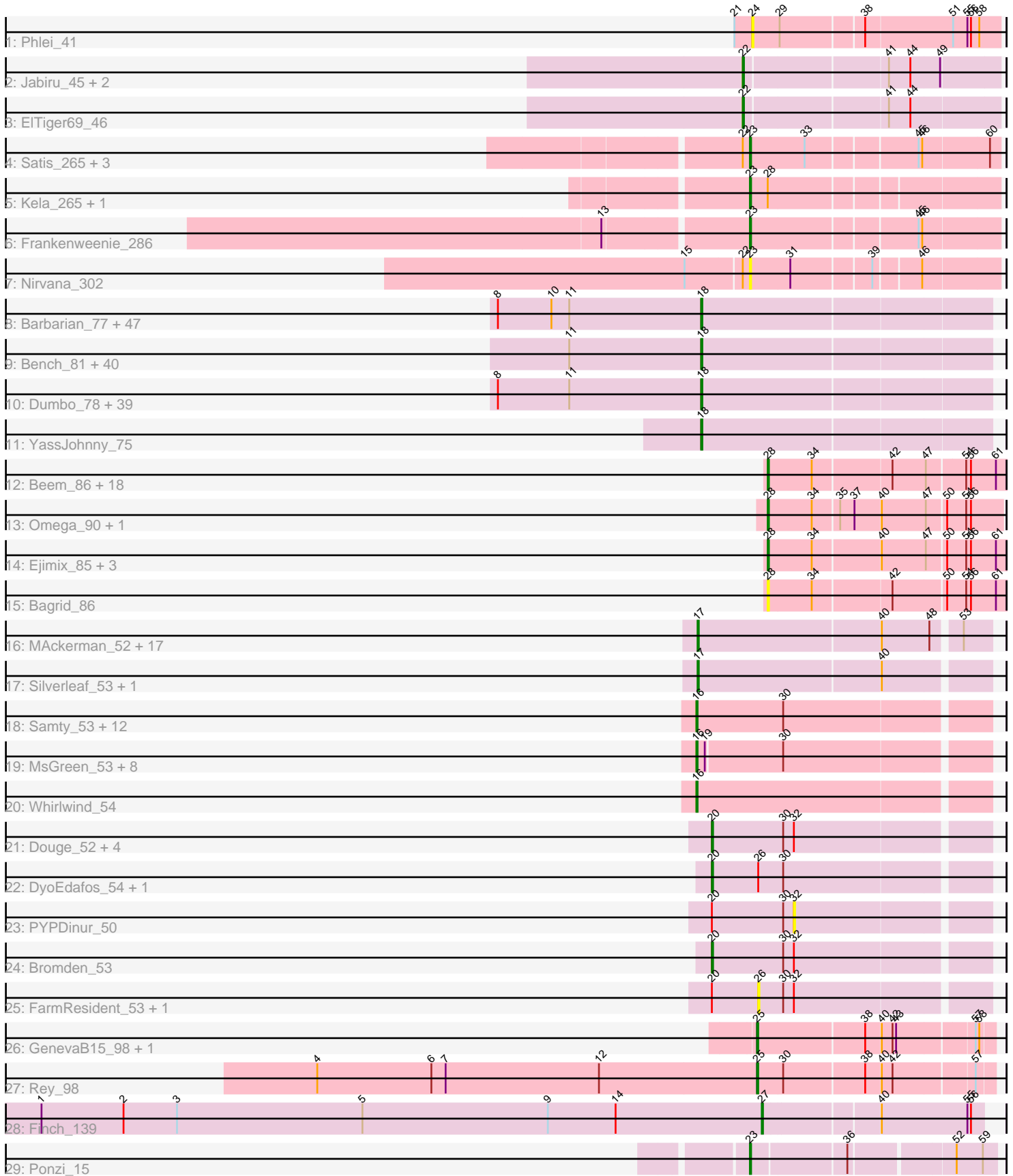


Pham 202661



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 202661 Report

This analysis was run 01/18/25 on database version 583.

Pham number 202661 has 228 members, 27 are drafts.

Phages represented in each track:

- Track 1 : Phlei_41
- Track 2 : Jabiru_45, UnionJack_45, Benedict_47
- Track 3 : EITiger69_46
- Track 4 : Satis_265, Kradal_265, EhyElimayoE_268, Quantum_263
- Track 5 : Kela_265, JustBecause_265
- Track 6 : Frankenweenie_286
- Track 7 : Nirvana_302
- Track 8 : Barbarian_77, Traaww1_74, Sotrice96_79, HufflyPuff_81, Teaspoon_79, IHOP_76, Porky_77, Kostya_78, Flypotenuse_74, SophKB_75, NelitzaMV_76, Glexan_77, Eureka_76, TBrady12_81, Command613_80, AmericanBeauty_82, Icee_79, Harella_78, ABCat_75, Balomoji_78, Dusk_75, Gator_76, Kanye_75, Cactus_81, Elite2014_77, Emmina_78, Daikon_80, ChosenOne_78, Stank_81, Inca_75, Goku_76, Moldemort_81, BadStone_75, Argent26_82, Asriel_77, GooberAzure_81, Gemini_83, xkcd_81, Phaja_76, Lilpickle_77, Holt_83, Murica_81, Wiggin_80, Tucu_79, Quallification_79, Goldilocks_81, Adnama_82, GoldenSpark_82
- Track 9 : Bench_81, Mosby_74, Filch_79, Maxxinista_80, Czyszczonek_79, Thresher_80, Miniwave_73, Pumpkin_81, RiverMonster_78, Terminus_81, BigBubba_78, Hopey_78, Sassay_73, Elph10_78, MPhalcon_79, Policronamos_82, Murphy_78, Pharsalus_75, Youngblood_81, Stark_79, Phrux_75, Palpatine_80, Cjw1_78, BugsBunny_78, Willez_73, BaboJay_75, MISSy_79, Misfit_79, PhatBacter_82, Lilac_80, Phaux_80, Bruin_75, HanKaySha_78, Lilizi_79, Rakim_79, DrDrey_78, Paperbeatsrock_77, Contagion_74, Xandras_77, StellaBean_76, Tarkin_77
- Track 10 : Dumbo_78, Petra64142_82, Myrale_78, Mindy_77, Tomaszewski_73, Kimchi_82, Marshmallow_76, Ukulele_73, Easy2Say_79, OrionPax_77, ShamWow_78, Rimmer_79, Buck_79, NoSleep_79, Highbury_77, Amao_78, FireRed_82, SirDuracell_77, Pat3_76, Cookies_75, Toto_76, ChotaBhai_78, Manda_79, Saints25_77, CrystalP_77, FairyPath_78, JeTaime_78, Hoonter_81, Nimrod_79, Simpliphy_77, Nala_80, Henry_76, DoctorDiddles_77, TeardropMSU_74, Bask21_78, ShereKhan_76, BilboSwaggins_77, Gage_80, MadamMonkfish_78, StolenFromERC_81
- Track 11 : YassJohnny_75
- Track 12 : Beem_86, Dallas_85, Zelink_84, Thibault_72, Bombitas_75, Phoebus_88, Dove_71, NihilNomen_87, DmpstrDiver_86, Yeet_79, Odette_85, Constella_72, Schatzie_81, ThreeRngTarjay_83, HokkenD_76, Hughesyang_86, Kalah2_80, Halley_87, JuicyJay_84
- Track 13 : Omega_90, LittleE_85

- Track 14 : Ejimix_85, Klein_85, Redno2_81, Wanda_89
- Track 15 : Bagrid_86
- Track 16 : MAckerman_52, JoeDirt_51, CicholasNage_52, Poochiewood_52, Enceladus_51, DirkDirk_50, OhShagHennessy_50, Wamburggrxpress_52, Calm_53, Wyatt2_53, Appletree2_51, Zaria_53, Tyson_52, Acquire49_53, Rose5_52, LeBron_52, UPIE_52, Halena_51
- Track 17 : Silverleaf_53, AvadaKedavra_53
- Track 18 : Samty_53, LiyuLake_53, Ellson_53, MiniLon_56, Krypton555_55, BourbonZero_54, Kingsolomon_53, KirDoubleO7_52, DuncansLeg_54, Finnry_53, Nicholas_53, Lolly9_53, MiniMac_56
- Track 19 : MsGreen_53, Jobypre_54, Clautastrophe_53, Bellis_53, Lumos_55, Jubie_53, Snenia_53, Moostard_53, TriFive_54
- Track 20 : Whirlwind_54
- Track 21 : Douge_52, Chaser_50, BrainDrainer_52, Sheng711_52, Douzhi_52
- Track 22 : DyoEdafos_54, Kropertea_50
- Track 23 : PYPDinur_50
- Track 24 : Bromden_53
- Track 25 : FarmResident_53, Quby_51
- Track 26 : GenevaB15_98, Aziz_96
- Track 27 : Rey_98
- Track 28 : Finch_139
- Track 29 : Ponzi_15

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

The start number called the most often in the published annotations is 18, it was called in 122 of the 201 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ABCat_75, Adnama_82, Amao_78, AmericanBeauty_82, Argent26_82, Asriel_77, BaboJay_75, BadStone_75, Balomoji_78, Barbarian_77, Bask21_78, Bench_81, BigBubba_78, BilboSwaggins_77, Bruin_75, Buck_79, BugsBunny_78, Cactus_81, ChosenOne_78, ChotaBhai_78, Cjw1_78, Command613_80, Contagion_74, Cookies_75, CrystalP_77, Czyszczonek_79, Daikon_80, DoctorDiddles_77, DrDrey_78, Dumbo_78, Dusk_75, Easy2Say_79, Elite2014_77, Elph10_78, Emmina_78, Eureka_76, FairyPath_78, Filch_79, FireRed_82, Flypotenuse_74, Gage_80, Gator_76, Gemini_83, Glexan_77, Goku_76, GoldenSpark_82, Goldilocks_81, GooberAzure_81, HanKaySha_78, Harella_78, Henry_76, Highbury_77, Holt_83, Hoonter_81, Hopey_78, HuffyPuff_81, IHOP_76, Icee_79, Inca_75, JeTaime_78, Kanye_75, Kimchi_82, Kostya_78, Lilac_80, Lilizi_79, Lilpickle_77, MISSy_79, MPhalcon_79, MadamMonkfish_78, Manda_79, Marshmallow_76, Maxxinista_80, Mindy_77, Miniwave_73, Misfit_79, Moldemort_81, Mosby_74, Murica_81, Murphy_78, Myrale_78, Nala_80, NelitzaMV_76, Nimrod_79, NoSleep_79, OrionPax_77, Palpatine_80, Paperbeatsrock_77, Pat3_76, Petra64142_82, Phaja_76, Pharsalus_75, PhatBacter_82, Phaux_80, Phrux_75, Policronamos_82, Porky_77, Pumpkin_81, Quallification_79, Rakim_79, Rimmer_79, RiverMonster_78, Saints25_77, Sassay_73, ShamWow_78, ShereKhan_76, Simpliphy_77, SirDuracell_77, SophKB_75, Sotrice96_79, Stank_81, Stark_79, StellaBean_76, StolenFromERC_81, TBrady12_81, Tarkin_77, TeardropMSU_74, Teaspoon_79, Terminus_81, Thresher_80, Tomaszewski_73, Toto_76, Traaww1_74,

Tuco_79, Ukulele_73, Wiggin_80, Willez_73, Xandras_77, YassJohnny_75, Youngblood_81, xkcd_81,

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

-

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

- Acquire49_53, Appletree2_51, AvadaKedavra_53, Aziz_96, Bagrid_86, Beem_86, Bellis_53, Benedict_47, Bombitas_75, BourbonZero_54, BrainDrainer_52, Bromden_53, Calm_53, Chaser_50, CicholasNage_52, Clautastrophe_53, Constella_72, Dallas_85, DirkDirk_50, DmpstrDiver_86, Douge_52, Douzhi_52, Dove_71, DuncansLeg_54, DyoEdafos_54, EhyElimayoE_268, Ejimix_85, EITiger69_46, Ellson_53, Enceladus_51, FarmResident_53, Finch_139, Finnry_53, Frankenweenie_286, GenevaB15_98, Halena_51, Halley_87, HokkenD_76, Hughesyang_86, Jabiru_45, Jobypre_54, JoeDirt_51, Jubie_53, JuicyJay_84, JustBecause_265, Kalah2_80, Kela_265, Kingsolomon_53, KirDoubleO7_52, Klein_85, Kradal_265, Kropertea_50, Krypton555_55, LeBron_52, LittleE_85, LiyuLake_53, Lolly9_53, Lumos_55, MAckerman_52, MiniLon_56, MiniMac_56, Moostard_53, MsGreen_53, Nicholas_53, NihilNomen_87, Nirvana_302, Odette_85, OhShagHennessy_50, Omega_90, PYPDinur_50, Phlei_41, Phoebus_88, Ponzi_15, Poochiewood_52, Quantum_263, Quby_51, Redno2_81, Rey_98, Rose5_52, Samty_53, Satis_265, Schatzie_81, Sheng711_52, Silverleaf_53, Snenia_53, Thibault_72, ThreeRngTarjay_83, TriFive_54, Tyson_52, UPIE_52, UnionJack_45, Wamburgrxpress_52, Wanda_89, Whirlwind_54, Wyatt2_53, Yeet_79, Zaria_53, Zelink_84,

Summary by start number:

Start 16:

- Found in 23 of 228 (10.1%) of genes in pham
- Manual Annotations of this start: 16 of 201
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bellis_53 (L3), BourbonZero_54 (L3), Clautastrophe_53 (L3), DuncansLeg_54 (L3), Ellson_53 (L3), Finnry_53 (L3), Jobypre_54 (L3), Jubie_53 (L3), Kingsolomon_53 (L3), KirDoubleO7_52 (L3), Krypton555_55 (L3), LiyuLake_53 (L3), Lolly9_53 (L3), Lumos_55 (L3), MiniLon_56 (L3), MiniMac_56 (L3), Moostard_53 (L3), MsGreen_53 (L3), Nicholas_53 (L3), Samty_53 (L3), Snenia_53 (L3), TriFive_54 (L3), Whirlwind_54 (L3),

Start 17:

- Found in 20 of 228 (8.8%) of genes in pham
- Manual Annotations of this start: 19 of 201
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Acquire49_53 (L1), Appletree2_51 (L1), AvadaKedavra_53 (L1), Calm_53 (L1), CicholasNage_52 (L1), DirkDirk_50 (L1), Enceladus_51 (L1), Halena_51 (L1), JoeDirt_51 (L1), LeBron_52 (L1), MAckerman_52 (L1), OhShagHennessy_50 (L1), Poochiewood_52 (L1), Rose5_52 (L1), Silverleaf_53 (L1), Tyson_52 (L1), UPIE_52 (L1), Wamburgrxpress_52 (L1), Wyatt2_53 (L1), Zaria_53 (L1),

Start 18:

- Found in 130 of 228 (57.0%) of genes in pham
- Manual Annotations of this start: 122 of 201

- Called 100.0% of time when present
- Phage (with cluster) where this start called: ABCat_75 (E), Adnama_82 (E), Amao_78 (E), AmericanBeauty_82 (E), Argent26_82 (E), Asriel_77 (E), BaboJay_75 (E), BadStone_75 (E), Balomoji_78 (E), Barbarian_77 (E), Bask21_78 (E), Bench_81 (E), BigBubba_78 (E), BilboSwaggins_77 (E), Bruin_75 (E), Buck_79 (E), BugsBunny_78 (E), Cactus_81 (E), ChosenOne_78 (E), ChotaBhai_78 (E), Cjw1_78 (E), Command613_80 (E), Contagion_74 (E), Cookies_75 (E), CrystalP_77 (E), Czyszczonek_79 (E), Daikon_80 (E), DoctorDiddles_77 (E), DrDrey_78 (E), Dumbo_78 (E), Dusk_75 (E), Easy2Say_79 (E), Elite2014_77 (E), Elph10_78 (E), Emmina_78 (E), Eureka_76 (E), FairyPath_78 (E), Filch_79 (E), FireRed_82 (E), Flypotenuse_74 (E), Gage_80 (E), Gator_76 (E), Gemini_83 (E), Glexan_77 (E), Goku_76 (E), GoldenSpark_82 (E), Goldilocks_81 (E), GooberAzure_81 (E), HanKaySha_78 (E), Harella_78 (E), Henry_76 (E), Highbury_77 (E), Holt_83 (E), Hoonter_81 (E), Hopey_78 (E), HufflyPuff_81 (E), IHOP_76 (E), Icee_79 (E), Inca_75 (E), JeTaime_78 (E), Kanye_75 (E), Kimchi_82 (E), Kostya_78 (E), Lilac_80 (E), Lilizi_79 (E), Lilpickle_77 (E), MISSy_79 (E), MPhalcon_79 (E), MadamMonkfish_78 (E), Manda_79 (E), Marshmallow_76 (E), Maxxinista_80 (E), Mindy_77 (E), Miniwave_73 (E), Misfit_79 (E), Moldemort_81 (E), Mosby_74 (E), Murica_81 (E), Murphy_78 (E), Myrale_78 (E), Nala_80 (E), NelitzaMV_76 (E), Nimrod_79 (E), NoSleep_79 (E), OrionPax_77 (E), Palpatine_80 (E), Paperbeatsrock_77 (E), Pat3_76 (E), Petra64142_82 (E), Phaja_76 (E), Pharsalus_75 (E), PhatBacter_82 (E), Phaux_80 (E), Phrux_75 (E), Policronamos_82 (E), Porky_77 (E), Pumpkin_81 (E), Quallification_79 (E), Rakim_79 (E), Rimmer_79 (E), RiverMonster_78 (E), Saints25_77 (E), Sassay_73 (E), ShamWow_78 (E), ShereKhan_76 (E), Simpliphy_77 (E), SirDuracell_77 (E), SophKB_75 (E), Sotrice96_79 (E), Stank_81 (E), Stark_79 (E), StellaBean_76 (E), StolenFromERC_81 (E), TBrady12_81 (E), Tarkin_77 (E), TeardropMSU_74 (E), Teaspoon_79 (E), Terminus_81 (E), Thresher_80 (E), Tomaszewski_73 (E), Toto_76 (E), Traaww1_74 (E), Tuco_79 (E), Ukulele_73 (E), Wiggin_80 (E), Willez_73 (E), Xandras_77 (E), YassJohnny_75 (E), Youngblood_81 (E), xkcd_81 (E),

Start 20:

- Found in 11 of 228 (4.8%) of genes in pham
- Manual Annotations of this start: 4 of 201
- Called 72.7% of time when present
- Phage (with cluster) where this start called: BrainDrainer_52 (L4), Bromden_53 (L4), Chaser_50 (L4), Douge_52 (L4), Douzhi_52 (L4), DyoEdafos_54 (L4), Kropertea_50 (L4), Sheng711_52 (L4),

Start 22:

- Found in 9 of 228 (3.9%) of genes in pham
- Manual Annotations of this start: 4 of 201
- Called 44.4% of time when present
- Phage (with cluster) where this start called: Benedict_47 (A5), EITiger69_46 (A5), Jabiru_45 (A5), UnionJack_45 (A5),

Start 23:

- Found in 9 of 228 (3.9%) of genes in pham
- Manual Annotations of this start: 8 of 201
- Called 100.0% of time when present
- Phage (with cluster) where this start called: EhyElimayoE_268 (BM), Frankenweenie_286 (BM), JustBecause_265 (BM), Kela_265 (BM), Kradal_265 (BM), Nirvana_302 (BM), Ponzi_15 (singleton), Quantum_263 (BM), Satis_265 (BM),

Start 24:

- Found in 1 of 228 (0.4%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Phlei_41 (A13),

Start 25:

- Found in 3 of 228 (1.3%) of genes in pham
- Manual Annotations of this start: 3 of 201
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aziz_96 (M2), GenevaB15_98 (M2), Rey_98 (M2),

Start 26:

- Found in 4 of 228 (1.8%) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: FarmResident_53 (L4), Quby_51 (L4),

Start 27:

- Found in 1 of 228 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 201
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Finch_139 (singleton),

Start 28:

- Found in 28 of 228 (12.3%) of genes in pham
- Manual Annotations of this start: 24 of 201
- Called 92.9% of time when present
- Phage (with cluster) where this start called: Bagrid_86 (J), Beem_86 (J), Bombitas_75 (J), Constella_72 (J), Dallas_85 (J), DmpstrDiver_86 (J), Dove_71 (J), Ejimix_85 (J), Halley_87 (J), HokkenD_76 (J), Hughesyang_86 (J), JuicyJay_84 (J), Kalah2_80 (J), Klein_85 (J), LittleE_85 (J), NihilNomen_87 (J), Odette_85 (J), Omega_90 (J), Phoebus_88 (J), Redno2_81 (J), Schatzie_81 (J), Thibault_72 (J), ThreeRngTarjay_83 (J), Wanda_89 (J), Yeet_79 (J), Zelink_84 (J),

Start 32:

- Found in 9 of 228 (3.9%) of genes in pham
- No Manual Annotations of this start.
- Called 11.1% of time when present
- Phage (with cluster) where this start called: PYPDinur_50 (L4),

Summary by clusters:

There are 10 clusters represented in this pham: singleton, E, A13, BM, J, L4, A5, L3, L1, M2,

Info for manual annotations of cluster A5:

- Start number 22 was manually annotated 4 times for cluster A5.

Info for manual annotations of cluster BM:

- Start number 23 was manually annotated 7 times for cluster BM.

Info for manual annotations of cluster E:

- Start number 18 was manually annotated 122 times for cluster E.

Info for manual annotations of cluster J:

- Start number 28 was manually annotated 24 times for cluster J.

Info for manual annotations of cluster L1:

- Start number 17 was manually annotated 19 times for cluster L1.

Info for manual annotations of cluster L3:

- Start number 16 was manually annotated 16 times for cluster L3.

Info for manual annotations of cluster L4:

- Start number 20 was manually annotated 4 times for cluster L4.

Info for manual annotations of cluster M2:

- Start number 25 was manually annotated 3 times for cluster M2.

Gene Information:

Gene: ABCat_75 Start: 49269, Stop: 49505, Start Num: 18

Candidate Starts for ABCat_75:

(8, 49098), (10, 49143), (11, 49158), (Start: 18 @49269 has 122 MA's),

Gene: Acquire49_53 Start: 38583, Stop: 38816, Start Num: 17

Candidate Starts for Acquire49_53:

(Start: 17 @38583 has 19 MA's), (40, 38733), (48, 38772), (53, 38793),

Gene: Adnama_82 Start: 49295, Stop: 49531, Start Num: 18

Candidate Starts for Adnama_82:

(8, 49124), (10, 49169), (11, 49184), (Start: 18 @49295 has 122 MA's),

Gene: Amao_78 Start: 48689, Stop: 48925, Start Num: 18

Candidate Starts for Amao_78:

(8, 48518), (11, 48578), (Start: 18 @48689 has 122 MA's),

Gene: AmericanBeauty_82 Start: 49438, Stop: 49674, Start Num: 18

Candidate Starts for AmericanBeauty_82:

(8, 49267), (10, 49312), (11, 49327), (Start: 18 @49438 has 122 MA's),

Gene: Appletree2_51 Start: 38416, Stop: 38649, Start Num: 17

Candidate Starts for Appletree2_51:

(Start: 17 @38416 has 19 MA's), (40, 38566), (48, 38605), (53, 38626),

Gene: Argent26_82 Start: 49076, Stop: 49312, Start Num: 18

Candidate Starts for Argent26_82:

(8, 48905), (10, 48950), (11, 48965), (Start: 18 @49076 has 122 MA's),

Gene: Asriel_77 Start: 47632, Stop: 47868, Start Num: 18

Candidate Starts for Asriel_77:
(8, 47461), (10, 47506), (11, 47521), (Start: 18 @47632 has 122 MA's),

Gene: AvadaKedavra_53 Start: 38663, Stop: 38896, Start Num: 17
Candidate Starts for AvadaKedavra_53:
(Start: 17 @38663 has 19 MA's), (40, 38813),

Gene: Aziz_96 Start: 54973, Stop: 55158, Start Num: 25
Candidate Starts for Aziz_96:
(Start: 25 @54973 has 3 MA's), (38, 55060), (40, 55072), (42, 55081), (43, 55084), (57, 55144), (58, 55147),

Gene: BaboJay_75 Start: 48469, Stop: 48705, Start Num: 18
Candidate Starts for BaboJay_75:
(11, 48358), (Start: 18 @48469 has 122 MA's),

Gene: BadStone_75 Start: 48838, Stop: 49074, Start Num: 18
Candidate Starts for BadStone_75:
(8, 48667), (10, 48712), (11, 48727), (Start: 18 @48838 has 122 MA's),

Gene: Bagrid_86 Start: 54949, Stop: 55137, Start Num: 28
Candidate Starts for Bagrid_86:
(Start: 28 @54949 has 24 MA's), (34, 54985), (42, 55048), (50, 55090), (54, 55105), (56, 55108), (61, 55129),

Gene: Balomoji_78 Start: 49399, Stop: 49635, Start Num: 18
Candidate Starts for Balomoji_78:
(8, 49228), (10, 49273), (11, 49288), (Start: 18 @49399 has 122 MA's),

Gene: Barbarian_77 Start: 47632, Stop: 47868, Start Num: 18
Candidate Starts for Barbarian_77:
(8, 47461), (10, 47506), (11, 47521), (Start: 18 @47632 has 122 MA's),

Gene: Bask21_78 Start: 48252, Stop: 48488, Start Num: 18
Candidate Starts for Bask21_78:
(8, 48081), (11, 48141), (Start: 18 @48252 has 122 MA's),

Gene: Beem_86 Start: 55810, Stop: 55998, Start Num: 28
Candidate Starts for Beem_86:
(Start: 28 @55810 has 24 MA's), (34, 55846), (42, 55909), (47, 55936), (54, 55966), (56, 55969), (61, 55990),

Gene: Bellis_53 Start: 40576, Stop: 40809, Start Num: 16
Candidate Starts for Bellis_53:
(Start: 16 @40576 has 16 MA's), (19, 40582), (30, 40645),

Gene: Bench_81 Start: 48936, Stop: 49172, Start Num: 18
Candidate Starts for Bench_81:
(11, 48825), (Start: 18 @48936 has 122 MA's),

Gene: Benedict_47 Start: 34549, Stop: 34346, Start Num: 22
Candidate Starts for Benedict_47:
(Start: 22 @34549 has 4 MA's), (41, 34435), (44, 34417), (49, 34393),

Gene: BigBubba_78 Start: 48648, Stop: 48884, Start Num: 18

Candidate Starts for BigBubba_78:

(11, 48537), (Start: 18 @48648 has 122 MA's),

Gene: BilboSwaggins_77 Start: 49277, Stop: 49513, Start Num: 18

Candidate Starts for BilboSwaggins_77:

(8, 49106), (11, 49166), (Start: 18 @49277 has 122 MA's),

Gene: Bombitas_75 Start: 52973, Stop: 53161, Start Num: 28

Candidate Starts for Bombitas_75:

(Start: 28 @52973 has 24 MA's), (34, 53009), (42, 53072), (47, 53099), (54, 53129), (56, 53132), (61, 53153),

Gene: BourbonZero_54 Start: 40622, Stop: 40858, Start Num: 16

Candidate Starts for BourbonZero_54:

(Start: 16 @40622 has 16 MA's), (30, 40694),

Gene: BrainDrainer_52 Start: 39152, Stop: 39376, Start Num: 20

Candidate Starts for BrainDrainer_52:

(Start: 20 @39152 has 4 MA's), (30, 39212), (32, 39221),

Gene: Bromden_53 Start: 39820, Stop: 40044, Start Num: 20

Candidate Starts for Bromden_53:

(Start: 20 @39820 has 4 MA's), (30, 39880), (32, 39889),

Gene: Bruin_75 Start: 47812, Stop: 48048, Start Num: 18

Candidate Starts for Bruin_75:

(11, 47701), (Start: 18 @47812 has 122 MA's),

Gene: Buck_79 Start: 49517, Stop: 49753, Start Num: 18

Candidate Starts for Buck_79:

(8, 49346), (11, 49406), (Start: 18 @49517 has 122 MA's),

Gene: BugsBunny_78 Start: 49344, Stop: 49580, Start Num: 18

Candidate Starts for BugsBunny_78:

(11, 49233), (Start: 18 @49344 has 122 MA's),

Gene: Cactus_81 Start: 48293, Stop: 48529, Start Num: 18

Candidate Starts for Cactus_81:

(8, 48122), (10, 48167), (11, 48182), (Start: 18 @48293 has 122 MA's),

Gene: Calm_53 Start: 38598, Stop: 38831, Start Num: 17

Candidate Starts for Calm_53:

(Start: 17 @38598 has 19 MA's), (40, 38748), (48, 38787), (53, 38808),

Gene: Chaser_50 Start: 38908, Stop: 39132, Start Num: 20

Candidate Starts for Chaser_50:

(Start: 20 @38908 has 4 MA's), (30, 38968), (32, 38977),

Gene: ChosenOne_78 Start: 48293, Stop: 48529, Start Num: 18

Candidate Starts for ChosenOne_78:

(8, 48122), (10, 48167), (11, 48182), (Start: 18 @48293 has 122 MA's),

Gene: ChotaBhai_78 Start: 48617, Stop: 48853, Start Num: 18

Candidate Starts for ChotaBhai_78:

(8, 48446), (11, 48506), (Start: 18 @48617 has 122 MA's),

Gene: CicholasNage_52 Start: 38619, Stop: 38852, Start Num: 17

Candidate Starts for CicholasNage_52:

(Start: 17 @38619 has 19 MA's), (40, 38769), (48, 38808), (53, 38829),

Gene: Cjw1_78 Start: 49990, Stop: 50226, Start Num: 18

Candidate Starts for Cjw1_78:

(11, 49879), (Start: 18 @49990 has 122 MA's),

Gene: Clautastrophe_53 Start: 40573, Stop: 40806, Start Num: 16

Candidate Starts for Clautastrophe_53:

(Start: 16 @40573 has 16 MA's), (19, 40579), (30, 40642),

Gene: Command613_80 Start: 49332, Stop: 49568, Start Num: 18

Candidate Starts for Command613_80:

(8, 49161), (10, 49206), (11, 49221), (Start: 18 @49332 has 122 MA's),

Gene: Constella_72 Start: 49947, Stop: 50135, Start Num: 28

Candidate Starts for Constella_72:

(Start: 28 @49947 has 24 MA's), (34, 49983), (42, 50046), (47, 50073), (54, 50103), (56, 50106), (61, 50127),

Gene: Contagion_74 Start: 48093, Stop: 48329, Start Num: 18

Candidate Starts for Contagion_74:

(11, 47982), (Start: 18 @48093 has 122 MA's),

Gene: Cookies_75 Start: 48474, Stop: 48710, Start Num: 18

Candidate Starts for Cookies_75:

(8, 48303), (11, 48363), (Start: 18 @48474 has 122 MA's),

Gene: CrystalP_77 Start: 49277, Stop: 49513, Start Num: 18

Candidate Starts for CrystalP_77:

(8, 49106), (11, 49166), (Start: 18 @49277 has 122 MA's),

Gene: Czyszczonek1_79 Start: 48799, Stop: 49035, Start Num: 18

Candidate Starts for Czyszczonek1_79:

(11, 48688), (Start: 18 @48799 has 122 MA's),

Gene: Daikon_80 Start: 49420, Stop: 49656, Start Num: 18

Candidate Starts for Daikon_80:

(8, 49249), (10, 49294), (11, 49309), (Start: 18 @49420 has 122 MA's),

Gene: Dallas_85 Start: 54731, Stop: 54919, Start Num: 28

Candidate Starts for Dallas_85:

(Start: 28 @54731 has 24 MA's), (34, 54767), (42, 54830), (47, 54857), (54, 54887), (56, 54890), (61, 54911),

Gene: DirkDirk_50 Start: 38462, Stop: 38695, Start Num: 17

Candidate Starts for DirkDirk_50:

(Start: 17 @38462 has 19 MA's), (40, 38612), (48, 38651), (53, 38672),

Gene: DmpstrDiver_86 Start: 55145, Stop: 55333, Start Num: 28

Candidate Starts for DmpstrDiver_86:

(Start: 28 @55145 has 24 MA's), (34, 55181), (42, 55244), (47, 55271), (54, 55301), (56, 55304), (61, 55325),

Gene: DoctorDiddles_77 Start: 48661, Stop: 48897, Start Num: 18

Candidate Starts for DoctorDiddles_77:

(8, 48490), (11, 48550), (Start: 18 @48661 has 122 MA's),

Gene: Douge_52 Start: 38906, Stop: 39130, Start Num: 20

Candidate Starts for Douge_52:

(Start: 20 @38906 has 4 MA's), (30, 38966), (32, 38975),

Gene: Douzhi_52 Start: 38980, Stop: 39204, Start Num: 20

Candidate Starts for Douzhi_52:

(Start: 20 @38980 has 4 MA's), (30, 39040), (32, 39049),

Gene: Dove_71 Start: 51239, Stop: 51427, Start Num: 28

Candidate Starts for Dove_71:

(Start: 28 @51239 has 24 MA's), (34, 51275), (42, 51338), (47, 51365), (54, 51395), (56, 51398), (61, 51419),

Gene: DrDrey_78 Start: 49718, Stop: 49954, Start Num: 18

Candidate Starts for DrDrey_78:

(11, 49607), (Start: 18 @49718 has 122 MA's),

Gene: Dumbo_78 Start: 48198, Stop: 48434, Start Num: 18

Candidate Starts for Dumbo_78:

(8, 48027), (11, 48087), (Start: 18 @48198 has 122 MA's),

Gene: DuncansLeg_54 Start: 40604, Stop: 40840, Start Num: 16

Candidate Starts for DuncansLeg_54:

(Start: 16 @40604 has 16 MA's), (30, 40676),

Gene: Dusk_75 Start: 48498, Stop: 48734, Start Num: 18

Candidate Starts for Dusk_75:

(8, 48327), (10, 48372), (11, 48387), (Start: 18 @48498 has 122 MA's),

Gene: DyoEdafos_54 Start: 39182, Stop: 39406, Start Num: 20

Candidate Starts for DyoEdafos_54:

(Start: 20 @39182 has 4 MA's), (26, 39221), (30, 39242),

Gene: Easy2Say_79 Start: 49742, Stop: 49978, Start Num: 18

Candidate Starts for Easy2Say_79:

(8, 49571), (11, 49631), (Start: 18 @49742 has 122 MA's),

Gene: EhyElimayoE_268 Start: 152644, Stop: 152447, Start Num: 23

Candidate Starts for EhyElimayoE_268:

(Start: 22 @152650 has 4 MA's), (Start: 23 @152644 has 8 MA's), (33, 152599), (45, 152512), (46, 152509), (60, 152455),

Gene: Ejimix_85 Start: 56605, Stop: 56793, Start Num: 28
Candidate Starts for Ejimix_85:
(Start: 28 @56605 has 24 MA's), (34, 56641), (40, 56695), (47, 56731), (50, 56746), (54, 56761), (56, 56764), (61, 56785),

Gene: EITiger69_46 Start: 34531, Stop: 34328, Start Num: 22
Candidate Starts for EITiger69_46:
(Start: 22 @34531 has 4 MA's), (41, 34417), (44, 34399),

Gene: Elite2014_77 Start: 48292, Stop: 48528, Start Num: 18
Candidate Starts for Elite2014_77:
(8, 48121), (10, 48166), (11, 48181), (Start: 18 @48292 has 122 MA's),

Gene: Ellson_53 Start: 40634, Stop: 40870, Start Num: 16
Candidate Starts for Ellson_53:
(Start: 16 @40634 has 16 MA's), (30, 40706),

Gene: Elph10_78 Start: 48297, Stop: 48533, Start Num: 18
Candidate Starts for Elph10_78:
(11, 48186), (Start: 18 @48297 has 122 MA's),

Gene: Emmina_78 Start: 48199, Stop: 48435, Start Num: 18
Candidate Starts for Emmina_78:
(8, 48028), (10, 48073), (11, 48088), (Start: 18 @48199 has 122 MA's),

Gene: Enceladus_51 Start: 38457, Stop: 38690, Start Num: 17
Candidate Starts for Enceladus_51:
(Start: 17 @38457 has 19 MA's), (40, 38607), (48, 38646), (53, 38667),

Gene: Eureka_76 Start: 48763, Stop: 48999, Start Num: 18
Candidate Starts for Eureka_76:
(8, 48592), (10, 48637), (11, 48652), (Start: 18 @48763 has 122 MA's),

Gene: FairyPath_78 Start: 49411, Stop: 49647, Start Num: 18
Candidate Starts for FairyPath_78:
(8, 49240), (11, 49300), (Start: 18 @49411 has 122 MA's),

Gene: FarmResident_53 Start: 38980, Stop: 39165, Start Num: 26
Candidate Starts for FarmResident_53:
(Start: 20 @38941 has 4 MA's), (26, 38980), (30, 39001), (32, 39010),

Gene: Filch_79 Start: 48224, Stop: 48460, Start Num: 18
Candidate Starts for Filch_79:
(11, 48113), (Start: 18 @48224 has 122 MA's),

Gene: Finch_139 Start: 94070, Stop: 94243, Start Num: 27
Candidate Starts for Finch_139:
(1, 93464), (2, 93533), (3, 93578), (5, 93734), (9, 93890), (14, 93947), (Start: 27 @94070 has 1 MA's), (40, 94160), (55, 94232), (56, 94235),

Gene: Finnry_53 Start: 40841, Stop: 41077, Start Num: 16
Candidate Starts for Finnry_53:
(Start: 16 @40841 has 16 MA's), (30, 40913),

Gene: FireRed_82 Start: 49786, Stop: 50022, Start Num: 18

Candidate Starts for FireRed_82:

(8, 49615), (11, 49675), (Start: 18 @49786 has 122 MA's),

Gene: Flypotenuse_74 Start: 48283, Stop: 48519, Start Num: 18

Candidate Starts for Flypotenuse_74:

(8, 48112), (10, 48157), (11, 48172), (Start: 18 @48283 has 122 MA's),

Gene: Frankenweenie_286 Start: 163785, Stop: 163588, Start Num: 23

Candidate Starts for Frankenweenie_286:

(13, 163899), (Start: 23 @163785 has 8 MA's), (45, 163653), (46, 163650),

Gene: Gage_80 Start: 49076, Stop: 49312, Start Num: 18

Candidate Starts for Gage_80:

(8, 48905), (11, 48965), (Start: 18 @49076 has 122 MA's),

Gene: Gator_76 Start: 49129, Stop: 49365, Start Num: 18

Candidate Starts for Gator_76:

(8, 48958), (10, 49003), (11, 49018), (Start: 18 @49129 has 122 MA's),

Gene: Gemini_83 Start: 49593, Stop: 49829, Start Num: 18

Candidate Starts for Gemini_83:

(8, 49422), (10, 49467), (11, 49482), (Start: 18 @49593 has 122 MA's),

Gene: GenevaB15_98 Start: 54973, Stop: 55158, Start Num: 25

Candidate Starts for GenevaB15_98:

(Start: 25 @54973 has 3 MA's), (38, 55060), (40, 55072), (42, 55081), (43, 55084), (57, 55144), (58, 55147),

Gene: Glexan_77 Start: 49413, Stop: 49649, Start Num: 18

Candidate Starts for Glexan_77:

(8, 49242), (10, 49287), (11, 49302), (Start: 18 @49413 has 122 MA's),

Gene: Goku_76 Start: 48492, Stop: 48728, Start Num: 18

Candidate Starts for Goku_76:

(8, 48321), (10, 48366), (11, 48381), (Start: 18 @48492 has 122 MA's),

Gene: GoldenSpark_82 Start: 49076, Stop: 49312, Start Num: 18

Candidate Starts for GoldenSpark_82:

(8, 48905), (10, 48950), (11, 48965), (Start: 18 @49076 has 122 MA's),

Gene: Goldilocks_81 Start: 48574, Stop: 48810, Start Num: 18

Candidate Starts for Goldilocks_81:

(8, 48403), (10, 48448), (11, 48463), (Start: 18 @48574 has 122 MA's),

Gene: GooberAzure_81 Start: 49076, Stop: 49312, Start Num: 18

Candidate Starts for GooberAzure_81:

(8, 48905), (10, 48950), (11, 48965), (Start: 18 @49076 has 122 MA's),

Gene: Halena_51 Start: 38499, Stop: 38732, Start Num: 17

Candidate Starts for Halena_51:

(Start: 17 @38499 has 19 MA's), (40, 38649), (48, 38688), (53, 38709),

Gene: Halley_87 Start: 55810, Stop: 55998, Start Num: 28
Candidate Starts for Halley_87:
(Start: 28 @55810 has 24 MA's), (34, 55846), (42, 55909), (47, 55936), (54, 55966), (56, 55969), (61, 55990),

Gene: HanKaySha_78 Start: 48377, Stop: 48613, Start Num: 18
Candidate Starts for HanKaySha_78:
(11, 48266), (Start: 18 @48377 has 122 MA's),

Gene: Harella_78 Start: 49929, Stop: 50165, Start Num: 18
Candidate Starts for Harella_78:
(8, 49758), (10, 49803), (11, 49818), (Start: 18 @49929 has 122 MA's),

Gene: Henry_76 Start: 48717, Stop: 48953, Start Num: 18
Candidate Starts for Henry_76:
(8, 48546), (11, 48606), (Start: 18 @48717 has 122 MA's),

Gene: Highbury_77 Start: 48365, Stop: 48601, Start Num: 18
Candidate Starts for Highbury_77:
(8, 48194), (11, 48254), (Start: 18 @48365 has 122 MA's),

Gene: HokkenD_76 Start: 54079, Stop: 54267, Start Num: 28
Candidate Starts for HokkenD_76:
(Start: 28 @54079 has 24 MA's), (34, 54115), (42, 54178), (47, 54205), (54, 54235), (56, 54238), (61, 54259),

Gene: Holt_83 Start: 49490, Stop: 49726, Start Num: 18
Candidate Starts for Holt_83:
(8, 49319), (10, 49364), (11, 49379), (Start: 18 @49490 has 122 MA's),

Gene: Hoonter_81 Start: 49076, Stop: 49312, Start Num: 18
Candidate Starts for Hoonter_81:
(8, 48905), (11, 48965), (Start: 18 @49076 has 122 MA's),

Gene: Hopecy_78 Start: 48909, Stop: 49145, Start Num: 18
Candidate Starts for Hopecy_78:
(11, 48798), (Start: 18 @48909 has 122 MA's),

Gene: HufflyPuff_81 Start: 49742, Stop: 49978, Start Num: 18
Candidate Starts for HufflyPuff_81:
(8, 49571), (10, 49616), (11, 49631), (Start: 18 @49742 has 122 MA's),

Gene: Hughesyang_86 Start: 55768, Stop: 55956, Start Num: 28
Candidate Starts for Hughesyang_86:
(Start: 28 @55768 has 24 MA's), (34, 55804), (42, 55867), (47, 55894), (54, 55924), (56, 55927), (61, 55948),

Gene: IHOP_76 Start: 48841, Stop: 49077, Start Num: 18
Candidate Starts for IHOP_76:
(8, 48670), (10, 48715), (11, 48730), (Start: 18 @48841 has 122 MA's),

Gene: Icee_79 Start: 48740, Stop: 48976, Start Num: 18

Candidate Starts for Icee_79:
(8, 48569), (10, 48614), (11, 48629), (Start: 18 @48740 has 122 MA's),

Gene: Inca_75 Start: 47366, Stop: 47602, Start Num: 18
Candidate Starts for Inca_75:
(8, 47195), (10, 47240), (11, 47255), (Start: 18 @47366 has 122 MA's),

Gene: Jabiru_45 Start: 34404, Stop: 34201, Start Num: 22
Candidate Starts for Jabiru_45:
(Start: 22 @34404 has 4 MA's), (41, 34290), (44, 34272), (49, 34248),

Gene: JeTaime_78 Start: 49558, Stop: 49794, Start Num: 18
Candidate Starts for JeTaime_78:
(8, 49387), (11, 49447), (Start: 18 @49558 has 122 MA's),

Gene: Jobypre_54 Start: 40573, Stop: 40806, Start Num: 16
Candidate Starts for Jobypre_54:
(Start: 16 @40573 has 16 MA's), (19, 40579), (30, 40642),

Gene: JoeDirt_51 Start: 38456, Stop: 38689, Start Num: 17
Candidate Starts for JoeDirt_51:
(Start: 17 @38456 has 19 MA's), (40, 38606), (48, 38645), (53, 38666),

Gene: Jubie_53 Start: 40708, Stop: 40941, Start Num: 16
Candidate Starts for Jubie_53:
(Start: 16 @40708 has 16 MA's), (19, 40714), (30, 40777),

Gene: JuicyJay_84 Start: 56944, Stop: 57132, Start Num: 28
Candidate Starts for JuicyJay_84:
(Start: 28 @56944 has 24 MA's), (34, 56980), (42, 57043), (47, 57070), (54, 57100), (56, 57103), (61, 57124),

Gene: JustBecause_265 Start: 149325, Stop: 149131, Start Num: 23
Candidate Starts for JustBecause_265:
(Start: 23 @149325 has 8 MA's), (Start: 28 @149310 has 24 MA's),

Gene: Kalah2_80 Start: 55103, Stop: 55291, Start Num: 28
Candidate Starts for Kalah2_80:
(Start: 28 @55103 has 24 MA's), (34, 55139), (42, 55202), (47, 55229), (54, 55259), (56, 55262), (61, 55283),

Gene: Kanye_75 Start: 48422, Stop: 48658, Start Num: 18
Candidate Starts for Kanye_75:
(8, 48251), (10, 48296), (11, 48311), (Start: 18 @48422 has 122 MA's),

Gene: Kela_265 Start: 150929, Stop: 150735, Start Num: 23
Candidate Starts for Kela_265:
(Start: 23 @150929 has 8 MA's), (Start: 28 @150914 has 24 MA's),

Gene: Kimchi_82 Start: 49079, Stop: 49315, Start Num: 18
Candidate Starts for Kimchi_82:
(8, 48908), (11, 48968), (Start: 18 @49079 has 122 MA's),

Gene: Kingsolomon_53 Start: 40577, Stop: 40813, Start Num: 16
Candidate Starts for Kingsolomon_53:
(Start: 16 @40577 has 16 MA's), (30, 40649),

Gene: KirDoubleO7_52 Start: 40608, Stop: 40844, Start Num: 16
Candidate Starts for KirDoubleO7_52:
(Start: 16 @40608 has 16 MA's), (30, 40680),

Gene: Klein_85 Start: 54529, Stop: 54717, Start Num: 28
Candidate Starts for Klein_85:
(Start: 28 @54529 has 24 MA's), (34, 54565), (40, 54619), (47, 54655), (50, 54670), (54, 54685), (56, 54688), (61, 54709),

Gene: Kostya_78 Start: 48940, Stop: 49176, Start Num: 18
Candidate Starts for Kostya_78:
(8, 48769), (10, 48814), (11, 48829), (Start: 18 @48940 has 122 MA's),

Gene: Kradal_265 Start: 152641, Stop: 152444, Start Num: 23
Candidate Starts for Kradal_265:
(Start: 22 @152647 has 4 MA's), (Start: 23 @152641 has 8 MA's), (33, 152596), (45, 152509), (46, 152506), (60, 152452),

Gene: Kropertea_50 Start: 39081, Stop: 39305, Start Num: 20
Candidate Starts for Kropertea_50:
(Start: 20 @39081 has 4 MA's), (26, 39120), (30, 39141),

Gene: Krypton555_55 Start: 40810, Stop: 41046, Start Num: 16
Candidate Starts for Krypton555_55:
(Start: 16 @40810 has 16 MA's), (30, 40882),

Gene: LeBron_52 Start: 38500, Stop: 38733, Start Num: 17
Candidate Starts for LeBron_52:
(Start: 17 @38500 has 19 MA's), (40, 38650), (48, 38689), (53, 38710),

Gene: Lilac_80 Start: 48694, Stop: 48930, Start Num: 18
Candidate Starts for Lilac_80:
(11, 48583), (Start: 18 @48694 has 122 MA's),

Gene: Lilizi_79 Start: 48407, Stop: 48643, Start Num: 18
Candidate Starts for Lilizi_79:
(11, 48296), (Start: 18 @48407 has 122 MA's),

Gene: Lilpickle_77 Start: 48292, Stop: 48528, Start Num: 18
Candidate Starts for Lilpickle_77:
(8, 48121), (10, 48166), (11, 48181), (Start: 18 @48292 has 122 MA's),

Gene: LittleE_85 Start: 54353, Stop: 54541, Start Num: 28
Candidate Starts for LittleE_85:
(Start: 28 @54353 has 24 MA's), (34, 54389), (35, 54410), (37, 54422), (40, 54443), (47, 54479), (50, 54494), (54, 54509), (56, 54512),

Gene: LiyuLake_53 Start: 40624, Stop: 40860, Start Num: 16
Candidate Starts for LiyuLake_53:

(Start: 16 @40624 has 16 MA's), (30, 40696),

Gene: Lolly9_53 Start: 40395, Stop: 40631, Start Num: 16

Candidate Starts for Lolly9_53:

(Start: 16 @40395 has 16 MA's), (30, 40467),

Gene: Lumos_55 Start: 40570, Stop: 40803, Start Num: 16

Candidate Starts for Lumos_55:

(Start: 16 @40570 has 16 MA's), (19, 40576), (30, 40639),

Gene: MAckerman_52 Start: 38492, Stop: 38725, Start Num: 17

Candidate Starts for MAckerman_52:

(Start: 17 @38492 has 19 MA's), (40, 38642), (48, 38681), (53, 38702),

Gene: MISSy_79 Start: 48798, Stop: 49034, Start Num: 18

Candidate Starts for MISSy_79:

(11, 48687), (Start: 18 @48798 has 122 MA's),

Gene: MPhalcon_79 Start: 48791, Stop: 49027, Start Num: 18

Candidate Starts for MPhalcon_79:

(11, 48680), (Start: 18 @48791 has 122 MA's),

Gene: MadamMonkfish_78 Start: 48016, Stop: 48252, Start Num: 18

Candidate Starts for MadamMonkfish_78:

(8, 47845), (11, 47905), (Start: 18 @48016 has 122 MA's),

Gene: Manda_79 Start: 49878, Stop: 50114, Start Num: 18

Candidate Starts for Manda_79:

(8, 49707), (11, 49767), (Start: 18 @49878 has 122 MA's),

Gene: Marshmallow_76 Start: 49571, Stop: 49807, Start Num: 18

Candidate Starts for Marshmallow_76:

(8, 49400), (11, 49460), (Start: 18 @49571 has 122 MA's),

Gene: Maxxinista_80 Start: 48667, Stop: 48903, Start Num: 18

Candidate Starts for Maxxinista_80:

(11, 48556), (Start: 18 @48667 has 122 MA's),

Gene: Mindy_77 Start: 47883, Stop: 48119, Start Num: 18

Candidate Starts for Mindy_77:

(8, 47712), (11, 47772), (Start: 18 @47883 has 122 MA's),

Gene: MiniLon_56 Start: 40396, Stop: 40632, Start Num: 16

Candidate Starts for MiniLon_56:

(Start: 16 @40396 has 16 MA's), (30, 40468),

Gene: MiniMac_56 Start: 40394, Stop: 40630, Start Num: 16

Candidate Starts for MiniMac_56:

(Start: 16 @40394 has 16 MA's), (30, 40466),

Gene: Miniwave_73 Start: 48336, Stop: 48572, Start Num: 18

Candidate Starts for Miniwave_73:

(11, 48225), (Start: 18 @48336 has 122 MA's),

Gene: Misfit_79 Start: 49810, Stop: 50046, Start Num: 18

Candidate Starts for Misfit_79:

(11, 49699), (Start: 18 @49810 has 122 MA's),

Gene: Moldemort_81 Start: 48895, Stop: 49131, Start Num: 18

Candidate Starts for Moldemort_81:

(8, 48724), (10, 48769), (11, 48784), (Start: 18 @48895 has 122 MA's),

Gene: Moostard_53 Start: 40576, Stop: 40809, Start Num: 16

Candidate Starts for Moostard_53:

(Start: 16 @40576 has 16 MA's), (19, 40582), (30, 40645),

Gene: Mosby_74 Start: 48093, Stop: 48329, Start Num: 18

Candidate Starts for Mosby_74:

(11, 47982), (Start: 18 @48093 has 122 MA's),

Gene: MsGreen_53 Start: 40573, Stop: 40806, Start Num: 16

Candidate Starts for MsGreen_53:

(Start: 16 @40573 has 16 MA's), (19, 40579), (30, 40642),

Gene: Murica_81 Start: 49742, Stop: 49978, Start Num: 18

Candidate Starts for Murica_81:

(8, 49571), (10, 49616), (11, 49631), (Start: 18 @49742 has 122 MA's),

Gene: Murphy_78 Start: 49179, Stop: 49415, Start Num: 18

Candidate Starts for Murphy_78:

(11, 49068), (Start: 18 @49179 has 122 MA's),

Gene: Myrale_78 Start: 49436, Stop: 49672, Start Num: 18

Candidate Starts for Myrale_78:

(8, 49265), (11, 49325), (Start: 18 @49436 has 122 MA's),

Gene: Nala_80 Start: 49300, Stop: 49536, Start Num: 18

Candidate Starts for Nala_80:

(8, 49129), (11, 49189), (Start: 18 @49300 has 122 MA's),

Gene: NelitzaMV_76 Start: 48382, Stop: 48618, Start Num: 18

Candidate Starts for NelitzaMV_76:

(8, 48211), (10, 48256), (11, 48271), (Start: 18 @48382 has 122 MA's),

Gene: Nicholas_53 Start: 40577, Stop: 40813, Start Num: 16

Candidate Starts for Nicholas_53:

(Start: 16 @40577 has 16 MA's), (30, 40649),

Gene: NihilNomen_87 Start: 55897, Stop: 56085, Start Num: 28

Candidate Starts for NihilNomen_87:

(Start: 28 @55897 has 24 MA's), (34, 55933), (42, 55996), (47, 56023), (54, 56053), (56, 56056), (61, 56077),

Gene: Nimrod_79 Start: 50003, Stop: 50239, Start Num: 18

Candidate Starts for Nimrod_79:

(8, 49832), (11, 49892), (Start: 18 @50003 has 122 MA's),

Gene: Nirvana_302 Start: 164233, Stop: 164039, Start Num: 23

Candidate Starts for Nirvana_302:

(15, 164284), (Start: 22 @164239 has 4 MA's), (Start: 23 @164233 has 8 MA's), (31, 164200), (39, 164137), (46, 164101),

Gene: NoSleep_79 Start: 48637, Stop: 48873, Start Num: 18

Candidate Starts for NoSleep_79:

(8, 48466), (11, 48526), (Start: 18 @48637 has 122 MA's),

Gene: Odette_85 Start: 54939, Stop: 55127, Start Num: 28

Candidate Starts for Odette_85:

(Start: 28 @54939 has 24 MA's), (34, 54975), (42, 55038), (47, 55065), (54, 55095), (56, 55098), (61, 55119),

Gene: OhShagHennessy_50 Start: 37486, Stop: 37719, Start Num: 17

Candidate Starts for OhShagHennessy_50:

(Start: 17 @37486 has 19 MA's), (40, 37636), (48, 37675), (53, 37696),

Gene: Omega_90 Start: 56132, Stop: 56317, Start Num: 28

Candidate Starts for Omega_90:

(Start: 28 @56132 has 24 MA's), (34, 56168), (35, 56189), (37, 56201), (40, 56222), (47, 56258), (50, 56273), (54, 56288), (56, 56291),

Gene: OrionPax_77 Start: 48388, Stop: 48624, Start Num: 18

Candidate Starts for OrionPax_77:

(8, 48217), (11, 48277), (Start: 18 @48388 has 122 MA's),

Gene: PYPDinur_50 Start: 39082, Stop: 39237, Start Num: 32

Candidate Starts for PYPDinur_50:

(Start: 20 @39013 has 4 MA's), (30, 39073), (32, 39082),

Gene: Palpatine_80 Start: 49769, Stop: 50005, Start Num: 18

Candidate Starts for Palpatine_80:

(11, 49658), (Start: 18 @49769 has 122 MA's),

Gene: Paperbeatsrock_77 Start: 49014, Stop: 49250, Start Num: 18

Candidate Starts for Paperbeatsrock_77:

(11, 48903), (Start: 18 @49014 has 122 MA's),

Gene: Pat3_76 Start: 47546, Stop: 47782, Start Num: 18

Candidate Starts for Pat3_76:

(8, 47375), (11, 47435), (Start: 18 @47546 has 122 MA's),

Gene: Petra64142_82 Start: 50233, Stop: 50469, Start Num: 18

Candidate Starts for Petra64142_82:

(8, 50062), (11, 50122), (Start: 18 @50233 has 122 MA's),

Gene: Phaja_76 Start: 48840, Stop: 49076, Start Num: 18

Candidate Starts for Phaja_76:

(8, 48669), (10, 48714), (11, 48729), (Start: 18 @48840 has 122 MA's),

Gene: Pharsalus_75 Start: 48814, Stop: 49050, Start Num: 18

Candidate Starts for Pharsalus_75:
(11, 48703), (Start: 18 @48814 has 122 MA's),

Gene: PhatBacter_82 Start: 49786, Stop: 50022, Start Num: 18
Candidate Starts for PhatBacter_82:
(11, 49675), (Start: 18 @49786 has 122 MA's),

Gene: Phaux_80 Start: 49781, Stop: 50017, Start Num: 18
Candidate Starts for Phaux_80:
(11, 49670), (Start: 18 @49781 has 122 MA's),

Gene: Phlei_41 Start: 35394, Stop: 35197, Start Num: 24
Candidate Starts for Phlei_41:
(21, 35409), (24, 35394), (29, 35373), (38, 35307), (51, 35235), (55, 35223), (56, 35220), (58, 35214),

Gene: Phoebus_88 Start: 57079, Stop: 57267, Start Num: 28
Candidate Starts for Phoebus_88:
(Start: 28 @57079 has 24 MA's), (34, 57115), (42, 57178), (47, 57205), (54, 57235), (56, 57238), (61, 57259),

Gene: Phrux_75 Start: 48377, Stop: 48613, Start Num: 18
Candidate Starts for Phrux_75:
(11, 48266), (Start: 18 @48377 has 122 MA's),

Gene: Policronamos_82 Start: 49781, Stop: 50017, Start Num: 18
Candidate Starts for Policronamos_82:
(11, 49670), (Start: 18 @49781 has 122 MA's),

Gene: Ponzi_15 Start: 10003, Stop: 9815, Start Num: 23
Candidate Starts for Ponzi_15:
(Start: 23 @10003 has 8 MA's), (36, 9928), (52, 9847), (59, 9826),

Gene: Poochiewood_52 Start: 38571, Stop: 38804, Start Num: 17
Candidate Starts for Poochiewood_52:
(Start: 17 @38571 has 19 MA's), (40, 38721), (48, 38760), (53, 38781),

Gene: Porky_77 Start: 48207, Stop: 48443, Start Num: 18
Candidate Starts for Porky_77:
(8, 48036), (10, 48081), (11, 48096), (Start: 18 @48207 has 122 MA's),

Gene: Pumpkin_81 Start: 49435, Stop: 49671, Start Num: 18
Candidate Starts for Pumpkin_81:
(11, 49324), (Start: 18 @49435 has 122 MA's),

Gene: Quallification_79 Start: 49422, Stop: 49658, Start Num: 18
Candidate Starts for Quallification_79:
(8, 49251), (10, 49296), (11, 49311), (Start: 18 @49422 has 122 MA's),

Gene: Quantum_263 Start: 152635, Stop: 152438, Start Num: 23
Candidate Starts for Quantum_263:
(Start: 22 @152641 has 4 MA's), (Start: 23 @152635 has 8 MA's), (33, 152590), (45, 152503), (46, 152500), (60, 152446),

Gene: Quby_51 Start: 38905, Stop: 39090, Start Num: 26
Candidate Starts for Quby_51:
(Start: 20 @38866 has 4 MA's), (26, 38905), (30, 38926), (32, 38935),

Gene: Rakim_79 Start: 48891, Stop: 49127, Start Num: 18
Candidate Starts for Rakim_79:
(11, 48780), (Start: 18 @48891 has 122 MA's),

Gene: Redno2_81 Start: 52699, Stop: 52887, Start Num: 28
Candidate Starts for Redno2_81:
(Start: 28 @52699 has 24 MA's), (34, 52735), (40, 52789), (47, 52825), (50, 52840), (54, 52855), (56, 52858), (61, 52879),

Gene: Rey_98 Start: 54891, Stop: 55076, Start Num: 25
Candidate Starts for Rey_98:
(4, 54522), (6, 54618), (7, 54630), (12, 54759), (Start: 25 @54891 has 3 MA's), (30, 54912), (38, 54978), (40, 54990), (42, 54999), (57, 55062),

Gene: Rimmer_79 Start: 49127, Stop: 49363, Start Num: 18
Candidate Starts for Rimmer_79:
(8, 48956), (11, 49016), (Start: 18 @49127 has 122 MA's),

Gene: RiverMonster_78 Start: 48955, Stop: 49191, Start Num: 18
Candidate Starts for RiverMonster_78:
(11, 48844), (Start: 18 @48955 has 122 MA's),

Gene: Rose5_52 Start: 38583, Stop: 38816, Start Num: 17
Candidate Starts for Rose5_52:
(Start: 17 @38583 has 19 MA's), (40, 38733), (48, 38772), (53, 38793),

Gene: Saints25_77 Start: 48365, Stop: 48601, Start Num: 18
Candidate Starts for Saints25_77:
(8, 48194), (11, 48254), (Start: 18 @48365 has 122 MA's),

Gene: Samty_53 Start: 40578, Stop: 40814, Start Num: 16
Candidate Starts for Samty_53:
(Start: 16 @40578 has 16 MA's), (30, 40650),

Gene: Sassay_73 Start: 47055, Stop: 47291, Start Num: 18
Candidate Starts for Sassay_73:
(11, 46944), (Start: 18 @47055 has 122 MA's),

Gene: Satis_265 Start: 152978, Stop: 152781, Start Num: 23
Candidate Starts for Satis_265:
(Start: 22 @152984 has 4 MA's), (Start: 23 @152978 has 8 MA's), (33, 152933), (45, 152846), (46, 152843), (60, 152789),

Gene: Schatzie_81 Start: 54686, Stop: 54874, Start Num: 28
Candidate Starts for Schatzie_81:
(Start: 28 @54686 has 24 MA's), (34, 54722), (42, 54785), (47, 54812), (54, 54842), (56, 54845), (61, 54866),

Gene: ShamWow_78 Start: 49277, Stop: 49513, Start Num: 18

Candidate Starts for ShamWow_78:
(8, 49106), (11, 49166), (Start: 18 @49277 has 122 MA's),

Gene: Sheng711_52 Start: 38990, Stop: 39214, Start Num: 20
Candidate Starts for Sheng711_52:
(Start: 20 @38990 has 4 MA's), (30, 39050), (32, 39059),

Gene: ShereKhan_76 Start: 49347, Stop: 49583, Start Num: 18
Candidate Starts for ShereKhan_76:
(8, 49176), (11, 49236), (Start: 18 @49347 has 122 MA's),

Gene: Silverleaf_53 Start: 38655, Stop: 38888, Start Num: 17
Candidate Starts for Silverleaf_53:
(Start: 17 @38655 has 19 MA's), (40, 38805),

Gene: Simpliphy_77 Start: 48355, Stop: 48591, Start Num: 18
Candidate Starts for Simpliphy_77:
(8, 48184), (11, 48244), (Start: 18 @48355 has 122 MA's),

Gene: SirDuracell_77 Start: 47641, Stop: 47877, Start Num: 18
Candidate Starts for SirDuracell_77:
(8, 47470), (11, 47530), (Start: 18 @47641 has 122 MA's),

Gene: Snenia_53 Start: 40574, Stop: 40807, Start Num: 16
Candidate Starts for Snenia_53:
(Start: 16 @40574 has 16 MA's), (19, 40580), (30, 40643),

Gene: SophKB_75 Start: 48033, Stop: 48269, Start Num: 18
Candidate Starts for SophKB_75:
(8, 47862), (10, 47907), (11, 47922), (Start: 18 @48033 has 122 MA's),

Gene: Sotrice96_79 Start: 49036, Stop: 49272, Start Num: 18
Candidate Starts for Sotrice96_79:
(8, 48865), (10, 48910), (11, 48925), (Start: 18 @49036 has 122 MA's),

Gene: Stank_81 Start: 49294, Stop: 49530, Start Num: 18
Candidate Starts for Stank_81:
(8, 49123), (10, 49168), (11, 49183), (Start: 18 @49294 has 122 MA's),

Gene: Stark_79 Start: 48838, Stop: 49074, Start Num: 18
Candidate Starts for Stark_79:
(11, 48727), (Start: 18 @48838 has 122 MA's),

Gene: StellaBean_76 Start: 48601, Stop: 48837, Start Num: 18
Candidate Starts for StellaBean_76:
(11, 48490), (Start: 18 @48601 has 122 MA's),

Gene: StolenFromERC_81 Start: 49076, Stop: 49312, Start Num: 18
Candidate Starts for StolenFromERC_81:
(8, 48905), (11, 48965), (Start: 18 @49076 has 122 MA's),

Gene: TBrady12_81 Start: 48775, Stop: 49011, Start Num: 18
Candidate Starts for TBrady12_81:

(8, 48604), (10, 48649), (11, 48664), (Start: 18 @48775 has 122 MA's),

Gene: Tarkin_77 Start: 49023, Stop: 49259, Start Num: 18

Candidate Starts for Tarkin_77:

(11, 48912), (Start: 18 @49023 has 122 MA's),

Gene: TeardropMSU_74 Start: 48023, Stop: 48259, Start Num: 18

Candidate Starts for TeardropMSU_74:

(8, 47852), (11, 47912), (Start: 18 @48023 has 122 MA's),

Gene: Teaspoon_79 Start: 48917, Stop: 49153, Start Num: 18

Candidate Starts for Teaspoon_79:

(8, 48746), (10, 48791), (11, 48806), (Start: 18 @48917 has 122 MA's),

Gene: Terminus_81 Start: 49810, Stop: 50046, Start Num: 18

Candidate Starts for Terminus_81:

(11, 49699), (Start: 18 @49810 has 122 MA's),

Gene: Thibault_72 Start: 50892, Stop: 51080, Start Num: 28

Candidate Starts for Thibault_72:

(Start: 28 @50892 has 24 MA's), (34, 50928), (42, 50991), (47, 51018), (54, 51048), (56, 51051), (61, 51072),

Gene: ThreeRngTarjay_83 Start: 55971, Stop: 56159, Start Num: 28

Candidate Starts for ThreeRngTarjay_83:

(Start: 28 @55971 has 24 MA's), (34, 56007), (42, 56070), (47, 56097), (54, 56127), (56, 56130), (61, 56151),

Gene: Thresher_80 Start: 49897, Stop: 50133, Start Num: 18

Candidate Starts for Thresher_80:

(11, 49786), (Start: 18 @49897 has 122 MA's),

Gene: Tomaszewski_73 Start: 48186, Stop: 48422, Start Num: 18

Candidate Starts for Tomaszewski_73:

(8, 48015), (11, 48075), (Start: 18 @48186 has 122 MA's),

Gene: Toto_76 Start: 49277, Stop: 49513, Start Num: 18

Candidate Starts for Toto_76:

(8, 49106), (11, 49166), (Start: 18 @49277 has 122 MA's),

Gene: Traaww1_74 Start: 48461, Stop: 48697, Start Num: 18

Candidate Starts for Traaww1_74:

(8, 48290), (10, 48335), (11, 48350), (Start: 18 @48461 has 122 MA's),

Gene: TriFive_54 Start: 40573, Stop: 40806, Start Num: 16

Candidate Starts for TriFive_54:

(Start: 16 @40573 has 16 MA's), (19, 40579), (30, 40642),

Gene: Tuco_79 Start: 49785, Stop: 50021, Start Num: 18

Candidate Starts for Tuco_79:

(8, 49614), (10, 49659), (11, 49674), (Start: 18 @49785 has 122 MA's),

Gene: Tyson_52 Start: 38585, Stop: 38818, Start Num: 17

Candidate Starts for Tyson_52:
(Start: 17 @38585 has 19 MA's), (40, 38735), (48, 38774), (53, 38795),

Gene: UPIE_52 Start: 38471, Stop: 38704, Start Num: 17
Candidate Starts for UPIE_52:
(Start: 17 @38471 has 19 MA's), (40, 38621), (48, 38660), (53, 38681),

Gene: Ukulele_73 Start: 48168, Stop: 48404, Start Num: 18
Candidate Starts for Ukulele_73:
(8, 47997), (11, 48057), (Start: 18 @48168 has 122 MA's),

Gene: UnionJack_45 Start: 34104, Stop: 33901, Start Num: 22
Candidate Starts for UnionJack_45:
(Start: 22 @34104 has 4 MA's), (41, 33990), (44, 33972), (49, 33948),

Gene: Wamburgexpress_52 Start: 38487, Stop: 38720, Start Num: 17
Candidate Starts for Wamburgexpress_52:
(Start: 17 @38487 has 19 MA's), (40, 38637), (48, 38676), (53, 38697),

Gene: Wanda_89 Start: 54838, Stop: 55026, Start Num: 28
Candidate Starts for Wanda_89:
(Start: 28 @54838 has 24 MA's), (34, 54874), (40, 54928), (47, 54964), (50, 54979), (54, 54994), (56, 54997), (61, 55018),

Gene: Whirlwind_54 Start: 40389, Stop: 40625, Start Num: 16
Candidate Starts for Whirlwind_54:
(Start: 16 @40389 has 16 MA's),

Gene: Wiggin_80 Start: 48862, Stop: 49098, Start Num: 18
Candidate Starts for Wiggin_80:
(8, 48691), (10, 48736), (11, 48751), (Start: 18 @48862 has 122 MA's),

Gene: Willez_73 Start: 47055, Stop: 47291, Start Num: 18
Candidate Starts for Willez_73:
(11, 46944), (Start: 18 @47055 has 122 MA's),

Gene: Wyatt2_53 Start: 38583, Stop: 38816, Start Num: 17
Candidate Starts for Wyatt2_53:
(Start: 17 @38583 has 19 MA's), (40, 38733), (48, 38772), (53, 38793),

Gene: Xandras_77 Start: 48270, Stop: 48506, Start Num: 18
Candidate Starts for Xandras_77:
(11, 48159), (Start: 18 @48270 has 122 MA's),

Gene: YassJohnny_75 Start: 48225, Stop: 48461, Start Num: 18
Candidate Starts for YassJohnny_75:
(Start: 18 @48225 has 122 MA's),

Gene: Yeet_79 Start: 54188, Stop: 54376, Start Num: 28
Candidate Starts for Yeet_79:
(Start: 28 @54188 has 24 MA's), (34, 54224), (42, 54287), (47, 54314), (54, 54344), (56, 54347), (61, 54368),

Gene: Youngblood_81 Start: 49737, Stop: 49973, Start Num: 18

Candidate Starts for Youngblood_81:

(11, 49626), (Start: 18 @49737 has 122 MA's),

Gene: Zaria_53 Start: 38598, Stop: 38831, Start Num: 17

Candidate Starts for Zaria_53:

(Start: 17 @38598 has 19 MA's), (40, 38748), (48, 38787), (53, 38808),

Gene: Zelink_84 Start: 56283, Stop: 56471, Start Num: 28

Candidate Starts for Zelink_84:

(Start: 28 @56283 has 24 MA's), (34, 56319), (42, 56382), (47, 56409), (54, 56439), (56, 56442), (61, 56463),

Gene: xkcd_81 Start: 49927, Stop: 50163, Start Num: 18

Candidate Starts for xkcd_81:

(8, 49756), (10, 49801), (11, 49816), (Start: 18 @49927 has 122 MA's),