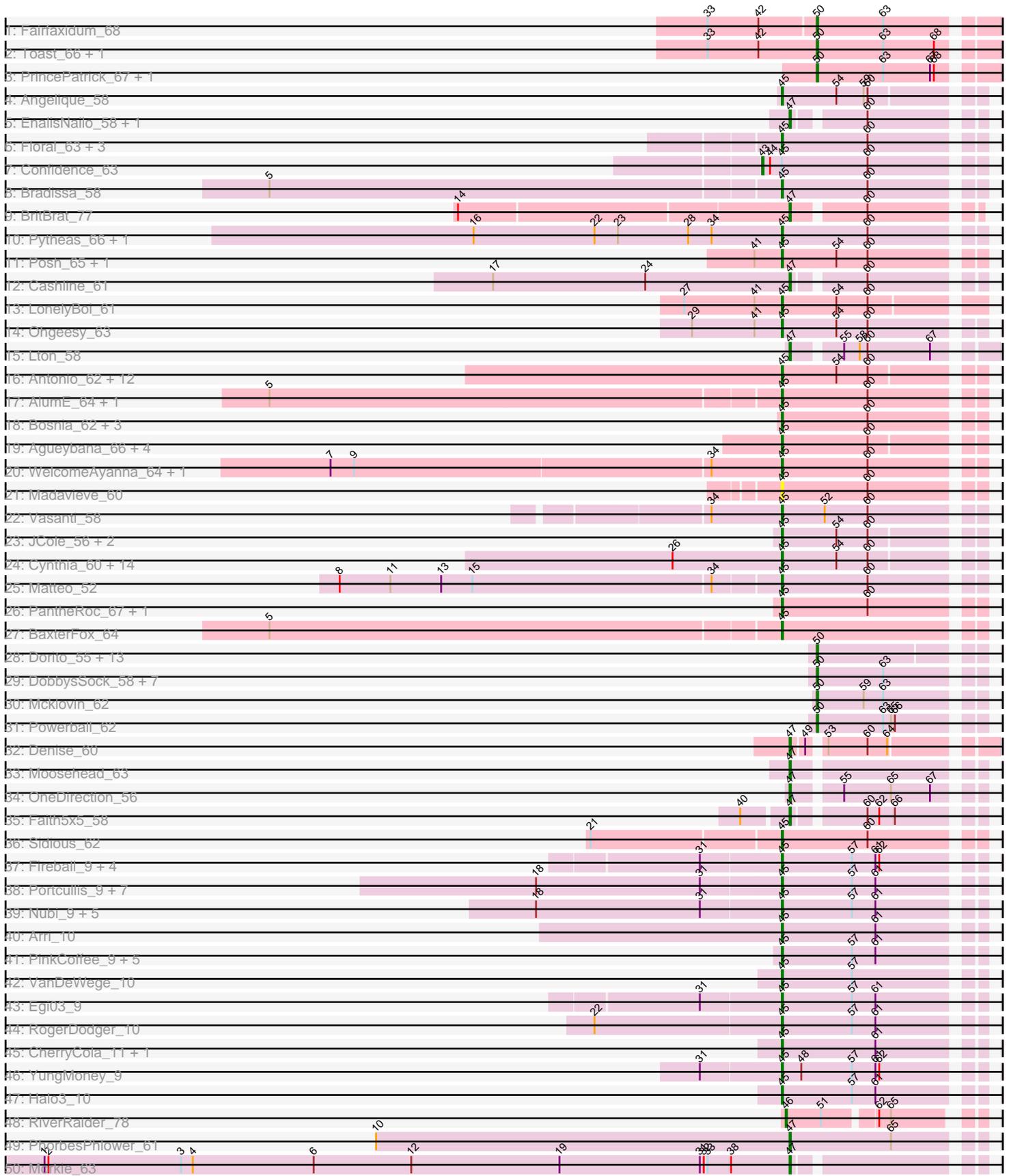# Pham 283521

Pham 283521

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 283521 Report

This analysis was run 02/23/26 on database version 636.

Pham number 283521 has 179 members, 14 are drafts.

Phages represented in each track:
• Track 1 : Fairfaxidum_68
• Track 2 : Toast_66, PCoral7_66
• Track 3 : PrincePatrick_67, William_69
• Track 4 : Angelique_58
• Track 5 : EnalisNailo_58, Lilas_60
• Track 6 : Floral_63, EMsquaredA_62, Pollux_65, Marteena_61
• Track 7 : Confidence_63
• Track 8 : Bradissa_58
• Track 9 : BritBrat_77
• Track 10 : Pytheas_66, Jablanski_66
• Track 11 : Posh_65, Wrigley_67
• Track 12 : Cashline_61
• Track 13 : LonelyBoi_61
• Track 14 : Ohgeesy_63
• Track 15 : Lton_58
• Track 16 : Antonio_62, Trumpet_62, Eudoria_62, Pickett_55, Polly_59, Kita_63, EdnaMode_56, Suscepit_62, Tayonia_62, Zirinka_59, Manasvini_63, Zameen_62, Bialota_60
• Track 17 : AlumE_64, BoyNamedSue_64
• Track 18 : Bosnia_62, Jalleen_62, Herod_65, Hugley_63
• Track 19 : Agueybana_66, FroggyToad_58, Attis_58, LordFarquaad_60, SoilAssassin_58
• Track 20 : WelcomeAyanna_64, ThankyouJordi_64
• Track 21 : Madavieve_60
• Track 22 : Vasanti_58
• Track 23 : JCole_56, Yeet412_57, BeeGee_68
• Track 24 : Cynthia_60, Bjanes7_57, Nettuno_56, Sproutie_60, Whiteclaw_60, Clap_60, Gizermo_60, TuertoX_60, Mocha12_60, Lamberg_56, Ebert_64, Sahara_59, GemG_60, Savage_60, Haley23_60
• Track 25 : Matteo_52
• Track 26 : PantheRoc_67, RavenCo17_60
• Track 27 : BaxterFox_64
• Track 28 : Dorito_55, WinkNick_62, Easley_59, Twinkle_63, PhriskyACE_61, Adora_61, MichaelScott_65, Shlim410_62, Howe_64, Dolores_62, Sekhmet_61, Hortense_64, Thimann_64, Oregano_64
• Track 29 : DobbysSock_58, Beenie_58, Suerte_57, Samman98_64, Tuti_64, Invectra_66, Clark_63, Annalisa_61

- Track 30 : Mcklovin_62
- Track 31 : Powerball_62
- Track 32 : Denise_60
- Track 33 : Moosehead_63
- Track 34 : OneDirection_56
- Track 35 : Faith5x5_58
- Track 36 : Sidious_62
- Track 37 : Fireball_9, Wizard_9, Gezellig_9, PullumCavea_9, Phlop_9
- Track 38 : Portcullis_9, Savbucketdawg_9, Evamon_9, Togo_9, SmokingBunny_9, Salvador_9, TillyBobJoe_9, Jambalaya_9
- Track 39 : Nubi_9, CoveyB_9, Shinji_9, Danyall_9, Mutzi_9, Twister6_9
- Track 40 : Arri_10
- Track 41 : PinkCoffee_9, Fugax_9, ClamChowder_9, Bakery_10, KimmyK_9, Barb_9
- Track 42 : VanDeWege_10
- Track 43 : Egi03_9
- Track 44 : RogerDodger_10
- Track 45 : CherryCola_11, Valary_10
- Track 46 : YungMoney_9
- Track 47 : Halo3_10
- Track 48 : RiverRaider_78
- Track 49 : PhorbesPhlower_61
- Track 50 : Morkie_63
- Track 51 : BotCity_85, Pepperoni_57, BENtherdunthat_83, Lucky10_59, Lutum_84, Frickyeah_86, Holliday_83, Kenna_78, ODay_88
- Track 52 : Malisha_84
- Track 53 : MortyNRick_74
- Track 54 : Asapag_79, Phabuloso_88, Budski_86, Birdsong_78
- Track 55 : CheeseTouch_87
- Track 56 : Kamaru_75
- Track 57 : Whitney_79, Getalong_84
- Track 58 : Squiddly_83
- Track 59 : Spooky_84
- Track 60 : Apricot_78, Ecliptus_85, Leroy_80, LitninMcQueen_83, Horus_81, Periwinkle_90, ShawBrad_85, Phistory_78, Crater_79
- Track 61 : Kuwabara_81
- Track 62 : MakCheese_69
- Track 63 : Malibo_64
- Track 64 : DumpsterDude_60
- Track 65 : Heinz_52, Hibiscus_52
- Track 66 : DonkeyMan_52, Tarzan_52
- Track 67 : Jojo24_51
- Track 68 : Reyja_54
- Track 69 : Gudmit_56

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

The start number called the most often in the published annotations is 45, it was called in 96 of the 165 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Agueybana_66, AlumE_64, Angelique_58, Antonio_62, Arri_10, Attis_58, Bakery_10, Barb_9, BaxterFox_64, BeeGee_68, Bialota_60, Bjanes7_57, Bosnia_62, BoyNamedSue_64, Bradissa_58, CherryCola_11, ClamChowder_9, Clap_60, CoveyB_9, Cynthia_60, Danyall_9, DonkeyMan_52, DumpsterDude_60, EMsquaredA_62, Ebert_64, EdnaMode_56, Egi03_9, Eudoria_62, Evamon_9, Fireball_9, Floral_63, FroggyToad_58, Fugax_9, GemG_60, Gezellig_9, Gizermo_60, Haley23_60, Halo3_10, Heinz_52, Herod_65, Hibiscus_52, Hugley_63, JCole_56, Jablanski_66, Jalleen_62, Jambalaya_9, Jojo24_51, KimmyK_9, Kita_63, Lamberg_56, LonelyBoi_61, LordFarquaad_60, Madavieve_60, Malibo_64, Manasvini_63, Marteena_61, Matteo_52, Mocha12_60, Mutzi_9, Nettuno_56, Nubi_9, Ohgeesy_63, PantheRoc_67, Phlop_9, Pickett_55, PinkCoffee_9, Pollux_65, Polly_59, Portcullis_9, Posh_65, PullumCavea_9, Pytheas_66, RavenCo17_60, Reyja_54, RogerDodger_10, Sahara_59, Salvador_9, Savage_60, Savbucketdawg_9, Shinji_9, Sidious_62, SmokingBunny_9, SoilAssassin_58, Sproutie_60, Suscepit_62, Tarzan_52, Tayonia_62, ThankyouJordi_64, TillyBobJoe_9, Togo_9, Trumpet_62, TuertoX_60, Twister6_9, Valary_10, VanDeWege_10, Vasanti_58, WelcomeAyanna_64, Whiteclaw_60, Wizard_9, Wrigley_67, Yeet412_57, YungMoney_9, Zameen_62, Zirinka_59,

Genes that have the "Most Annotated" start but do not call it:
• Confidence_63,

Genes that do not have the "Most Annotated" start:
• Adora_61, Annalisa_61, Apricot_78, Asapag_79, BENtherdunthat_83, Beenie_58, Birdsong_78, BotCity_85, BritBrat_77, Budski_86, Cashline_61, CheeseTouch_87, Clark_63, Crater_79, Denise_60, DobbysSock_58, Dolores_62, Dorito_55, Easley_59, Ecliptus_85, EnalisNailo_58, Fairfaxidum_68, Faith5x5_58, Frickyeah_86, Getalong_84, Gudmit_56, Holliday_83, Hortense_64, Horus_81, Howe_64, Invectra_66, Kamaru_75, Kenna_78, Kuwabara_81, Leroy_80, Lilas_60, LitninMcQueen_83, Lton_58, Lucky10_59, Lutum_84, MakCheese_69, Malisha_84, Mcklovin_62, MichaelScott_65, Moosehead_63, Morkie_63, MortyNRick_74, ODay_88, OneDirection_56, Oregano_64, PCoral7_66, Pepperoni_57, Periwinkle_90, Phabuloso_88, Phistory_78, PhorbesPhlower_61, PhriskyACE_61, Powerball_62, PrincePatrick_67, RiverRaider_78, Samman98_64, Sekhmet_61, ShawBrad_85, Shlim410_62, Spooky_84, Squiddly_83, Suerte_57, Thimann_64, Toast_66, Tuti_64, Twinkle_63, Whitney_79, William_69, WinkNick_62,

Summary by start number:

Start 43:
• Found in 1 of 179 (0.6%) of genes in pham
• Manual Annotations of this start: 1 of 165
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Confidence_63 (CY1),

Start 45:
• Found in 105 of 179 (58.7%) of genes in pham
• Manual Annotations of this start: 96 of 165
• Called 99.0% of time when present
• Phage (with cluster) where this start called: Agueybana_66 (CZ1), AlumE_64 (CZ1), Angelique_58 (CY1), Antonio_62 (CZ1), Arri_10 (DC1), Attis_58 (CZ2), Bakery_10 (DC1), Barb_9 (DC1), BaxterFox_64 (CZ3), BeeGee_68 (CY5), Bialota_60 (CZ1),

Bjanes7_57 (CZ2), Bosnia_62 (CZ1), BoyNamedSue_64 (CZ1), Bradissa_58 (CY1), CherryCola_11 (DC1), ClamChowder_9 (DC1), Clap_60 (CZ2), CoveyB_9 (DC1), Cynthia_60 (CZ2), Danyall_9 (DC1), DonkeyMan_52 (DY), DumpsterDude_60 (DW), EMsquaredA_62 (CY1), Ebert_64 (CZ2), EdnaMode_56 (CZ2), Egi03_9 (DC1), Eudoria_62 (CZ1), Evamon_9 (DC1), Fireball_9 (DC1), Floral_63 (CY1), FroggyToad_58 (CZ2), Fugax_9 (DC1), GemG_60 (CZ2), Gezellig_9 (DC1), Gizermo_60 (CZ2), Haley23_60 (CZ2), Halo3_10 (DC1), Heinz_52 (DY), Herod_65 (CZ1), Hibiscus_52 (DY), Hugley_63 (CZ1), JCole_56 (CZ2), Jablanski_66 (CY3), Jalleen_62 (CZ2), Jambalaya_9 (DC1), Jojo24_51 (DY), KimmyK_9 (DC1), Kita_63 (CZ1), Lamberg_56 (CZ2), LonelyBoi_61 (CY7), LordFarquaad_60 (CZ2), Madavieve_60 (CZ1), Malibo_64 (DW), Manasvini_63 (CZ1), Marteena_61 (CY1), Matteo_52 (CZ2), Mocha12_60 (CZ2), Mutzi_9 (DC1), Nettuno_56 (CZ2), Nubi_9 (DC1), Ohgeesy_63 (CZ), PantheRoc_67 (CZ3), Phlop_9 (DC1), Pickett_55 (CZ2), PinkCoffee_9 (DC1), Pollux_65 (CY1), Polly_59 (CZ1), Portcullis_9 (DC1), Posh_65 (CY4), PullumCavea_9 (DC1), Pytheas_66 (CY3), RavenCo17_60 (CZ8), Reyja_54 (DY), RogerDodger_10 (DC1), Sahara_59 (CZ2), Salvador_9 (DC1), Savage_60 (CZ2), Savbucketdawg_9 (DC1), Shinji_9 (DC1), Sidious_62 (CZ7), SmokingBunny_9 (DC1), SoilAssassin_58 (CZ2), Sproutie_60 (CZ2), Suscepit_62 (CZ1), Tarzan_52 (DY), Tayonia_62 (CZ1), ThankyouJordi_64 (CZ1), TillyBobJoe_9 (DC1), Togo_9 (DC1), Trumpet_62 (CZ1), TuertoX_60 (CZ2), Twister6_9 (DC1), Valary_10 (DC1), VanDeWege_10 (DC1), Vasanti_58 (CZ2), WelcomeAyanna_64 (CZ1), Whiteclaw_60 (CZ2), Wizard_9 (DC1), Wrigley_67 (CY4), Yeet412_57 (CZ2), YungMoney_9 (DC1), Zameen_62 (CZ1), Zirinka_59 (CZ1),

Start 46:
• Found in 1 of 179 (0.6%) of genes in pham
• Manual Annotations of this start: 1 of 165
• Called 100.0% of time when present
• Phage (with cluster) where this start called: RiverRaider_78 (DE1),

Start 47:
• Found in 42 of 179 (23.5%) of genes in pham
• Manual Annotations of this start: 39 of 165
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Apricot_78 (DN3), Asapag_79 (DN1), BENtherdunthat_83 (DN1), Birdsong_78 (DN), BotCity_85 (DN), BritBrat_77 (CY2), Budski_86 (DN), Cashline_61 (CY6), CheeseTouch_87 (DN1), Crater_79 (DN3), Denise_60 (CZ5), Ecliptus_85 (DN), EnalisNailo_58 (CY1), Faith5x5_58 (CZ6), Frickyeah_86 (DN1), Getalong_84 (DN1), Holliday_83 (DN1), Horus_81 (DN1), Kamaru_75 (DN1), Kenna_78 (DN1), Kuwabara_81 (DN4), Leroy_80 (DN1), Lilas_60 (CY1), LitninMcQueen_83 (DN1), Lton_58 (CZ), Lucky10_59 (DH), Lutum_84 (DN1), Malisha_84 (DN), Moosehead_63 (CZ6), Morkie_63 (DH), MortyNRick_74 (DN), ODay_88 (DN), OneDirection_56 (CZ6), Pepperoni_57 (CZ), Periwinkle_90 (DN1), Phabuloso_88 (DN1), Phistory_78 (DN1), PhorbesPhlower_61 (DH), ShawBrad_85 (DN1), Spooky_84 (DN2), Squiddly_83 (DN2), Whitney_79 (DN1),

Start 50:
• Found in 31 of 179 (17.3%) of genes in pham
• Manual Annotations of this start: 28 of 165
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Adora_61 (CZ4), Annalisa_61 (CZ4), Beenie_58 (CZ4), Clark_63 (CZ4), DobbysSock_58 (CZ4), Dolores_62 (CZ4), Dorito_55 (CZ4), Easley_59 (CZ4), Fairfaxidum_68 (CV), Gudmit_56 (singleton),

Hortense_64 (CZ4), Howe_64 (CZ4), Invectra_66 (CZ4), MakCheese_69 (DW), Mcklovin_62 (CZ4), MichaelScott_65 (CZ4), Oregano_64 (CZ4), PCoral7_66 (CV), PhriskyACE_61 (CZ4), Powerball_62 (CZ4), PrincePatrick_67 (CV), Samman98_64 (CZ4), Sekhmet_61 (CZ4), Shlim410_62 (CZ4), Suerte_57 (CZ4), Thimann_64 (CZ4), Toast_66 (CV), Tuti_64 (CZ4), Twinkle_63 (CZ4), William_69 (CV), WinkNick_62 (CZ4),

Summary by clusters:

There are 28 clusters represented in this pham: DN, singleton, DH, CZ2, CZ3, CZ1, CZ6, CZ7, CZ4, CZ5, CZ8, DY, DW, DN4, DN1, DN3, DN2, CY3, CY2, CY1, CY7, CY6, CY5, CY4, CZ, CV, DC1, DE1,

Info for manual annotations of cluster CV:
•Start number 50 was manually annotated 5 times for cluster CV.

Info for manual annotations of cluster CY1:
•Start number 43 was manually annotated 1 time for cluster CY1.
•Start number 45 was manually annotated 6 times for cluster CY1.
•Start number 47 was manually annotated 2 times for cluster CY1.

Info for manual annotations of cluster CY2:
•Start number 47 was manually annotated 1 time for cluster CY2.

Info for manual annotations of cluster CY3:
•Start number 45 was manually annotated 2 times for cluster CY3.

Info for manual annotations of cluster CY4:
•Start number 45 was manually annotated 2 times for cluster CY4.

Info for manual annotations of cluster CY5:
•Start number 45 was manually annotated 1 time for cluster CY5.

Info for manual annotations of cluster CY6:
•Start number 47 was manually annotated 1 time for cluster CY6.

Info for manual annotations of cluster CY7:
•Start number 45 was manually annotated 1 time for cluster CY7.

Info for manual annotations of cluster CZ:
•Start number 45 was manually annotated 1 time for cluster CZ.
•Start number 47 was manually annotated 1 time for cluster CZ.

Info for manual annotations of cluster CZ1:
•Start number 45 was manually annotated 18 times for cluster CZ1.

Info for manual annotations of cluster CZ2:
•Start number 45 was manually annotated 23 times for cluster CZ2.

Info for manual annotations of cluster CZ3:
•Start number 45 was manually annotated 2 times for cluster CZ3.

Info for manual annotations of cluster CZ4:

•Start number 50 was manually annotated 22 times for cluster CZ4.

Info for manual annotations of cluster CZ5:
•Start number 47 was manually annotated 1 time for cluster CZ5.

Info for manual annotations of cluster CZ6:
•Start number 47 was manually annotated 3 times for cluster CZ6.

Info for manual annotations of cluster CZ7:
•Start number 45 was manually annotated 1 time for cluster CZ7.

Info for manual annotations of cluster CZ8:
•Start number 45 was manually annotated 1 time for cluster CZ8.

Info for manual annotations of cluster DC1:
•Start number 45 was manually annotated 31 times for cluster DC1.

Info for manual annotations of cluster DE1:
•Start number 46 was manually annotated 1 time for cluster DE1.

Info for manual annotations of cluster DH:
•Start number 47 was manually annotated 3 times for cluster DH.

Info for manual annotations of cluster DN:
•Start number 47 was manually annotated 7 times for cluster DN.

Info for manual annotations of cluster DN1:
•Start number 47 was manually annotated 15 times for cluster DN1.

Info for manual annotations of cluster DN2:
•Start number 47 was manually annotated 2 times for cluster DN2.

Info for manual annotations of cluster DN3:
•Start number 47 was manually annotated 2 times for cluster DN3.

Info for manual annotations of cluster DN4:
•Start number 47 was manually annotated 1 time for cluster DN4.

Info for manual annotations of cluster DW:
•Start number 45 was manually annotated 2 times for cluster DW.

Info for manual annotations of cluster DY:
•Start number 45 was manually annotated 5 times for cluster DY.

Gene Information:

Gene: Adora_61 Start: 43146, Stop: 43259, Start Num: 50
Candidate Starts for Adora_61:
(Start: 50 @43146 has 28 MA's),

Gene: Agueybana_66 Start: 44544, Stop: 44684, Start Num: 45

Candidate Starts for Agueybana_66:
(Start: 45 @44544 has 96 MA's), (60, 44610),

Gene: AlumE_64 Start: 44204, Stop: 44347, Start Num: 45
Candidate Starts for AlumE_64:
(5, 43820), (Start: 45 @44204 has 96 MA's), (60, 44270),

Gene: Angelique_58 Start: 42751, Stop: 42891, Start Num: 45
Candidate Starts for Angelique_58:
(Start: 45 @42751 has 96 MA's), (54, 42793), (59, 42814), (60, 42817),

Gene: Annalisa_61 Start: 40463, Stop: 40579, Start Num: 50
Candidate Starts for Annalisa_61:
(Start: 50 @40463 has 28 MA's), (63, 40514),

Gene: Antonio_62 Start: 42026, Stop: 42166, Start Num: 45
Candidate Starts for Antonio_62:
(Start: 45 @42026 has 96 MA's), (54, 42068), (60, 42092),

Gene: Apricot_78 Start: 44909, Stop: 45034, Start Num: 47
Candidate Starts for Apricot_78:
(Start: 47 @44909 has 39 MA's), (55, 44942), (58, 44954), (68, 45011),

Gene: Arri_10 Start: 4536, Stop: 4679, Start Num: 45
Candidate Starts for Arri_10:
(Start: 45 @4536 has 96 MA's), (61, 4608),

Gene: Asapag_79 Start: 45783, Stop: 45908, Start Num: 47
Candidate Starts for Asapag_79:
(Start: 47 @45783 has 39 MA's), (55, 45816),

Gene: Attis_58 Start: 40273, Stop: 40416, Start Num: 45
Candidate Starts for Attis_58:
(Start: 45 @40273 has 96 MA's), (60, 40339),

Gene: BENtherdunthat_83 Start: 46733, Stop: 46858, Start Num: 47
Candidate Starts for BENtherdunthat_83:
(Start: 47 @46733 has 39 MA's), (55, 46766), (58, 46778),

Gene: Bakery_10 Start: 4597, Stop: 4740, Start Num: 45
Candidate Starts for Bakery_10:
(Start: 45 @4597 has 96 MA's), (57, 4651), (61, 4669),

Gene: Barb_9 Start: 4492, Stop: 4635, Start Num: 45
Candidate Starts for Barb_9:
(Start: 45 @4492 has 96 MA's), (57, 4546), (61, 4564),

Gene: BaxterFox_64 Start: 44136, Stop: 44279, Start Num: 45
Candidate Starts for BaxterFox_64:
(5, 43752), (Start: 45 @44136 has 96 MA's),

Gene: BeeGee_68 Start: 44042, Stop: 44182, Start Num: 45
Candidate Starts for BeeGee_68:

(Start: 45 @44042 has 96 MA's), (54, 44084), (60, 44108),

Gene: Beenie_58 Start: 41191, Stop: 41307, Start Num: 50
Candidate Starts for Beenie_58:
(Start: 50 @41191 has 28 MA's), (63, 41242),

Gene: Bialota_60 Start: 42658, Stop: 42798, Start Num: 45
Candidate Starts for Bialota_60:
(Start: 45 @42658 has 96 MA's), (54, 42700), (60, 42724),

Gene: Birdsong_78 Start: 45519, Stop: 45644, Start Num: 47
Candidate Starts for Birdsong_78:
(Start: 47 @45519 has 39 MA's), (55, 45552),

Gene: Bjanes7_57 Start: 38405, Stop: 38545, Start Num: 45
Candidate Starts for Bjanes7_57:
(26, 38321), (Start: 45 @38405 has 96 MA's), (54, 38447), (60, 38471),

Gene: Bosnia_62 Start: 44730, Stop: 44873, Start Num: 45
Candidate Starts for Bosnia_62:
(Start: 45 @44730 has 96 MA's), (60, 44796),

Gene: BotCity_85 Start: 48262, Stop: 48387, Start Num: 47
Candidate Starts for BotCity_85:
(Start: 47 @48262 has 39 MA's), (55, 48295), (58, 48307),

Gene: BoyNamedSue_64 Start: 44204, Stop: 44347, Start Num: 45
Candidate Starts for BoyNamedSue_64:
(5, 43820), (Start: 45 @44204 has 96 MA's), (60, 44270),

Gene: Bradissa_58 Start: 43290, Stop: 43433, Start Num: 45
Candidate Starts for Bradissa_58:
(5, 42906), (Start: 45 @43290 has 96 MA's), (60, 43356),

Gene: BritBrat_77 Start: 48245, Stop: 48370, Start Num: 47
Candidate Starts for BritBrat_77:
(14, 47999), (Start: 47 @48245 has 39 MA's), (60, 48296),

Gene: Budski_86 Start: 47711, Stop: 47848, Start Num: 47
Candidate Starts for Budski_86:
(Start: 47 @47711 has 39 MA's), (55, 47753),

Gene: Cashline_61 Start: 43921, Stop: 44046, Start Num: 47
Candidate Starts for Cashline_61:
(17, 43693), (24, 43810), (Start: 47 @43921 has 39 MA's), (60, 43969),

Gene: CheeseTouch_87 Start: 43339, Stop: 43476, Start Num: 47
Candidate Starts for CheeseTouch_87:
(Start: 47 @43339 has 39 MA's), (55, 43381), (58, 43393), (67, 43447),

Gene: CherryCola_11 Start: 4728, Stop: 4871, Start Num: 45
Candidate Starts for CherryCola_11:
(Start: 45 @4728 has 96 MA's), (61, 4800),

Gene: ClamChowder_9 Start: 4492, Stop: 4635, Start Num: 45
Candidate Starts for ClamChowder_9:
(Start: 45 @4492 has 96 MA's), (57, 4546), (61, 4564),

Gene: Clap_60 Start: 38584, Stop: 38724, Start Num: 45
Candidate Starts for Clap_60:
(26, 38500), (Start: 45 @38584 has 96 MA's), (54, 38626), (60, 38650),

Gene: Clark_63 Start: 40954, Stop: 41070, Start Num: 50
Candidate Starts for Clark_63:
(Start: 50 @40954 has 28 MA's), (63, 41005),

Gene: Confidence_63 Start: 42119, Stop: 42277, Start Num: 43
Candidate Starts for Confidence_63:
(Start: 43 @42119 has 1 MA's), (44, 42125), (Start: 45 @42134 has 96 MA's), (60, 42200),

Gene: CoveyB_9 Start: 4364, Stop: 4507, Start Num: 45
Candidate Starts for CoveyB_9:
(18, 4178), (31, 4304), (Start: 45 @4364 has 96 MA's), (57, 4418), (61, 4436),

Gene: Crater_79 Start: 45646, Stop: 45771, Start Num: 47
Candidate Starts for Crater_79:
(Start: 47 @45646 has 39 MA's), (55, 45679), (58, 45691), (68, 45748),

Gene: Cynthia_60 Start: 38582, Stop: 38722, Start Num: 45
Candidate Starts for Cynthia_60:
(26, 38498), (Start: 45 @38582 has 96 MA's), (54, 38624), (60, 38648),

Gene: Danyall_9 Start: 4364, Stop: 4507, Start Num: 45
Candidate Starts for Danyall_9:
(18, 4178), (31, 4304), (Start: 45 @4364 has 96 MA's), (57, 4418), (61, 4436),

Gene: Denise_60 Start: 37655, Stop: 37786, Start Num: 47
Candidate Starts for Denise_60:
(Start: 47 @37655 has 39 MA's), (49, 37664), (53, 37673), (60, 37703), (64, 37718),

Gene: DobbysSock_58 Start: 40602, Stop: 40718, Start Num: 50
Candidate Starts for DobbysSock_58:
(Start: 50 @40602 has 28 MA's), (63, 40653),

Gene: Dolores_62 Start: 40290, Stop: 40403, Start Num: 50
Candidate Starts for Dolores_62:
(Start: 50 @40290 has 28 MA's),

Gene: DonkeyMan_52 Start: 34611, Stop: 34760, Start Num: 45
Candidate Starts for DonkeyMan_52:
(37, 34569), (Start: 45 @34611 has 96 MA's), (60, 34677),

Gene: Dorito_55 Start: 38107, Stop: 38220, Start Num: 50
Candidate Starts for Dorito_55:
(Start: 50 @38107 has 28 MA's),

Gene: DumpsterDude_60 Start: 45393, Stop: 45536, Start Num: 45
Candidate Starts for DumpsterDude_60:
(20, 45243), (Start: 45 @45393 has 96 MA's), (60, 45459),

Gene: EMsquaredA_62 Start: 42676, Stop: 42819, Start Num: 45
Candidate Starts for EMsquaredA_62:
(Start: 45 @42676 has 96 MA's), (60, 42742),

Gene: Easley_59 Start: 39801, Stop: 39899, Start Num: 50
Candidate Starts for Easley_59:
(Start: 50 @39801 has 28 MA's),

Gene: Ebert_64 Start: 39016, Stop: 39156, Start Num: 45
Candidate Starts for Ebert_64:
(26, 38932), (Start: 45 @39016 has 96 MA's), (54, 39058), (60, 39082),

Gene: Ecliptus_85 Start: 48615, Stop: 48740, Start Num: 47
Candidate Starts for Ecliptus_85:
(Start: 47 @48615 has 39 MA's), (55, 48648), (58, 48660), (68, 48717),

Gene: EdnaMode_56 Start: 37847, Stop: 37987, Start Num: 45
Candidate Starts for EdnaMode_56:
(Start: 45 @37847 has 96 MA's), (54, 37889), (60, 37913),

Gene: Egi03_9 Start: 4263, Stop: 4406, Start Num: 45
Candidate Starts for Egi03_9:
(31, 4203), (Start: 45 @4263 has 96 MA's), (57, 4317), (61, 4335),

Gene: EnalisNailo_58 Start: 42500, Stop: 42625, Start Num: 47
Candidate Starts for EnalisNailo_58:
(Start: 47 @42500 has 39 MA's), (60, 42548),

Gene: Eudoria_62 Start: 42026, Stop: 42166, Start Num: 45
Candidate Starts for Eudoria_62:
(Start: 45 @42026 has 96 MA's), (54, 42068), (60, 42092),

Gene: Evamon_9 Start: 4345, Stop: 4488, Start Num: 45
Candidate Starts for Evamon_9:
(18, 4159), (31, 4285), (Start: 45 @4345 has 96 MA's), (57, 4399), (61, 4417),

Gene: Fairfaxidum_68 Start: 43559, Stop: 43687, Start Num: 50
Candidate Starts for Fairfaxidum_68:
(33, 43478), (42, 43517), (Start: 50 @43559 has 28 MA's), (63, 43610),

Gene: Faith5x5_58 Start: 36024, Stop: 36149, Start Num: 47
Candidate Starts for Faith5x5_58:
(40, 35991), (Start: 47 @36024 has 39 MA's), (60, 36072), (62, 36081), (66, 36093),

Gene: Fireball_9 Start: 4263, Stop: 4406, Start Num: 45
Candidate Starts for Fireball_9:
(31, 4203), (Start: 45 @4263 has 96 MA's), (57, 4317), (61, 4335), (62, 4338),

Gene: Floral_63 Start: 44561, Stop: 44704, Start Num: 45

Candidate Starts for Floral_63:
(Start: 45 @44561 has 96 MA's), (60, 44627),

Gene: Frickyeah_86 Start: 47022, Stop: 47147, Start Num: 47
Candidate Starts for Frickyeah_86:
(Start: 47 @47022 has 39 MA's), (55, 47055), (58, 47067),

Gene: FroggyToad_58 Start: 38804, Stop: 38947, Start Num: 45
Candidate Starts for FroggyToad_58:
(Start: 45 @38804 has 96 MA's), (60, 38870),

Gene: Fugax_9 Start: 4492, Stop: 4635, Start Num: 45
Candidate Starts for Fugax_9:
(Start: 45 @4492 has 96 MA's), (57, 4546), (61, 4564),

Gene: GemG_60 Start: 38588, Stop: 38728, Start Num: 45
Candidate Starts for GemG_60:
(26, 38504), (Start: 45 @38588 has 96 MA's), (54, 38630), (60, 38654),

Gene: Getalong_84 Start: 48039, Stop: 48173, Start Num: 47
Candidate Starts for Getalong_84:
(Start: 47 @48039 has 39 MA's), (55, 48081), (65, 48117), (68, 48150), (69, 48165),

Gene: Gezellig_9 Start: 4263, Stop: 4406, Start Num: 45
Candidate Starts for Gezellig_9:
(31, 4203), (Start: 45 @4263 has 96 MA's), (57, 4317), (61, 4335), (62, 4338),

Gene: Gizermo_60 Start: 38584, Stop: 38724, Start Num: 45
Candidate Starts for Gizermo_60:
(26, 38500), (Start: 45 @38584 has 96 MA's), (54, 38626), (60, 38650),

Gene: Gudmit_56 Start: 33859, Stop: 33978, Start Num: 50
Candidate Starts for Gudmit_56:
(25, 33745), (Start: 50 @33859 has 28 MA's), (63, 33910), (71, 33970),

Gene: Haley23_60 Start: 38584, Stop: 38724, Start Num: 45
Candidate Starts for Haley23_60:
(26, 38500), (Start: 45 @38584 has 96 MA's), (54, 38626), (60, 38650),

Gene: Halo3_10 Start: 4803, Stop: 4946, Start Num: 45
Candidate Starts for Halo3_10:
(Start: 45 @4803 has 96 MA's), (57, 4857), (61, 4875),

Gene: Heinz_52 Start: 33427, Stop: 33582, Start Num: 45
Candidate Starts for Heinz_52:
(Start: 45 @33427 has 96 MA's), (60, 33493),

Gene: Herod_65 Start: 45084, Stop: 45227, Start Num: 45
Candidate Starts for Herod_65:
(Start: 45 @45084 has 96 MA's), (60, 45150),

Gene: Hibiscus_52 Start: 33376, Stop: 33531, Start Num: 45
Candidate Starts for Hibiscus_52:

(Start: 45 @33376 has 96 MA's), (60, 33442),

Gene: Holliday_83 Start: 49327, Stop: 49452, Start Num: 47
Candidate Starts for Holliday_83:
(Start: 47 @49327 has 39 MA's), (55, 49360), (58, 49372),

Gene: Hortense_64 Start: 44501, Stop: 44614, Start Num: 50
Candidate Starts for Hortense_64:
(Start: 50 @44501 has 28 MA's),

Gene: Horus_81 Start: 47713, Stop: 47838, Start Num: 47
Candidate Starts for Horus_81:
(Start: 47 @47713 has 39 MA's), (55, 47746), (58, 47758), (68, 47815),

Gene: Howe_64 Start: 44501, Stop: 44614, Start Num: 50
Candidate Starts for Howe_64:
(Start: 50 @44501 has 28 MA's),

Gene: Hugley_63 Start: 45064, Stop: 45207, Start Num: 45
Candidate Starts for Hugley_63:
(Start: 45 @45064 has 96 MA's), (60, 45130),

Gene: Invectra_66 Start: 42527, Stop: 42643, Start Num: 50
Candidate Starts for Invectra_66:
(Start: 50 @42527 has 28 MA's), (63, 42578),

Gene: JCole_56 Start: 36913, Stop: 37053, Start Num: 45
Candidate Starts for JCole_56:
(Start: 45 @36913 has 96 MA's), (54, 36955), (60, 36979),

Gene: Jablanski_66 Start: 46418, Stop: 46561, Start Num: 45
Candidate Starts for Jablanski_66:
(16, 46181), (22, 46274), (23, 46292), (28, 46346), (34, 46364), (Start: 45 @46418 has 96 MA's), (60, 46484),

Gene: Jalleen_62 Start: 38902, Stop: 39045, Start Num: 45
Candidate Starts for Jalleen_62:
(Start: 45 @38902 has 96 MA's), (60, 38968),

Gene: Jambalaya_9 Start: 4175, Stop: 4318, Start Num: 45
Candidate Starts for Jambalaya_9:
(18, 3989), (31, 4115), (Start: 45 @4175 has 96 MA's), (57, 4229), (61, 4247),

Gene: Jojo24_51 Start: 33913, Stop: 34062, Start Num: 45
Candidate Starts for Jojo24_51:
(35, 33874), (36, 33877), (39, 33886), (Start: 45 @33913 has 96 MA's), (60, 33979),

Gene: Kamaru_75 Start: 44811, Stop: 44936, Start Num: 47
Candidate Starts for Kamaru_75:
(Start: 47 @44811 has 39 MA's), (55, 44844), (58, 44856), (65, 44880),

Gene: Kenna_78 Start: 46006, Stop: 46131, Start Num: 47
Candidate Starts for Kenna_78:

(Start: 47 @46006 has 39 MA's), (55, 46039), (58, 46051),

Gene: KimmyK_9 Start: 4492, Stop: 4635, Start Num: 45
Candidate Starts for KimmyK_9:
(Start: 45 @4492 has 96 MA's), (57, 4546), (61, 4564),

Gene: Kita_63 Start: 42035, Stop: 42175, Start Num: 45
Candidate Starts for Kita_63:
(Start: 45 @42035 has 96 MA's), (54, 42077), (60, 42101),

Gene: Kuwabara_81 Start: 48077, Stop: 48205, Start Num: 47
Candidate Starts for Kuwabara_81:
(Start: 47 @48077 has 39 MA's), (60, 48128),

Gene: Lamberg_56 Start: 37093, Stop: 37233, Start Num: 45
Candidate Starts for Lamberg_56:
(26, 37009), (Start: 45 @37093 has 96 MA's), (54, 37135), (60, 37159),

Gene: Leroy_80 Start: 45908, Stop: 46033, Start Num: 47
Candidate Starts for Leroy_80:
(Start: 47 @45908 has 39 MA's), (55, 45941), (58, 45953), (68, 46010),

Gene: Lilas_60 Start: 44253, Stop: 44378, Start Num: 47
Candidate Starts for Lilas_60:
(Start: 47 @44253 has 39 MA's), (60, 44301),

Gene: LitninMcQueen_83 Start: 46751, Stop: 46876, Start Num: 47
Candidate Starts for LitninMcQueen_83:
(Start: 47 @46751 has 39 MA's), (55, 46784), (58, 46796), (68, 46853),

Gene: LonelyBoi_61 Start: 45136, Stop: 45279, Start Num: 45
Candidate Starts for LonelyBoi_61:
(27, 45061), (41, 45115), (Start: 45 @45136 has 96 MA's), (54, 45178), (60, 45202),

Gene: LordFarquaad_60 Start: 40254, Stop: 40397, Start Num: 45
Candidate Starts for LordFarquaad_60:
(Start: 45 @40254 has 96 MA's), (60, 40320),

Gene: Lton_58 Start: 34944, Stop: 35081, Start Num: 47
Candidate Starts for Lton_58:
(Start: 47 @34944 has 39 MA's), (55, 34977), (58, 34989), (60, 34995), (67, 35043),

Gene: Lucky10_59 Start: 37676, Stop: 37801, Start Num: 47
Candidate Starts for Lucky10_59:
(Start: 47 @37676 has 39 MA's), (55, 37709), (58, 37718),

Gene: Lutum_84 Start: 47168, Stop: 47293, Start Num: 47
Candidate Starts for Lutum_84:
(Start: 47 @47168 has 39 MA's), (55, 47201), (58, 47213),

Gene: Madavieve_60 Start: 43329, Stop: 43472, Start Num: 45
Candidate Starts for Madavieve_60:
(Start: 45 @43329 has 96 MA's), (60, 43395),

Gene: MakCheese_69 Start: 44932, Stop: 45048, Start Num: 50
Candidate Starts for MakCheese_69:
(Start: 50 @44932 has 28 MA's), (56, 44956), (63, 44983),

Gene: Malibo_64 Start: 42931, Stop: 43074, Start Num: 45
Candidate Starts for Malibo_64:
(Start: 45 @42931 has 96 MA's),

Gene: Malisha_84 Start: 50153, Stop: 50281, Start Num: 47
Candidate Starts for Malisha_84:
(Start: 47 @50153 has 39 MA's), (60, 50204),

Gene: Manasvini_63 Start: 42050, Stop: 42190, Start Num: 45
Candidate Starts for Manasvini_63:
(Start: 45 @42050 has 96 MA's), (54, 42092), (60, 42116),

Gene: Marteena_61 Start: 42676, Stop: 42819, Start Num: 45
Candidate Starts for Marteena_61:
(Start: 45 @42676 has 96 MA's), (60, 42742),

Gene: Matteo_52 Start: 35712, Stop: 35855, Start Num: 45
Candidate Starts for Matteo_52:
(8, 35382), (11, 35421), (13, 35460), (15, 35484), (34, 35664), (Start: 45 @35712 has 96 MA's), (60, 35778),

Gene: Mcklovin_62 Start: 46828, Stop: 46944, Start Num: 50
Candidate Starts for Mcklovin_62:
(Start: 50 @46828 has 28 MA's), (59, 46864), (63, 46879),

Gene: MichaelScott_65 Start: 42221, Stop: 42334, Start Num: 50
Candidate Starts for MichaelScott_65:
(Start: 50 @42221 has 28 MA's),

Gene: Mocha12_60 Start: 38584, Stop: 38724, Start Num: 45
Candidate Starts for Mocha12_60:
(26, 38500), (Start: 45 @38584 has 96 MA's), (54, 38626), (60, 38650),

Gene: Moosehead_63 Start: 36248, Stop: 36376, Start Num: 47
Candidate Starts for Moosehead_63:
(Start: 47 @36248 has 39 MA's),

Gene: Morkie_63 Start: 37576, Stop: 37701, Start Num: 47
Candidate Starts for Morkie_63:
(1, 37003), (2, 37006), (3, 37108), (4, 37117), (6, 37210), (12, 37285), (19, 37399), (31, 37507), (32, 37510), (33, 37513), (38, 37531), (Start: 47 @37576 has 39 MA's),

Gene: MortyNRick_74 Start: 45894, Stop: 46013, Start Num: 47
Candidate Starts for MortyNRick_74:
(30, 45822), (Start: 47 @45894 has 39 MA's), (49, 45903), (53, 45912), (60, 45942), (70, 46005),

Gene: Mutzi_9 Start: 4364, Stop: 4507, Start Num: 45
Candidate Starts for Mutzi_9:

(18, 4178), (31, 4304), (Start: 45 @4364 has 96 MA's), (57, 4418), (61, 4436),

Gene: Nettuno_56 Start: 37093, Stop: 37233, Start Num: 45
Candidate Starts for Nettuno_56:
(26, 37009), (Start: 45 @37093 has 96 MA's), (54, 37135), (60, 37159),

Gene: Nubi_9 Start: 4364, Stop: 4507, Start Num: 45
Candidate Starts for Nubi_9:
(18, 4178), (31, 4304), (Start: 45 @4364 has 96 MA's), (57, 4418), (61, 4436),

Gene: ODay_88 Start: 49002, Stop: 49139, Start Num: 47
Candidate Starts for ODay_88:
(Start: 47 @49002 has 39 MA's), (55, 49044), (58, 49056),

Gene: Ohgeesy_63 Start: 43522, Stop: 43665, Start Num: 45
Candidate Starts for Ohgeesy_63:
(29, 43453), (41, 43501), (Start: 45 @43522 has 96 MA's), (54, 43564), (60, 43588),

Gene: OneDirection_56 Start: 34748, Stop: 34876, Start Num: 47
Candidate Starts for OneDirection_56:
(Start: 47 @34748 has 39 MA's), (55, 34781), (65, 34817), (67, 34847),

Gene: Oregano_64 Start: 41095, Stop: 41208, Start Num: 50
Candidate Starts for Oregano_64:
(Start: 50 @41095 has 28 MA's),

Gene: PCoral7_66 Start: 42700, Stop: 42828, Start Num: 50
Candidate Starts for PCoral7_66:
(33, 42616), (42, 42655), (Start: 50 @42700 has 28 MA's), (63, 42751), (68, 42790),

Gene: PantheRoc_67 Start: 44266, Stop: 44409, Start Num: 45
Candidate Starts for PantheRoc_67:
(Start: 45 @44266 has 96 MA's), (60, 44332),

Gene: Pepperoni_57 Start: 36388, Stop: 36516, Start Num: 47
Candidate Starts for Pepperoni_57:
(Start: 47 @36388 has 39 MA's), (55, 36421), (58, 36433),

Gene: Periwinkle_90 Start: 48715, Stop: 48840, Start Num: 47
Candidate Starts for Periwinkle_90:
(Start: 47 @48715 has 39 MA's), (55, 48748), (58, 48760), (68, 48817),

Gene: Phabuloso_88 Start: 47735, Stop: 47860, Start Num: 47
Candidate Starts for Phabuloso_88:
(Start: 47 @47735 has 39 MA's), (55, 47768),

Gene: Phistory_78 Start: 44811, Stop: 44936, Start Num: 47
Candidate Starts for Phistory_78:
(Start: 47 @44811 has 39 MA's), (55, 44844), (58, 44856), (68, 44913),

Gene: Phlop_9 Start: 4263, Stop: 4406, Start Num: 45
Candidate Starts for Phlop_9:
(31, 4203), (Start: 45 @4263 has 96 MA's), (57, 4317), (61, 4335), (62, 4338),

Gene: PhorbesPhlower_61 Start: 36673, Stop: 36810, Start Num: 47
Candidate Starts for PhorbesPhlower_61:
(10, 36355), (Start: 47 @36673 has 39 MA's), (65, 36751),

Gene: PhriskyACE_61 Start: 41112, Stop: 41225, Start Num: 50
Candidate Starts for PhriskyACE_61:
(Start: 50 @41112 has 28 MA's),

Gene: Pickett_55 Start: 36323, Stop: 36463, Start Num: 45
Candidate Starts for Pickett_55:
(Start: 45 @36323 has 96 MA's), (54, 36365), (60, 36389),

Gene: PinkCoffee_9 Start: 4501, Stop: 4644, Start Num: 45
Candidate Starts for PinkCoffee_9:
(Start: 45 @4501 has 96 MA's), (57, 4555), (61, 4573),

Gene: Pollux_65 Start: 44561, Stop: 44704, Start Num: 45
Candidate Starts for Pollux_65:
(Start: 45 @44561 has 96 MA's), (60, 44627),

Gene: Polly_59 Start: 41469, Stop: 41609, Start Num: 45
Candidate Starts for Polly_59:
(Start: 45 @41469 has 96 MA's), (54, 41511), (60, 41535),

Gene: Portcullis_9 Start: 4423, Stop: 4566, Start Num: 45
Candidate Starts for Portcullis_9:
(18, 4237), (31, 4363), (Start: 45 @4423 has 96 MA's), (57, 4477), (61, 4495),

Gene: Posh_65 Start: 45063, Stop: 45206, Start Num: 45
Candidate Starts for Posh_65:
(41, 45042), (Start: 45 @45063 has 96 MA's), (54, 45105), (60, 45129),

Gene: Powerball_62 Start: 41218, Stop: 41334, Start Num: 50
Candidate Starts for Powerball_62:
(Start: 50 @41218 has 28 MA's), (63, 41269), (65, 41275), (66, 41278),

Gene: PrincePatrick_67 Start: 41750, Stop: 41878, Start Num: 50
Candidate Starts for PrincePatrick_67:
(Start: 50 @41750 has 28 MA's), (63, 41801), (67, 41837), (68, 41840),

Gene: PullumCavea_9 Start: 4263, Stop: 4406, Start Num: 45
Candidate Starts for PullumCavea_9:
(31, 4203), (Start: 45 @4263 has 96 MA's), (57, 4317), (61, 4335), (62, 4338),

Gene: Pytheas_66 Start: 46417, Stop: 46560, Start Num: 45
Candidate Starts for Pytheas_66:
(16, 46180), (22, 46273), (23, 46291), (28, 46345), (34, 46363), (Start: 45 @46417 has 96 MA's), (60, 46483),

Gene: RavenCo17_60 Start: 42838, Stop: 42981, Start Num: 45
Candidate Starts for RavenCo17_60:
(Start: 45 @42838 has 96 MA's), (60, 42904),

Gene: Reyja_54 Start: 35199, Stop: 35348, Start Num: 45
Candidate Starts for Reyja_54:
(35, 35160), (36, 35163), (39, 35172), (Start: 45 @35199 has 96 MA's), (49, 35217), (60, 35265),

Gene: RiverRaider_78 Start: 53776, Stop: 53904, Start Num: 46
Candidate Starts for RiverRaider_78:
(Start: 46 @53776 has 1 MA's), (51, 53803), (62, 53839), (65, 53848),

Gene: RogerDodger_10 Start: 4728, Stop: 4871, Start Num: 45
Candidate Starts for RogerDodger_10:
(22, 4587), (Start: 45 @4728 has 96 MA's), (57, 4782), (61, 4800),

Gene: Sahara_59 Start: 38331, Stop: 38471, Start Num: 45
Candidate Starts for Sahara_59:
(26, 38247), (Start: 45 @38331 has 96 MA's), (54, 38373), (60, 38397),

Gene: Salvador_9 Start: 4343, Stop: 4486, Start Num: 45
Candidate Starts for Salvador_9:
(18, 4157), (31, 4283), (Start: 45 @4343 has 96 MA's), (57, 4397), (61, 4415),

Gene: Samman98_64 Start: 41057, Stop: 41173, Start Num: 50
Candidate Starts for Samman98_64:
(Start: 50 @41057 has 28 MA's), (63, 41108),

Gene: Savage_60 Start: 38584, Stop: 38724, Start Num: 45
Candidate Starts for Savage_60:
(26, 38500), (Start: 45 @38584 has 96 MA's), (54, 38626), (60, 38650),

Gene: Savbucketdawg_9 Start: 4175, Stop: 4318, Start Num: 45
Candidate Starts for Savbucketdawg_9:
(18, 3989), (31, 4115), (Start: 45 @4175 has 96 MA's), (57, 4229), (61, 4247),

Gene: Sekhmet_61 Start: 40689, Stop: 40802, Start Num: 50
Candidate Starts for Sekhmet_61:
(Start: 50 @40689 has 28 MA's),

Gene: ShawBrad_85 Start: 45964, Stop: 46089, Start Num: 47
Candidate Starts for ShawBrad_85:
(Start: 47 @45964 has 39 MA's), (55, 45997), (58, 46009), (68, 46066),

Gene: Shinji_9 Start: 4364, Stop: 4507, Start Num: 45
Candidate Starts for Shinji_9:
(18, 4178), (31, 4304), (Start: 45 @4364 has 96 MA's), (57, 4418), (61, 4436),

Gene: Shlim410_62 Start: 44501, Stop: 44614, Start Num: 50
Candidate Starts for Shlim410_62:
(Start: 50 @44501 has 28 MA's),

Gene: Sidious_62 Start: 43734, Stop: 43877, Start Num: 45
Candidate Starts for Sidious_62:
(21, 43593), (Start: 45 @43734 has 96 MA's), (60, 43800),

Gene: SmokingBunny_9 Start: 4343, Stop: 4486, Start Num: 45
Candidate Starts for SmokingBunny_9:
(18, 4157), (31, 4283), (Start: 45 @4343 has 96 MA's), (57, 4397), (61, 4415),

Gene: SoilAssassin_58 Start: 40272, Stop: 40415, Start Num: 45
Candidate Starts for SoilAssassin_58:
(Start: 45 @40272 has 96 MA's), (60, 40338),

Gene: Spooky_84 Start: 47413, Stop: 47538, Start Num: 47
Candidate Starts for Spooky_84:
(Start: 47 @47413 has 39 MA's), (60, 47461),

Gene: Sproutie_60 Start: 38584, Stop: 38724, Start Num: 45
Candidate Starts for Sproutie_60:
(26, 38500), (Start: 45 @38584 has 96 MA's), (54, 38626), (60, 38650),

Gene: Squiddly_83 Start: 49948, Stop: 50076, Start Num: 47
Candidate Starts for Squiddly_83:
(Start: 47 @49948 has 39 MA's), (60, 49999),

Gene: Suerte_57 Start: 40021, Stop: 40137, Start Num: 50
Candidate Starts for Suerte_57:
(Start: 50 @40021 has 28 MA's), (63, 40072),

Gene: Suscepit_62 Start: 42027, Stop: 42167, Start Num: 45
Candidate Starts for Suscepit_62:
(Start: 45 @42027 has 96 MA's), (54, 42069), (60, 42093),

Gene: Tarzan_52 Start: 33866, Stop: 34015, Start Num: 45
Candidate Starts for Tarzan_52:
(37, 33824), (Start: 45 @33866 has 96 MA's), (60, 33932),

Gene: Tayonia_62 Start: 42026, Stop: 42166, Start Num: 45
Candidate Starts for Tayonia_62:
(Start: 45 @42026 has 96 MA's), (54, 42068), (60, 42092),

Gene: ThankyouJordi_64 Start: 45185, Stop: 45328, Start Num: 45
Candidate Starts for ThankyouJordi_64:
(7, 44843), (9, 44861), (34, 45131), (Start: 45 @45185 has 96 MA's), (60, 45251),

Gene: Thimann_64 Start: 41329, Stop: 41442, Start Num: 50
Candidate Starts for Thimann_64:
(Start: 50 @41329 has 28 MA's),

Gene: TillyBobJoe_9 Start: 4178, Stop: 4321, Start Num: 45
Candidate Starts for TillyBobJoe_9:
(18, 3992), (31, 4118), (Start: 45 @4178 has 96 MA's), (57, 4232), (61, 4250),

Gene: Toast_66 Start: 42700, Stop: 42828, Start Num: 50
Candidate Starts for Toast_66:
(33, 42616), (42, 42655), (Start: 50 @42700 has 28 MA's), (63, 42751), (68, 42790),

Gene: Togo_9 Start: 4343, Stop: 4486, Start Num: 45

Candidate Starts for Togo_9:
(18, 4157), (31, 4283), (Start: 45 @4343 has 96 MA's), (57, 4397), (61, 4415),

Gene: Trumpet_62 Start: 42027, Stop: 42167, Start Num: 45
Candidate Starts for Trumpet_62:
(Start: 45 @42027 has 96 MA's), (54, 42069), (60, 42093),

Gene: TuertoX_60 Start: 38584, Stop: 38724, Start Num: 45
Candidate Starts for TuertoX_60:
(26, 38500), (Start: 45 @38584 has 96 MA's), (54, 38626), (60, 38650),

Gene: Tuti_64 Start: 42073, Stop: 42189, Start Num: 50
Candidate Starts for Tuti_64:
(Start: 50 @42073 has 28 MA's), (63, 42124),

Gene: Twinkle_63 Start: 45560, Stop: 45673, Start Num: 50
Candidate Starts for Twinkle_63:
(Start: 50 @45560 has 28 MA's),

Gene: Twister6_9 Start: 4275, Stop: 4418, Start Num: 45
Candidate Starts for Twister6_9:
(18, 4089), (31, 4215), (Start: 45 @4275 has 96 MA's), (57, 4329), (61, 4347),

Gene: Valary_10 Start: 4728, Stop: 4871, Start Num: 45
Candidate Starts for Valary_10:
(Start: 45 @4728 has 96 MA's), (61, 4800),

Gene: VanDeWege_10 Start: 4656, Stop: 4799, Start Num: 45
Candidate Starts for VanDeWege_10:
(Start: 45 @4656 has 96 MA's), (57, 4710),

Gene: Vasanti_58 Start: 38563, Stop: 38706, Start Num: 45
Candidate Starts for Vasanti_58:
(34, 38509), (Start: 45 @38563 has 96 MA's), (52, 38596), (60, 38629),

Gene: WelcomeAyanna_64 Start: 45332, Stop: 45475, Start Num: 45
Candidate Starts for WelcomeAyanna_64:
(7, 44990), (9, 45008), (34, 45278), (Start: 45 @45332 has 96 MA's), (60, 45398),

Gene: Whiteclaw_60 Start: 38584, Stop: 38724, Start Num: 45
Candidate Starts for Whiteclaw_60:
(26, 38500), (Start: 45 @38584 has 96 MA's), (54, 38626), (60, 38650),

Gene: Whitney_79 Start: 47360, Stop: 47494, Start Num: 47
Candidate Starts for Whitney_79:
(Start: 47 @47360 has 39 MA's), (55, 47402), (65, 47438), (68, 47471), (69, 47486),

Gene: William_69 Start: 44098, Stop: 44226, Start Num: 50
Candidate Starts for William_69:
(Start: 50 @44098 has 28 MA's), (63, 44149), (67, 44185), (68, 44188),

Gene: WinkNick_62 Start: 40213, Stop: 40326, Start Num: 50
Candidate Starts for WinkNick_62:

(Start: 50 @40213 has 28 MA's),

Gene: Wizard_9 Start: 4263, Stop: 4406, Start Num: 45
Candidate Starts for Wizard_9:
(31, 4203), (Start: 45 @4263 has 96 MA's), (57, 4317), (61, 4335), (62, 4338),

Gene: Wrigley_67 Start: 44646, Stop: 44789, Start Num: 45
Candidate Starts for Wrigley_67:
(41, 44625), (Start: 45 @44646 has 96 MA's), (54, 44688), (60, 44712),

Gene: Yeet412_57 Start: 39130, Stop: 39270, Start Num: 45
Candidate Starts for Yeet412_57:
(Start: 45 @39130 has 96 MA's), (54, 39172), (60, 39196),

Gene: YungMoney_9 Start: 5428, Stop: 5571, Start Num: 45
Candidate Starts for YungMoney_9:
(31, 5368), (Start: 45 @5428 has 96 MA's), (48, 5443), (57, 5482), (61, 5500), (62, 5503),

Gene: Zameen_62 Start: 42026, Stop: 42166, Start Num: 45
Candidate Starts for Zameen_62:
(Start: 45 @42026 has 96 MA's), (54, 42068), (60, 42092),

Gene: Zirinka_59 Start: 42646, Stop: 42786, Start Num: 45
Candidate Starts for Zirinka_59:
(Start: 45 @42646 has 96 MA's), (54, 42688), (60, 42712),