark_69, Cynthia_68, Dolores_70, Dorito_64, EMSquaredA_73, Easley_68, Ebert_71, EdnaMode_67, EnalisNailo_69, Eudoria_71, Eviarto_75, Floral_74, GemG_68, Gizermo_68, Haley23_68, Herod_75, Hortense_71, Howe_71, Hugley_73, Hyzer_89, JCole_65, Jablanski_77, Kita_72, Lamberg_64, Lilas_70, LordFarquaad_71, Madeline_68, Malibo_73, Manasvini_73, Maridalia_74, Marteena_72, Matteo_62, Mcklovin_70, MichaelScott_71, Mocha12_68, Neobush_73, Nettuno_66, Nymphadora_75, Ohgeesy_74, Oregano_70, PantheRoc_77, PhriskyACE_67, Pickett_65, Pollux_76, Polly_68, Powerball_68, Pytheas_78, Sahara_67, Samman98_71, Savage_68, Sekhmet_69, Sidious_71, SoilAssassin_68, Sproutie_68, Suerte_64, Suscepit_71, Tayonia_71, ThankyouJordi_74, Thimann_71, TimTam_75, Trumpet_71, TuertoX_68, Vasanti_67, WelcomeAyanna_74, Whiteclaw_68, WinkNick_70, Yeet412_67, Yeezy_76, Zameen_71, Zirinka_69,

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

- DobbysSock_66, Shlim410_69, Twinkle_70,

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

- Apricot_90, Awesomesauce_70, Bradissa_71, BritBrat_89, Brujita_53, Budski_95, Cashline_72, Che9c_64, ChickenDinner_72, Clawz_16, ClearAsMud_50, ColdSoup_15, Confidence_73, Crater_90, DocMcStuffins_70, DonTron_13, Ecliptus_97, Finkle_64, Fireman_49, Frankie_73, Frickyeh_97, Gina_49, Gudmit_62, Holliday_92, Horus_91, Island3_53, Jace_77, Jayden_49, Jollymon_15, Kamaru_84, KingstonB_13, Leroy_90, LilSpotty_67, LonelyBoi_72, Mbo4_59, Megan_45, Metamorphoo_49, Misha28_68, Moosehead_69, MortyNRick_83, Nicole72_45, NoodlelyBoi_48, Periwinkle_99, Phistory_88, Piper2020_71, RavenCo17_69, RobsFeet_50, Sbash_61, Scitech_46, SkinnyPete_48, Soos_13, Sting_14, Teamocil_49, TootsiePop_68, Tortellini_59, Tyrumbra_47,

Summary by start number:

Start 55:

- Found in 25 of 146 (17.1%) of genes in pham
- No Manual Annotations of this start.
- Called 4.0% of time when present
- Phage (with cluster) where this start called: Scitech_46 (N),

Start 61:

- Found in 6 of 146 (4.1%) of genes in pham
- Manual Annotations of this start: 3 of 132
- Called 50.0% of time when present
- Phage (with cluster) where this start called: DobbysSock_66 (CZ4), Shlim410_69 (CZ4), Twinkle_70 (CZ4),

Start 62:

- Found in 7 of 146 (4.8%) of genes in pham
- Manual Annotations of this start: 3 of 132

- Called 85.7% of time when present
- Phage (with cluster) where this start called: Clawz_16 (CP), ColdSoup_15 (CP), DonTron_13 (CP), Jollymon_15 (CP), Soos_13 (CP), Sting_14 (CP),

Start 64:

- Found in 7 of 146 (4.8%) of genes in pham
- No Manual Annotations of this start.
- Called 14.3% of time when present
- Phage (with cluster) where this start called: KingstonB_13 (CP),

Start 65:

- Found in 26 of 146 (17.8%) of genes in pham
- Manual Annotations of this start: 22 of 132
- Called 96.2% of time when present
- Phage (with cluster) where this start called: Apricot_90 (DN3), Awesomesauce_70 (F1), BritBrat_89 (CY2), Brujita_53 (I1), Che9c_64 (I2), ChickenDinner_72 (F1), Crater_90 (DN3), DocMcStuffins_70 (F1), Ecliptus_97 (DN), Finkle_64 (singleton), Frankie_73 (F1), Holliday_92 (DN1), Island3_53 (I1), Kamaru_84 (DN1), LilSpotty_67 (singleton), Mbo4_59 (singleton), Misha28_68 (F1), Moosehead_69 (CZ6), MortyNRick_83 (DN), Phistory_88 (DN1), Piper2020_71 (F1), Sbash_61 (I2), SkinnyPete_48 (N), TootsiePop_68 (F1), Tortellini_59 (P2),

Start 66:

- Found in 6 of 146 (4.1%) of genes in pham
- Manual Annotations of this start: 5 of 132
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Budski_95 (DN), Frickyeah_97 (DN1), Gudmit_62 (singleton), Horus_91 (DN1), Leroy_90 (DN1), Periwinkle_99 (DN1),

Start 67:

- Found in 7 of 146 (4.8%) of genes in pham
- Manual Annotations of this start: 1 of 132
- Called 14.3% of time when present
- Phage (with cluster) where this start called: Megan_45 (EC),

Start 68:

- Found in 90 of 146 (61.6%) of genes in pham
- Manual Annotations of this start: 82 of 132
- Called 96.7% of time when present
- Phage (with cluster) where this start called: Adora_68 (CZ4), Agueybana_76 (CZ1), AlumE_72 (CZ1), Angelique_69 (CY1), Annalisa_70 (CZ4), Antonio_70 (CZ1), Attis_68 (CZ2), BatStarr_74 (CZ1), BaxterFox_77 (CZ3), BeeGee_76 (CY), Beenie_64 (CZ4), Bialota_69 (CZ1), Bjaner7_65 (CZ2), Bosnia_73 (CZ1), BoyNamedSue_72 (CZ1), Bunnybear_69 (CZ), Clap_68 (CZ2), Clark_69 (CZ4), Cynthia_68 (CZ2), Dolores_70 (CZ4), Dorito_64 (CZ4), EMsquaredA_73 (CY1), Easley_68 (CZ4), Ebert_71 (CZ2), EdnaMode_67 (CZ2), EnalisNailo_69 (CY1), Eudoria_71 (CZ1), Eviarto_75 (CZ1), Floral_74 (CY1), GemG_68 (CZ2), Gizermo_68 (CZ2), Haley23_68 (CZ2), Herod_75 (CZ1), Hortense_71 (CZ4), Howe_71 (CZ4), Hugley_73 (CZ1), Hyzer_89 (CZ1), JCole_65 (CZ2), Jablanski_77 (CY), Kita_72 (CZ1), Lamberg_64 (CZ2), Lilas_70 (CY1), LordFarquaad_71 (CZ2), Madeline_68 (CZ1), Malibo_73 (DW), Manasvini_73 (CZ1), Maridalia_74 (CZ1), Marteena_72 (CY1), Matteo_62 (CZ2), Mcklovin_70 (CZ4), MichaelScott_71 (CZ4), Mocha12_68 (CZ2), Neobush_73 (CZ1), Nettuno_66 (CZ2), Nymphadora_75 (CZ1), Ohgeesy_74

(CZ), Oregano_70 (CZ4), PantheRoc_77 (CZ3), PhriskyACE_67 (CZ4), Pickett_65 (CZ2), Pollux_76 (CY1), Polly_68 (CZ1), Powerball_68 (CZ4), Pytheas_78 (CY), Sahara_67 (CZ2), Samman98_71 (CZ4), Savage_68 (CZ2), Sekhmet_69 (CZ4), Sidious_71 (CZ7), SoilAssassin_68 (CZ2), Sproutie_68 (CZ2), Suerte_64 (CZ4), Suscepit_71 (CZ1), Tayonia_71 (CZ1), ThankyouJordi_74 (CZ1), Thimann_71 (CZ4), TimTam_75 (CZ1), Trumpet_71 (CZ1), TuertoX_68 (CZ2), Vasanti_67 (CZ2), WelcomeAyanna_74 (CZ1), Whiteclaw_68 (CZ2), WinkNick_70 (CZ4), Yeet412_67 (CZ2), Yeezy_76 (CZ3), Zameen_71 (CZ1), Zirinka_69 (CZ1),

Start 69:

- Found in 9 of 146 (6.2%) of genes in pham
- Manual Annotations of this start: 9 of 132
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ClearAsMud_50 (EC), Fireman_49 (EC), Gina_49 (EC), Jayden_49 (EC), Metamorphoo_49 (EC), NoodlelyBoi_48 (EC), RobsFeet_50 (EC), Teamocil_49 (EC), Tyumbra_47 (EC),

Start 70:

- Found in 7 of 146 (4.8%) of genes in pham
- Manual Annotations of this start: 7 of 132
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bradissa_71 (CY1), Cashline_72 (CY), Confidence_73 (CY1), Jace_77 (singleton), LonelyBoi_72 (CY), Nicole72_45 (EC), RavenCo17_69 (CZ8),

Summary by clusters:

There are 23 clusters represented in this pham: DN, CZ8, CZ2, CZ3, CZ1, CZ6, CZ7, CZ4, DW, I1, I2, DN1, DN3, P2, CY2, CY1, EC, N, CZ, CY, singleton, CP, F1,

Info for manual annotations of cluster CP:

- Start number 62 was manually annotated 3 times for cluster CP.

Info for manual annotations of cluster CY:

- Start number 68 was manually annotated 3 times for cluster CY.
- Start number 70 was manually annotated 2 times for cluster CY.

Info for manual annotations of cluster CY1:

- Start number 68 was manually annotated 7 times for cluster CY1.
- Start number 70 was manually annotated 2 times for cluster CY1.

Info for manual annotations of cluster CY2:

- Start number 65 was manually annotated 1 time for cluster CY2.

Info for manual annotations of cluster CZ:

- Start number 68 was manually annotated 2 times for cluster CZ.

Info for manual annotations of cluster CZ1:

- Start number 68 was manually annotated 25 times for cluster CZ1.

Info for manual annotations of cluster CZ2:

- Start number 68 was manually annotated 23 times for cluster CZ2.

Info for manual annotations of cluster CZ3:

- Start number 68 was manually annotated 3 times for cluster CZ3.

Info for manual annotations of cluster CZ4:

- Start number 61 was manually annotated 3 times for cluster CZ4.
- Start number 68 was manually annotated 17 times for cluster CZ4.

Info for manual annotations of cluster CZ6:

- Start number 65 was manually annotated 1 time for cluster CZ6.

Info for manual annotations of cluster CZ7:

- Start number 68 was manually annotated 1 time for cluster CZ7.

Info for manual annotations of cluster CZ8:

- Start number 70 was manually annotated 1 time for cluster CZ8.

Info for manual annotations of cluster DN:

- Start number 65 was manually annotated 1 time for cluster DN.
- Start number 66 was manually annotated 1 time for cluster DN.

Info for manual annotations of cluster DN1:

- Start number 65 was manually annotated 3 times for cluster DN1.
- Start number 66 was manually annotated 3 times for cluster DN1.

Info for manual annotations of cluster DN3:

- Start number 65 was manually annotated 2 times for cluster DN3.

Info for manual annotations of cluster DW:

- Start number 68 was manually annotated 1 time for cluster DW.

Info for manual annotations of cluster EC:

- Start number 67 was manually annotated 1 time for cluster EC.
- Start number 69 was manually annotated 9 times for cluster EC.
- Start number 70 was manually annotated 1 time for cluster EC.

Info for manual annotations of cluster F1:

- Start number 65 was manually annotated 6 times for cluster F1.

Info for manual annotations of cluster I1:

- Start number 65 was manually annotated 2 times for cluster I1.

Info for manual annotations of cluster I2:

- Start number 65 was manually annotated 2 times for cluster I2.

Info for manual annotations of cluster N:

- Start number 65 was manually annotated 1 time for cluster N.

Info for manual annotations of cluster P2:

- Start number 65 was manually annotated 1 time for cluster P2.

Gene Information:

Gene: Adora_68 Start: 47407, Stop: 47808, Start Num: 68
Candidate Starts for Adora_68:
(Start: 61 @47389 has 3 MA's), (Start: 68 @47407 has 82 MA's), (99, 47584), (125, 47728), (137, 47770),

Gene: Agueybana_76 Start: 49121, Stop: 49486, Start Num: 68
Candidate Starts for Agueybana_76:
(35, 49004), (40, 49028), (41, 49031), (55, 49073), (Start: 68 @49121 has 82 MA's), (120, 49385),

Gene: AlumE_72 Start: 48795, Stop: 49160, Start Num: 68
Candidate Starts for AlumE_72:
(15, 48408), (33, 48681), (36, 48690), (42, 48714), (56, 48753), (Start: 68 @48795 has 82 MA's),

Gene: Angelique_69 Start: 48080, Stop: 48445, Start Num: 68
Candidate Starts for Angelique_69:
(Start: 68 @48080 has 82 MA's), (97, 48221),

Gene: Annalisa_70 Start: 43981, Stop: 44349, Start Num: 68
Candidate Starts for Annalisa_70:
(33, 43867), (36, 43876), (42, 43900), (56, 43939), (Start: 68 @43981 has 82 MA's),

Gene: Antonio_70 Start: 46557, Stop: 46922, Start Num: 68
Candidate Starts for Antonio_70:
(35, 46443), (Start: 68 @46557 has 82 MA's), (73, 46572), (101, 46713),

Gene: Apricot_90 Start: 48459, Stop: 48836, Start Num: 65
Candidate Starts for Apricot_90:
(Start: 65 @48459 has 22 MA's), (77, 48507), (87, 48555), (96, 48621), (107, 48693), (121, 48759), (127, 48780), (132, 48801),

Gene: Attis_68 Start: 45280, Stop: 45648, Start Num: 68
Candidate Starts for Attis_68:
(35, 45163), (38, 45172), (41, 45190), (55, 45232), (Start: 68 @45280 has 82 MA's), (73, 45295),

Gene: Awesomesauce_70 Start: 42720, Stop: 43097, Start Num: 65
Candidate Starts for Awesomesauce_70:
(Start: 65 @42720 has 22 MA's), (78, 42789), (87, 42825), (90, 42843), (113, 42984), (117, 43008), (132, 43065), (138, 43089),

Gene: BatStarr_74 Start: 49525, Stop: 49890, Start Num: 68
Candidate Starts for BatStarr_74:
(35, 49408), (40, 49432), (41, 49435), (55, 49477), (Start: 68 @49525 has 82 MA's), (73, 49540),

Gene: BaxterFox_77 Start: 50109, Stop: 50474, Start Num: 68
Candidate Starts for BaxterFox_77:
(35, 49992), (40, 50016), (41, 50019), (55, 50061), (Start: 68 @50109 has 82 MA's), (73, 50124), (120, 50373),

Gene: BeeGee_76 Start: 48379, Stop: 48744, Start Num: 68
Candidate Starts for BeeGee_76:
(33, 48265), (36, 48274), (42, 48298), (56, 48337), (Start: 68 @48379 has 82 MA's),

Gene: Beenie_64 Start: 44525, Stop: 44890, Start Num: 68

Candidate Starts for Beenie_64:
(Start: 68 @44525 has 82 MA's), (116, 44774),

Gene: Bialota_69 Start: 48237, Stop: 48602, Start Num: 68
Candidate Starts for Bialota_69:
(35, 48120), (40, 48144), (41, 48147), (55, 48189), (Start: 68 @48237 has 82 MA's), (73, 48252),

Gene: Bjanes7_65 Start: 42654, Stop: 43019, Start Num: 68
Candidate Starts for Bjanes7_65:
(11, 42006), (15, 42267), (33, 42540), (36, 42549), (42, 42573), (Start: 68 @42654 has 82 MA's),

Gene: Bosnia_73 Start: 50639, Stop: 51004, Start Num: 68
Candidate Starts for Bosnia_73:
(33, 50525), (36, 50534), (42, 50558), (56, 50597), (Start: 68 @50639 has 82 MA's),

Gene: BoyNamedSue_72 Start: 48795, Stop: 49160, Start Num: 68
Candidate Starts for BoyNamedSue_72:
(15, 48408), (33, 48681), (36, 48690), (42, 48714), (56, 48753), (Start: 68 @48795 has 82 MA's),

Gene: Bradissa_71 Start: 49627, Stop: 49992, Start Num: 70
Candidate Starts for Bradissa_71:
(63, 49609), (Start: 70 @49627 has 7 MA's), (73, 49642), (103, 49807), (120, 49891),

Gene: BritBrat_89 Start: 51800, Stop: 52234, Start Num: 65
Candidate Starts for BritBrat_89:
(Start: 65 @51800 has 22 MA's), (74, 51821), (77, 51848), (84, 51881), (89, 51920), (92, 51947), (124, 52097), (131, 52121), (143, 52199),

Gene: Brujita_53 Start: 36853, Stop: 37233, Start Num: 65
Candidate Starts for Brujita_53:
(Start: 65 @36853 has 22 MA's), (78, 36925), (111, 37117), (113, 37120), (132, 37201),

Gene: Budski_95 Start: 51613, Stop: 51987, Start Num: 66
Candidate Starts for Budski_95:
(28, 51436), (52, 51556), (Start: 66 @51613 has 5 MA's), (74, 51631), (78, 51670), (85, 51694), (86, 51697), (87, 51706), (89, 51718), (92, 51745), (94, 51766), (106, 51835), (109, 51856), (110, 51859), (117, 51898), (121, 51910),

Gene: Bunnybear_69 Start: 47790, Stop: 48155, Start Num: 68
Candidate Starts for Bunnybear_69:
(35, 47673), (40, 47697), (41, 47700), (55, 47742), (Start: 68 @47790 has 82 MA's),

Gene: Cashline_72 Start: 50322, Stop: 50687, Start Num: 70
Candidate Starts for Cashline_72:
(63, 50304), (Start: 70 @50322 has 7 MA's), (73, 50337), (103, 50502),

Gene: Che9c_64 Start: 45395, Stop: 45778, Start Num: 65
Candidate Starts for Che9c_64:
(Start: 65 @45395 has 22 MA's), (78, 45467), (111, 45659), (113, 45662), (132, 45743), (139, 45770),

Gene: ChickenDinner_72 Start: 43637, Stop: 44014, Start Num: 65
Candidate Starts for ChickenDinner_72:

(Start: 65 @43637 has 22 MA's), (78, 43706), (87, 43742), (90, 43760), (113, 43901), (117, 43925), (132, 43982), (138, 44006),

Gene: Clap_68 Start: 42833, Stop: 43198, Start Num: 68

Candidate Starts for Clap_68:

(11, 42185), (15, 42446), (33, 42719), (36, 42728), (42, 42752), (Start: 68 @42833 has 82 MA's),

Gene: Clark_69 Start: 44288, Stop: 44653, Start Num: 68

Candidate Starts for Clark_69:

(Start: 68 @44288 has 82 MA's), (116, 44537),

Gene: Clawz_16 Start: 7752, Stop: 8141, Start Num: 62

Candidate Starts for Clawz_16:

(24, 7545), (26, 7566), (37, 7653), (54, 7722), (59, 7749), (Start: 62 @7752 has 3 MA's), (64, 7761), (75, 7806), (85, 7860), (94, 7932), (105, 7992), (110, 8025), (111, 8037), (117, 8064), (121, 8076), (122, 8082), (134, 8127),

Gene: ClearAsMud_50 Start: 32507, Stop: 32881, Start Num: 69

Candidate Starts for ClearAsMud_50:

(Start: 69 @32507 has 9 MA's), (78, 32567), (86, 32594), (96, 32663), (98, 32672), (100, 32681), (104, 32714), (113, 32765), (117, 32789), (121, 32801), (129, 32831), (134, 32852), (136, 32858),

Gene: ColdSoup_15 Start: 7379, Stop: 7768, Start Num: 62

Candidate Starts for ColdSoup_15:

(26, 7193), (44, 7304), (54, 7349), (59, 7376), (Start: 62 @7379 has 3 MA's), (64, 7388), (Start: 67 @7397 has 1 MA's), (81, 7472), (97, 7571), (109, 7649), (111, 7664), (117, 7691), (121, 7703), (125, 7721), (134, 7754),

Gene: Confidence_73 Start: 47600, Stop: 47965, Start Num: 70

Candidate Starts for Confidence_73:

(63, 47582), (Start: 70 @47600 has 7 MA's), (73, 47615),

Gene: Crater_90 Start: 48803, Stop: 49180, Start Num: 65

Candidate Starts for Crater_90:

(Start: 65 @48803 has 22 MA's), (77, 48851), (87, 48899), (96, 48965), (107, 49037), (121, 49103), (127, 49124), (132, 49145),

Gene: Cynthia_68 Start: 42831, Stop: 43196, Start Num: 68

Candidate Starts for Cynthia_68:

(11, 42183), (15, 42444), (33, 42717), (36, 42726), (42, 42750), (Start: 68 @42831 has 82 MA's),

Gene: DobbysSock_66 Start: 44836, Stop: 45252, Start Num: 61

Candidate Starts for DobbysSock_66:

(Start: 61 @44836 has 3 MA's), (Start: 68 @44854 has 82 MA's), (99, 45031), (137, 45217),

Gene: DocMcStuffins_70 Start: 43637, Stop: 44014, Start Num: 65

Candidate Starts for DocMcStuffins_70:

(Start: 65 @43637 has 22 MA's), (78, 43706), (87, 43742), (90, 43760), (113, 43901), (117, 43925), (132, 43982), (138, 44006),

Gene: Dolores_70 Start: 43516, Stop: 43884, Start Num: 68

Candidate Starts for Dolores_70:

(10, 42763), (33, 43402), (36, 43411), (42, 43435), (56, 43474), (Start: 68 @43516 has 82 MA's), (102, 43681),

Gene: DonTron_13 Start: 6968, Stop: 7357, Start Num: 62

Candidate Starts for DonTron_13:

(26, 6782), (44, 6893), (54, 6938), (59, 6965), (Start: 62 @6968 has 3 MA's), (64, 6977), (Start: 67 @6986 has 1 MA's), (81, 7061), (97, 7160), (109, 7238), (111, 7253), (117, 7280), (121, 7292), (125, 7310), (134, 7343),

Gene: Dorito_64 Start: 42718, Stop: 43086, Start Num: 68

Candidate Starts for Dorito_64:

(Start: 68 @42718 has 82 MA's),

Gene: EMSquaredA_73 Start: 47755, Stop: 48120, Start Num: 68

Candidate Starts for EMSquaredA_73:

(42, 47674), (56, 47713), (Start: 68 @47755 has 82 MA's), (97, 47896),

Gene: Easley_68 Start: 43289, Stop: 43654, Start Num: 68

Candidate Starts for Easley_68:

(3, 42284), (4, 42296), (5, 42332), (6, 42356), (7, 42368), (8, 42380), (12, 42842), (Start: 68 @43289 has 82 MA's),

Gene: Ebert_71 Start: 43265, Stop: 43630, Start Num: 68

Candidate Starts for Ebert_71:

(11, 42617), (15, 42878), (33, 43151), (36, 43160), (42, 43184), (Start: 68 @43265 has 82 MA's),

Gene: Ecliptus_97 Start: 52002, Stop: 52379, Start Num: 65

Candidate Starts for Ecliptus_97:

(Start: 65 @52002 has 22 MA's), (77, 52050), (87, 52098), (96, 52164), (107, 52236), (121, 52302), (127, 52323), (132, 52344),

Gene: EdnaMode_67 Start: 42941, Stop: 43306, Start Num: 68

Candidate Starts for EdnaMode_67:

(33, 42827), (36, 42836), (42, 42860), (Start: 68 @42941 has 82 MA's),

Gene: EnalisNailo_69 Start: 48247, Stop: 48612, Start Num: 68

Candidate Starts for EnalisNailo_69:

(15, 47860), (33, 48133), (36, 48142), (42, 48166), (Start: 68 @48247 has 82 MA's),

Gene: Eudoria_71 Start: 46557, Stop: 46922, Start Num: 68

Candidate Starts for Eudoria_71:

(35, 46443), (Start: 68 @46557 has 82 MA's), (73, 46572), (101, 46713),

Gene: Eviarto_75 Start: 49500, Stop: 49865, Start Num: 68

Candidate Starts for Eviarto_75:

(35, 49383), (40, 49407), (41, 49410), (55, 49452), (Start: 68 @49500 has 82 MA's), (73, 49515),

Gene: Finkle_64 Start: 40296, Stop: 40754, Start Num: 65

Candidate Starts for Finkle_64:

(20, 40047), (21, 40068), (Start: 65 @40296 has 22 MA's), (89, 40404), (96, 40458), (98, 40467), (131, 40605), (141, 40659),

Gene: Fireman_49 Start: 33919, Stop: 34293, Start Num: 69

Candidate Starts for Fireman_49:

(Start: 69 @33919 has 9 MA's), (104, 34126), (113, 34177), (117, 34201), (121, 34213), (133, 34261), (136, 34270),

Gene: Floral_74 Start: 49712, Stop: 50077, Start Num: 68

Candidate Starts for Floral_74:

(42, 49631), (56, 49670), (Start: 68 @49712 has 82 MA's), (97, 49853),

Gene: Frankie_73 Start: 45043, Stop: 45420, Start Num: 65

Candidate Starts for Frankie_73:

(16, 44707), (19, 44749), (52, 44986), (Start: 65 @45043 has 22 MA's), (78, 45112), (111, 45304), (113, 45307), (117, 45331), (132, 45388),

Gene: Frickyeah_97 Start: 50758, Stop: 51126, Start Num: 66

Candidate Starts for Frickyeah_97:

(Start: 66 @50758 has 5 MA's), (78, 50815), (91, 50872), (95, 50914), (96, 50917), (97, 50923), (110, 51004), (117, 51043), (121, 51055), (122, 51061), (132, 51091),

Gene: GemG_68 Start: 42837, Stop: 43202, Start Num: 68

Candidate Starts for GemG_68:

(11, 42189), (15, 42450), (33, 42723), (36, 42732), (42, 42756), (Start: 68 @42837 has 82 MA's),

Gene: Gina_49 Start: 32061, Stop: 32435, Start Num: 69

Candidate Starts for Gina_49:

(Start: 69 @32061 has 9 MA's), (88, 32166), (96, 32217), (104, 32268), (113, 32319), (117, 32343), (121, 32355), (122, 32361), (126, 32376), (134, 32406), (136, 32412),

Gene: Gizermo_68 Start: 42833, Stop: 43198, Start Num: 68

Candidate Starts for Gizermo_68:

(11, 42185), (15, 42446), (33, 42719), (36, 42728), (42, 42752), (Start: 68 @42833 has 82 MA's),

Gene: Gudmit_62 Start: 37386, Stop: 37871, Start Num: 66

Candidate Starts for Gudmit_62:

(51, 37326), (Start: 66 @37386 has 5 MA's), (76, 37425), (80, 37452), (87, 37497), (94, 37557), (108, 37638), (109, 37647), (121, 37701), (132, 37743),

Gene: Haley23_68 Start: 42833, Stop: 43198, Start Num: 68

Candidate Starts for Haley23_68:

(11, 42185), (15, 42446), (33, 42719), (36, 42728), (42, 42752), (Start: 68 @42833 has 82 MA's),

Gene: Herod_75 Start: 49919, Stop: 50284, Start Num: 68

Candidate Starts for Herod_75:

(35, 49802), (40, 49826), (41, 49829), (55, 49871), (Start: 68 @49919 has 82 MA's), (73, 49934),

Gene: Holliday_92 Start: 52368, Stop: 52745, Start Num: 65

Candidate Starts for Holliday_92:

(Start: 65 @52368 has 22 MA's), (77, 52416), (87, 52464), (107, 52602), (121, 52668), (132, 52710),

Gene: Hortense_71 Start: 48762, Stop: 49163, Start Num: 68

Candidate Starts for Hortense_71:

(Start: 61 @48744 has 3 MA's), (Start: 68 @48762 has 82 MA's), (99, 48939), (125, 49083), (137, 49125),

Gene: Horus_91 Start: 51033, Stop: 51401, Start Num: 66
Candidate Starts for Horus_91:
(Start: 66 @51033 has 5 MA's), (78, 51090), (91, 51147), (95, 51189), (96, 51192), (97, 51198), (110, 51279), (117, 51318), (121, 51330), (122, 51336), (132, 51366),

Gene: Howe_71 Start: 48762, Stop: 49163, Start Num: 68
Candidate Starts for Howe_71:
(Start: 61 @48744 has 3 MA's), (Start: 68 @48762 has 82 MA's), (99, 48939), (125, 49083), (137, 49125),

Gene: Hugley_73 Start: 49899, Stop: 50264, Start Num: 68
Candidate Starts for Hugley_73:
(35, 49782), (40, 49806), (41, 49809), (55, 49851), (Start: 68 @49899 has 82 MA's), (73, 49914),

Gene: Hyzer_89 Start: 56367, Stop: 56672, Start Num: 68
Candidate Starts for Hyzer_89:
(55, 56319), (Start: 68 @56367 has 82 MA's),

Gene: Island3_53 Start: 36853, Stop: 37233, Start Num: 65
Candidate Starts for Island3_53:
(Start: 65 @36853 has 22 MA's), (78, 36925), (111, 37117), (113, 37120), (132, 37201),

Gene: JCole_65 Start: 41503, Stop: 41868, Start Num: 68
Candidate Starts for JCole_65:
(9, 40720), (11, 40855), (15, 41116), (33, 41389), (36, 41398), (42, 41422), (56, 41461), (Start: 68 @41503 has 82 MA's),

Gene: Jablanski_77 Start: 51014, Stop: 51379, Start Num: 68
Candidate Starts for Jablanski_77:
(30, 50894), (50, 50963), (57, 50978), (Start: 68 @51014 has 82 MA's), (119, 51275),

Gene: Jace_77 Start: 44043, Stop: 44462, Start Num: 70
Candidate Starts for Jace_77:
(17, 43710), (25, 43836), (Start: 70 @44043 has 7 MA's), (77, 44088), (79, 44103), (84, 44121), (87, 44148), (89, 44160), (94, 44208), (96, 44214), (112, 44313), (114, 44316), (123, 44358), (124, 44361), (131, 44385), (142, 44445),

Gene: Jayden_49 Start: 32758, Stop: 33132, Start Num: 69
Candidate Starts for Jayden_49:
(45, 32671), (Start: 69 @32758 has 9 MA's), (85, 32842), (96, 32914), (104, 32965), (117, 33040), (121, 33052), (122, 33058), (134, 33103), (136, 33109),

Gene: Jollymon_15 Start: 7379, Stop: 7768, Start Num: 62
Candidate Starts for Jollymon_15:
(26, 7193), (44, 7304), (54, 7349), (59, 7376), (Start: 62 @7379 has 3 MA's), (64, 7388), (Start: 67 @7397 has 1 MA's), (81, 7472), (97, 7571), (109, 7649), (111, 7664), (117, 7691), (121, 7703), (125, 7721), (134, 7754),

Gene: Kamaru_84 Start: 48067, Stop: 48444, Start Num: 65
Candidate Starts for Kamaru_84:
(28, 47893), (Start: 65 @48067 has 22 MA's), (74, 48088), (77, 48115), (92, 48202), (107, 48301), (109, 48313), (120, 48364), (121, 48367), (132, 48409),

Gene: KingstonB_13 Start: 6977, Stop: 7357, Start Num: 64

Candidate Starts for KingstonB_13:

(26, 6782), (44, 6893), (54, 6938), (59, 6965), (Start: 62 @6968 has 3 MA's), (64, 6977), (Start: 67 @6986 has 1 MA's), (81, 7061), (97, 7160), (109, 7238), (111, 7253), (117, 7280), (121, 7292), (125, 7310), (134, 7343),

Gene: Kita_72 Start: 46566, Stop: 46931, Start Num: 68

Candidate Starts for Kita_72:

(35, 46452), (Start: 68 @46566 has 82 MA's), (73, 46581), (101, 46722),

Gene: Lamberg_64 Start: 41342, Stop: 41707, Start Num: 68

Candidate Starts for Lamberg_64:

(11, 40694), (15, 40955), (33, 41228), (36, 41237), (42, 41261), (Start: 68 @41342 has 82 MA's),

Gene: Leroy_90 Start: 49228, Stop: 49596, Start Num: 66

Candidate Starts for Leroy_90:

(Start: 66 @49228 has 5 MA's), (78, 49285), (91, 49342), (95, 49384), (96, 49387), (97, 49393), (110, 49474), (117, 49513), (121, 49525), (122, 49531), (132, 49561),

Gene: LilSpotty_67 Start: 41443, Stop: 41820, Start Num: 65

Candidate Starts for LilSpotty_67:

(32, 41326), (34, 41329), (39, 41350), (Start: 65 @41443 has 22 MA's), (78, 41512), (111, 41704), (113, 41707), (117, 41731), (132, 41788),

Gene: Lilas_70 Start: 49785, Stop: 50150, Start Num: 68

Candidate Starts for Lilas_70:

(15, 49398), (33, 49671), (36, 49680), (42, 49704), (Start: 68 @49785 has 82 MA's),

Gene: LonelyBoi_72 Start: 50747, Stop: 51112, Start Num: 70

Candidate Starts for LonelyBoi_72:

(43, 50669), (Start: 70 @50747 has 7 MA's), (73, 50762),

Gene: LordFarquaad_71 Start: 45261, Stop: 45629, Start Num: 68

Candidate Starts for LordFarquaad_71:

(35, 45144), (38, 45153), (41, 45171), (55, 45213), (Start: 68 @45261 has 82 MA's), (73, 45276),

Gene: Madeline_68 Start: 48371, Stop: 48736, Start Num: 68

Candidate Starts for Madeline_68:

(35, 48254), (38, 48263), (41, 48281), (55, 48323), (Start: 68 @48371 has 82 MA's), (73, 48386), (82, 48440), (101, 48527),

Gene: Malibo_73 Start: 47674, Stop: 48039, Start Num: 68

Candidate Starts for Malibo_73:

(13, 47248), (35, 47557), (40, 47581), (41, 47584), (55, 47626), (Start: 68 @47674 has 82 MA's),

Gene: Manasvini_73 Start: 46581, Stop: 46946, Start Num: 68

Candidate Starts for Manasvini_73:

(35, 46467), (Start: 68 @46581 has 82 MA's), (73, 46596), (101, 46737),

Gene: Maridalia_74 Start: 47802, Stop: 48167, Start Num: 68

Candidate Starts for Maridalia_74:

(35, 47685), (41, 47712), (55, 47754), (Start: 68 @47802 has 82 MA's), (73, 47817),

Gene: Marteena_72 Start: 47755, Stop: 48120, Start Num: 68
Candidate Starts for Marteena_72:
(42, 47674), (56, 47713), (Start: 68 @47755 has 82 MA's), (97, 47896),

Gene: Matteo_62 Start: 41374, Stop: 41742, Start Num: 68
Candidate Starts for Matteo_62:
(15, 40987), (33, 41260), (36, 41269), (42, 41293), (Start: 68 @41374 has 82 MA's),

Gene: Mbo4_59 Start: 42474, Stop: 42896, Start Num: 65
Candidate Starts for Mbo4_59:
(19, 42183), (22, 42258), (31, 42348), (Start: 65 @42474 has 22 MA's), (77, 42522), (83, 42552), (92, 42621), (131, 42795),

Gene: Mcklovin_70 Start: 50090, Stop: 50455, Start Num: 68
Candidate Starts for Mcklovin_70:
(33, 49976), (36, 49985), (42, 50009), (56, 50048), (Start: 68 @50090 has 82 MA's), (115, 50336),

Gene: Megan_45 Start: 35422, Stop: 35853, Start Num: 67
Candidate Starts for Megan_45:
(53, 35371), (Start: 67 @35422 has 1 MA's), (87, 35521), (99, 35593), (104, 35629), (106, 35641), (110, 35665), (111, 35677), (113, 35680), (117, 35704), (118, 35707), (121, 35716), (130, 35755), (134, 35767), (136, 35773), (138, 35782), (140, 35809),

Gene: Metamorphoo_49 Start: 33181, Stop: 33555, Start Num: 69
Candidate Starts for Metamorphoo_49:
(Start: 69 @33181 has 9 MA's), (104, 33388), (113, 33439), (117, 33463), (121, 33475), (133, 33523), (136, 33532),

Gene: MichaelScott_71 Start: 44969, Stop: 45334, Start Num: 68
Candidate Starts for MichaelScott_71:
(Start: 68 @44969 has 82 MA's), (116, 45218),

Gene: Misha28_68 Start: 42725, Stop: 43102, Start Num: 65
Candidate Starts for Misha28_68:
(Start: 65 @42725 has 22 MA's), (78, 42794), (87, 42830), (90, 42848), (113, 42989), (117, 43013), (132, 43070), (138, 43094),

Gene: Mocha12_68 Start: 42833, Stop: 43198, Start Num: 68
Candidate Starts for Mocha12_68:
(11, 42185), (15, 42446), (33, 42719), (36, 42728), (42, 42752), (Start: 68 @42833 has 82 MA's),

Gene: Moosehead_69 Start: 39233, Stop: 39610, Start Num: 65
Candidate Starts for Moosehead_69:
(27, 39047), (46, 39152), (47, 39164), (58, 39209), (Start: 65 @39233 has 22 MA's), (77, 39281), (87, 39329), (121, 39533),

Gene: MortyNRick_83 Start: 48781, Stop: 49158, Start Num: 65
Candidate Starts for MortyNRick_83:
(Start: 65 @48781 has 22 MA's), (77, 48829), (87, 48877), (107, 49015), (111, 49042), (121, 49081), (127, 49102), (132, 49123),

Gene: Neobush_73 Start: 47125, Stop: 47490, Start Num: 68
Candidate Starts for Neobush_73:

(35, 47011), (Start: 68 @47125 has 82 MA's), (73, 47140), (101, 47281),

Gene: Nettuno_66 Start: 42038, Stop: 42406, Start Num: 68

Candidate Starts for Nettuno_66:

(35, 41921), (38, 41930), (41, 41948), (55, 41990), (Start: 68 @42038 has 82 MA's), (73, 42053),

Gene: Nicole72_45 Start: 35846, Stop: 36274, Start Num: 70

Candidate Starts for Nicole72_45:

(30, 35690), (Start: 70 @35846 has 7 MA's), (72, 35855), (104, 36047), (105, 36050), (111, 36095), (113, 36098), (117, 36122), (121, 36134), (128, 36161), (130, 36173), (132, 36179), (134, 36185), (136, 36191), (138, 36203), (140, 36230),

Gene: NoodlelyBoi_48 Start: 32719, Stop: 33093, Start Num: 69

Candidate Starts for NoodlelyBoi_48:

(Start: 69 @32719 has 9 MA's), (78, 32779), (86, 32806), (96, 32875), (98, 32884), (100, 32893), (104, 32926), (110, 32962), (113, 32977), (117, 33001), (121, 33013), (134, 33064), (136, 33070),

Gene: Nymphadora_75 Start: 49524, Stop: 49889, Start Num: 68

Candidate Starts for Nymphadora_75:

(35, 49407), (40, 49431), (41, 49434), (55, 49476), (Start: 68 @49524 has 82 MA's), (73, 49539),

Gene: Ohgeesy_74 Start: 49004, Stop: 49369, Start Num: 68

Candidate Starts for Ohgeesy_74:

(35, 48887), (41, 48914), (Start: 68 @49004 has 82 MA's),

Gene: Oregano_70 Start: 43852, Stop: 44250, Start Num: 68

Candidate Starts for Oregano_70:

(Start: 68 @43852 has 82 MA's), (78, 43912), (99, 44029), (125, 44173), (137, 44215),

Gene: PantheRoc_77 Start: 49218, Stop: 49622, Start Num: 68

Candidate Starts for PantheRoc_77:

(35, 49101), (40, 49125), (41, 49128), (55, 49170), (Start: 68 @49218 has 82 MA's), (77, 49266), (89, 49326), (93, 49365), (96, 49380), (99, 49395), (125, 49539), (135, 49575), (137, 49584),

Gene: Periwinkle_99 Start: 52035, Stop: 52403, Start Num: 66

Candidate Starts for Periwinkle_99:

(Start: 66 @52035 has 5 MA's), (78, 52092), (91, 52149), (95, 52191), (96, 52194), (97, 52200), (110, 52281), (117, 52320), (121, 52332), (122, 52338), (132, 52368),

Gene: Phistory_88 Start: 48067, Stop: 48444, Start Num: 65

Candidate Starts for Phistory_88:

(Start: 65 @48067 has 22 MA's), (77, 48115), (87, 48163), (96, 48229), (107, 48301), (121, 48367), (127, 48388), (132, 48409),

Gene: PhriskyACE_67 Start: 44129, Stop: 44497, Start Num: 68

Candidate Starts for PhriskyACE_67:

(42, 44048), (56, 44087), (Start: 68 @44129 has 82 MA's), (85, 44213),

Gene: Pickett_65 Start: 41546, Stop: 41911, Start Num: 68

Candidate Starts for Pickett_65:

(33, 41432), (36, 41441), (42, 41465), (Start: 68 @41546 has 82 MA's),

Gene: Piper2020_71 Start: 43620, Stop: 43997, Start Num: 65

Candidate Starts for Piper2020_71:

(Start: 65 @43620 has 22 MA's), (78, 43689), (87, 43725), (90, 43743), (113, 43884), (117, 43908), (132, 43965), (138, 43989),

Gene: Pollux_76 Start: 49712, Stop: 50077, Start Num: 68

Candidate Starts for Pollux_76:

(42, 49631), (56, 49670), (Start: 68 @49712 has 82 MA's), (97, 49853),

Gene: Polly_68 Start: 46000, Stop: 46365, Start Num: 68

Candidate Starts for Polly_68:

(35, 45886), (Start: 68 @46000 has 82 MA's), (73, 46015), (101, 46156),

Gene: Powerball_68 Start: 44232, Stop: 44600, Start Num: 68

Candidate Starts for Powerball_68:

(42, 44151), (56, 44190), (Start: 68 @44232 has 82 MA's), (85, 44316),

Gene: Pytheas_78 Start: 51013, Stop: 51378, Start Num: 68

Candidate Starts for Pytheas_78:

(30, 50893), (50, 50962), (57, 50977), (Start: 68 @51013 has 82 MA's), (119, 51274),

Gene: RavenCo17_69 Start: 47361, Stop: 47729, Start Num: 70

Candidate Starts for RavenCo17_69:

(10, 46593), (Start: 70 @47361 has 7 MA's), (73, 47376), (120, 47625),

Gene: RobsFeet_50 Start: 33462, Stop: 33836, Start Num: 69

Candidate Starts for RobsFeet_50:

(Start: 69 @33462 has 9 MA's), (104, 33669), (113, 33720), (117, 33744), (121, 33756), (133, 33804), (136, 33813),

Gene: Sahara_67 Start: 42654, Stop: 43022, Start Num: 68

Candidate Starts for Sahara_67:

(1, 41634), (2, 41637), (15, 42267), (33, 42540), (36, 42549), (42, 42573), (Start: 68 @42654 has 82 MA's),

Gene: Samman98_71 Start: 44391, Stop: 44756, Start Num: 68

Candidate Starts for Samman98_71:

(Start: 68 @44391 has 82 MA's), (116, 44640),

Gene: Savage_68 Start: 42833, Stop: 43198, Start Num: 68

Candidate Starts for Savage_68:

(11, 42185), (15, 42446), (33, 42719), (36, 42728), (42, 42752), (Start: 68 @42833 has 82 MA's),

Gene: Sbash_61 Start: 42805, Stop: 43188, Start Num: 65

Candidate Starts for Sbash_61:

(23, 42580), (48, 42736), (49, 42739), (Start: 65 @42805 has 22 MA's), (71, 42826), (78, 42877), (111, 43069), (113, 43072), (132, 43153), (139, 43180),

Gene: Scitech_46 Start: 32555, Stop: 32974, Start Num: 55

Candidate Starts for Scitech_46:

(55, 32555), (60, 32582), (Start: 65 @32597 has 22 MA's), (78, 32666), (87, 32702), (90, 32720), (113, 32861), (132, 32942), (138, 32966),

Gene: Sekhmet_69 Start: 43915, Stop: 44283, Start Num: 68

Candidate Starts for Sekhmet_69:

(10, 43162), (33, 43801), (36, 43810), (42, 43834), (56, 43873), (Start: 68 @43915 has 82 MA's),

Gene: Shlim410_69 Start: 48744, Stop: 49163, Start Num: 61

Candidate Starts for Shlim410_69:

(Start: 61 @48744 has 3 MA's), (Start: 68 @48762 has 82 MA's), (99, 48939), (125, 49083), (137, 49125),

Gene: Sidious_71 Start: 48554, Stop: 48919, Start Num: 68

Candidate Starts for Sidious_71:

(42, 48473), (56, 48512), (Start: 68 @48554 has 82 MA's),

Gene: SkinnyPete_48 Start: 33096, Stop: 33473, Start Num: 65

Candidate Starts for SkinnyPete_48:

(Start: 65 @33096 has 22 MA's), (78, 33165), (87, 33201), (90, 33219), (113, 33360), (132, 33441), (138, 33465),

Gene: SoilAssassin_68 Start: 45279, Stop: 45647, Start Num: 68

Candidate Starts for SoilAssassin_68:

(35, 45162), (38, 45171), (41, 45189), (55, 45231), (Start: 68 @45279 has 82 MA's), (73, 45294),

Gene: Soos_13 Start: 6967, Stop: 7356, Start Num: 62

Candidate Starts for Soos_13:

(26, 6781), (44, 6892), (54, 6937), (59, 6964), (Start: 62 @6967 has 3 MA's), (64, 6976), (Start: 67 @6985 has 1 MA's), (81, 7060), (97, 7159), (109, 7237), (111, 7252), (117, 7279), (121, 7291), (125, 7309), (128, 7318), (134, 7342),

Gene: Sproutie_68 Start: 42833, Stop: 43198, Start Num: 68

Candidate Starts for Sproutie_68:

(11, 42185), (15, 42446), (33, 42719), (36, 42728), (42, 42752), (Start: 68 @42833 has 82 MA's),

Gene: Sting_14 Start: 7379, Stop: 7768, Start Num: 62

Candidate Starts for Sting_14:

(24, 7172), (26, 7193), (44, 7304), (54, 7349), (59, 7376), (Start: 62 @7379 has 3 MA's), (64, 7388), (Start: 67 @7397 has 1 MA's), (81, 7472), (97, 7571), (109, 7649), (111, 7664), (117, 7691), (121, 7703), (125, 7721), (128, 7730), (134, 7754),

Gene: Suerte_64 Start: 43530, Stop: 43898, Start Num: 68

Candidate Starts for Suerte_64:

(33, 43416), (36, 43425), (42, 43449), (Start: 68 @43530 has 82 MA's),

Gene: Suscepit_71 Start: 46558, Stop: 46923, Start Num: 68

Candidate Starts for Suscepit_71:

(35, 46444), (Start: 68 @46558 has 82 MA's), (73, 46573), (101, 46714),

Gene: Tayonia_71 Start: 46557, Stop: 46922, Start Num: 68

Candidate Starts for Tayonia_71:

(35, 46443), (Start: 68 @46557 has 82 MA's), (73, 46572), (101, 46713),

Gene: Teamocil_49 Start: 32160, Stop: 32534, Start Num: 69

Candidate Starts for Teamocil_49:

(Start: 69 @32160 has 9 MA's), (88, 32265), (96, 32316), (104, 32367), (113, 32418), (117, 32442), (121, 32454), (122, 32460), (126, 32475), (134, 32505), (136, 32511),

Gene: ThankyouJordi_74 Start: 49930, Stop: 50295, Start Num: 68
Candidate Starts for ThankyouJordi_74:
(18, 49627), (35, 49813), (38, 49822), (41, 49840), (55, 49882), (Start: 68 @49930 has 82 MA's),

Gene: Thimann_71 Start: 44657, Stop: 45025, Start Num: 68
Candidate Starts for Thimann_71:
(3, 43652), (4, 43664), (5, 43700), (6, 43724), (7, 43736), (8, 43748), (12, 44210), (Start: 68 @44657 has 82 MA's),

Gene: TimTam_75 Start: 49524, Stop: 49889, Start Num: 68
Candidate Starts for TimTam_75:
(35, 49407), (40, 49431), (41, 49434), (55, 49476), (Start: 68 @49524 has 82 MA's), (73, 49539),

Gene: TootsiePop_68 Start: 42725, Stop: 43102, Start Num: 65
Candidate Starts for TootsiePop_68:
(Start: 65 @42725 has 22 MA's), (78, 42794), (87, 42830), (90, 42848), (113, 42989), (117, 43013), (132, 43070), (138, 43094),

Gene: Tortellini_59 Start: 41926, Stop: 42303, Start Num: 65
Candidate Starts for Tortellini_59:
(14, 41533), (29, 41752), (52, 41869), (Start: 65 @41926 has 22 MA's), (78, 41995), (87, 42031), (90, 42049), (117, 42214), (132, 42271), (138, 42295),

Gene: Trumpet_71 Start: 46558, Stop: 46923, Start Num: 68
Candidate Starts for Trumpet_71:
(35, 46444), (Start: 68 @46558 has 82 MA's), (73, 46573), (101, 46714),

Gene: TuertoX_68 Start: 42833, Stop: 43198, Start Num: 68
Candidate Starts for TuertoX_68:
(11, 42185), (15, 42446), (33, 42719), (36, 42728), (42, 42752), (Start: 68 @42833 has 82 MA's),

Gene: Twinkle_70 Start: 49803, Stop: 50222, Start Num: 61
Candidate Starts for Twinkle_70:
(Start: 61 @49803 has 3 MA's), (Start: 68 @49821 has 82 MA's), (99, 49998), (125, 50142), (137, 50184),

Gene: Tyrumbra_47 Start: 33262, Stop: 33636, Start Num: 69
Candidate Starts for Tyrumbra_47:
(Start: 69 @33262 has 9 MA's), (104, 33469), (113, 33520), (117, 33544), (121, 33556), (133, 33604), (136, 33613),

Gene: Vasanti_67 Start: 44256, Stop: 44621, Start Num: 68
Candidate Starts for Vasanti_67:
(35, 44139), (40, 44163), (41, 44166), (55, 44208), (Start: 68 @44256 has 82 MA's), (90, 44367), (97, 44397),

Gene: WelcomeAyanna_74 Start: 50077, Stop: 50442, Start Num: 68
Candidate Starts for WelcomeAyanna_74:
(18, 49774), (35, 49960), (38, 49969), (41, 49987), (55, 50029), (Start: 68 @50077 has 82 MA's),

Gene: Whiteclaw_68 Start: 42833, Stop: 43198, Start Num: 68
Candidate Starts for Whiteclaw_68:

(11, 42185), (15, 42446), (33, 42719), (36, 42728), (42, 42752), (Start: 68 @42833 has 82 MA's),

Gene: WinkNick_70 Start: 43439, Stop: 43807, Start Num: 68

Candidate Starts for WinkNick_70:

(10, 42686), (33, 43325), (36, 43334), (42, 43358), (56, 43397), (Start: 68 @43439 has 82 MA's), (102, 43604),

Gene: Yeet412_67 Start: 44083, Stop: 44451, Start Num: 68

Candidate Starts for Yeet412_67:

(35, 43966), (38, 43975), (41, 43993), (55, 44035), (Start: 68 @44083 has 82 MA's), (73, 44098),

Gene: Yeezy_76 Start: 47471, Stop: 47836, Start Num: 68

Candidate Starts for Yeezy_76:

(47, 47405), (Start: 68 @47471 has 82 MA's), (73, 47486),

Gene: Zameen_71 Start: 46557, Stop: 46922, Start Num: 68

Candidate Starts for Zameen_71:

(35, 46443), (Start: 68 @46557 has 82 MA's), (73, 46572), (101, 46713),

Gene: Zirinka_69 Start: 48225, Stop: 48590, Start Num: 68

Candidate Starts for Zirinka_69:

(35, 48108), (40, 48132), (41, 48135), (55, 48177), (Start: 68 @48225 has 82 MA's), (73, 48240),