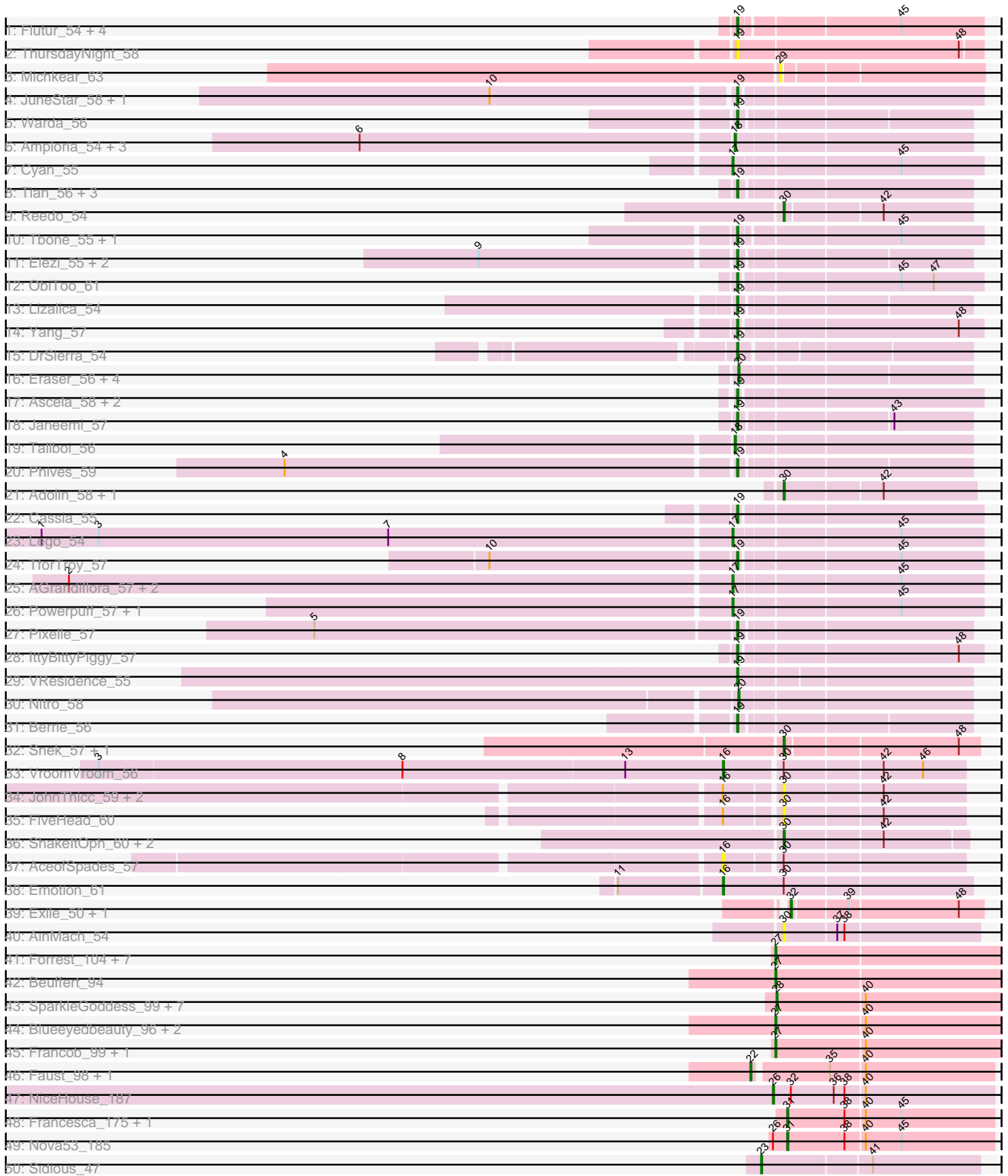
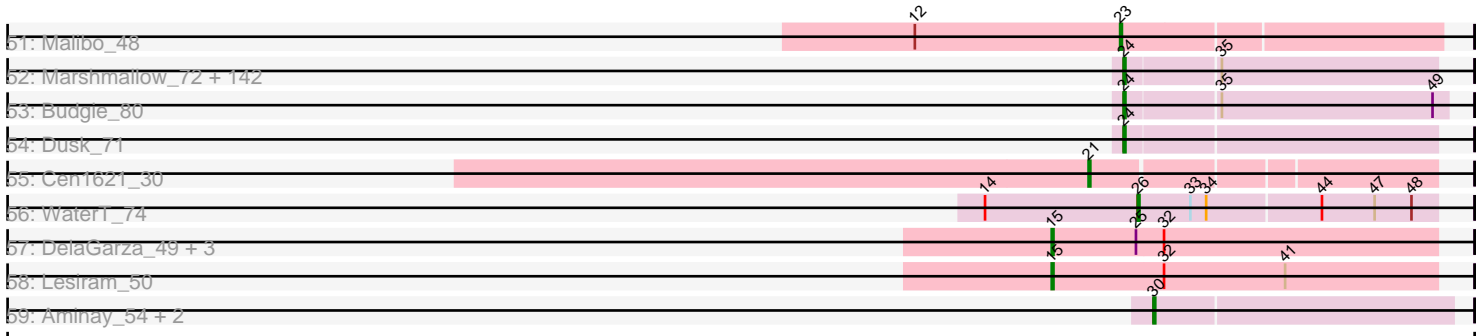


Pham 311188



Pham 311188



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 311188 Report

This analysis was run 06/27/26 on database version 652.

Pham number 311188 has 255 members, 37 are drafts.

Phages represented in each track:

- Track 1 : Flutur_54, Tutumahutu_56, Crewmate_61, JohnDoe_55, Kaylissa_56
- Track 2 : ThursdayNight_58
- Track 3 : Michkear_63
- Track 4 : JuneStar_58, Schaffner_55
- Track 5 : Warda_56
- Track 6 : Amploria_54, AEgle_52, Turab_53, Adumb2043_53
- Track 7 : Cyan_55
- Track 8 : Tian_56, Community_58, Amyev_57, Pumpkins_54
- Track 9 : Reedo_54
- Track 10 : Tbone_55, Mudpuppy_52
- Track 11 : Elezi_55, Jstan_57, Subaru_56
- Track 12 : ObiToo_61
- Track 13 : Lizalica_54
- Track 14 : Yang_57
- Track 15 : DrSierra_54
- Track 16 : Eraser_56, Niobe_56, Asa16_56, Skelbel_57, London_56
- Track 17 : Ascela_58, Iter_58, Tuck_58
- Track 18 : Janeemi_57
- Track 19 : Tallboi_56
- Track 20 : Phives_59
- Track 21 : Adolin_58, DrManhattan_58
- Track 22 : Cassia_55
- Track 23 : Lego_54
- Track 24 : TforTroy_57
- Track 25 : AGrandiflora_57, Joemato_55, Simpson_57
- Track 26 : Powerpuff_57, YesChef_55
- Track 27 : Pixelle_57
- Track 28 : IttyBittyPiggy_57
- Track 29 : VResidence_55
- Track 30 : Nitro_58
- Track 31 : Berrie_56
- Track 32 : Snek_57, Tweety19_58
- Track 33 : VroomVroom_56
- Track 34 : JohnThicc_59, LadyAstra_59, Origami_58
- Track 35 : FiveHead_60
- Track 36 : ShakeltOph_60, MiniMommy_60, JasmineDragon_60
- Track 37 : AceofSpades_57

- Track 38 : Emotion_61
- Track 39 : Exile_50, Soondubu_51
- Track 40 : AinMach_54
- Track 41 : Forrest_104, Gilson_101, Jada_101, DeluluLabubu_100, Maupel_101, Phredrick_100, MeganTheeKilla_99, Emma1919_102
- Track 42 : Beuffert_94
- Track 43 : SparkleGoddess_99, Belfort_101, Karp_97, Comrade_98, Moab_100, Stigma_98, Westy_103, Patelgo_99
- Track 44 : Blueeyedbeauty_96, Annadreamy_94, Limpid_93
- Track 45 : Francob_99, Kenrey_102
- Track 46 : Faust_98, SeresaTree_98
- Track 47 : NiceHouse_187
- Track 48 : Francesca_175, Dorin_173
- Track 49 : Nova53_185
- Track 50 : Sidious_47
- Track 51 : Malibo_48
- Track 52 : Marshmallow_72, Barbarian_73, MollyToe_69, Traaww1_70, Mindy_73, PaddyBaddy_74, Myrale_74, Dumbo_74, Flypotenuse_70, Hoonter_77, TBrady12_77, Kostya_74, Manda_75, Daikon_76, Lilac_76, Filch_75, Easy2Say_75, FoghornLeghorn_68, Bogg_74, Rimmer_75, Contagion_70, OrionPax_73, Teaspoon_75, ShamWow_74, Phaux_76, Buck_75, YassJohnny_71, Tomaszewski_69, Porky_73, ShereKhan_73, Amao_74, Highbury_73, SophKB_71, Ukulele_69, Cactus_77, NelitzaMV_72, NoSleep_75, Glexan_73, Eureka_72, Nala_76, xkcd_77, Adnama_78, Sassay_69, CrystalP_73, SirDuracell_73, AmericanBeauty_78, TeardropMSU_70, RiverMonster_74, Pat3_72, BigBubba_74, GoldenSpark_78, Lilizi_75, Thresher_76, IHOP_72, Asriel_73, Cookies_71, Youngblood_77, Goldilocks_77, MPhalcon_75, Harella_74, Hopey_74, Icee_75, Terminus_77, ChotaBhai_74, Czyszczon1_75, Murphy_74, Bench_77, Balomoji_74, Gator_72, Brewer_70, Kanye_71, Command613_76, Greep_78, Saints25_73, Gemini_79, Stark_75, 244_75, PhatBacter_78, Phrux_71, StormChicken_76, BugsBunny_74, FairyPath_75, Elite2014_73, Maxxinista_76, Mosby_70, Cjw1_74, DrDrey_74, JeTaime_74, BaboJay_71, Inca_71, ChosenOne_74, HufflyPuff_77, Pharsalus_71, Emmina_74, Misfit_75, Gage_76, TeamEdward_76, Goku_72, Simpliphy_73, Kimchi_78, Liveloughbron_76, Elph10_74, BadStone_71, Henry_72, Nimrod_75, MadamMonkfish_74, ABCat_71, DoctorDiddles_73, Argent26_78, Phaja_72, Bask21_74, Petra64142_78, Palpatine_76, Tarkin_73, Bruin_71, FireRed_78, MISSy_75, Xandras_73, Ptowny_71, Pumpkin_77, Policronamos_77, HanKaySha_74, Becksu_73, Sotrice96_75, Tuco_75, StolenFromERC_77, Rakim_75, Holt_79, Paperbeatsrock_73, Quallification_75, Miniwave_69, Moldemort_77, Toto_72, NonchalantPear_74, Lilpickle_73, Thimble_75, GooberAzure_77, Wiggin_76, Murica_77, StellaBean_72, Willez_69, BilboSwaggins_72, Stank_77
- Track 53 : Budgie_80
- Track 54 : Dusk_71
- Track 55 : Cen1621_30
- Track 56 : WaterT_74
- Track 57 : DelaGarza_49, Gingerbug_48, Teng_53, Sweetums_51
- Track 58 : Lesiram_50
- Track 59 : Aminay_54, PandaPo_57, MissSwiss_57

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

The start number called the most often in the published annotations is 24, it was called in 132 of the 218 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- 244_75, ABCat_71, Adnama_78, Amao_74, AmericanBeauty_78, Argent26_78, Asriel_73, BaboJay_71, BadStone_71, Balomoji_74, Barbarian_73, Bask21_74, Becksu_73, Bench_77, BigBubba_74, BilboSwaggins_72, Bogg_74, Brewer_70, Bruin_71, Buck_75, Budgie_80, BugsBunny_74, Cactus_77, ChosenOne_74, ChotaBhai_74, Cjw1_74, Command613_76, Contagion_70, Cookies_71, CrystalP_73, Czyszczonek1_75, Daikon_76, DoctorDiddles_73, DrDrey_74, Dumbo_74, Dusk_71, Easy2Say_75, Elite2014_73, Elph10_74, Emmina_74, Eureka_72, FairyPath_75, Filch_75, FireRed_78, Flypotenuse_70, FoghornLeghorn_68, Gage_76, Gator_72, Gemini_79, Glexan_73, Goku_72, GoldenSpark_78, Goldilocks_77, GooberAzure_77, Greep_78, HanKaySha_74, Harella_74, Henry_72, Highbury_73, Holt_79, Hoonter_77, Hopey_74, HufflyPuff_77, IHOP_72, Icee_75, Inca_71, JeTaime_74, Kanye_71, Kimchi_78, Kostya_74, Lilac_76, Lilizi_75, Lilpickle_73, Liveloughbron_76, MISSy_75, MPhalcon_75, MadamMonkfish_74, Manda_75, Marshmallow_72, Maxxinista_76, Mindy_73, Miniwave_69, Misfit_75, Moldemort_77, MollyToe_69, Mosby_70, Murica_77, Murphy_74, Myrale_74, Nala_76, NelitzaMV_72, Nimrod_75, NoSleep_75, NonchalantPear_74, OrionPax_73, PaddyBaddy_74, Palpatine_76, Paperbeatsrock_73, Pat3_72, Petra64142_78, Phaja_72, Pharsalus_71, PhatBacter_78, Phaux_76, Phrux_71, Policronamos_77, Porky_73, Ptowny_71, Pumpkin_77, Quallification_75, Rakim_75, Rimmer_75, RiverMonster_74, Saints25_73, Sassay_69, ShamWow_74, ShereKhan_73, Simpliphy_73, SirDuracell_73, SophKB_71, Sotrice96_75, Stank_77, Stark_75, StellaBean_72, StolenFromERC_77, StormChicken_76, TBrady12_77, Tarkin_73, TeamEdward_76, TeardropMSU_70, Teaspoon_75, Terminus_77, Thimble_75, Thresher_76, Tomaszewski_69, Toto_72, Traaww1_70, Tuco_75, Ukulele_69, Wiggin_76, Willez_69, Xandras_73, YassJohnny_71, Youngblood_77, xkcd_77,

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

-

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

- AEgle_52, AGrandiflora_57, AceofSpades_57, Adolin_58, Adumb2043_53, AinMach_54, Aminay_54, Amploria_54, Amyev_57, Annadreamy_94, Asa16_56, Ascela_58, Belfort_101, Berrie_56, Beuffert_94, Blueeyedbeauty_96, Cassia_55, Cen1621_30, Community_58, Comrade_98, Crewmate_61, Cyan_55, DelaGarza_49, DeluluLabubu_100, Dorin_173, DrManhattan_58, DrSierra_54, Elezi_55, Emma1919_102, Emotion_61, Eraser_56, Exile_50, Faust_98, FiveHead_60, Flutur_54, Forrest_104, Francesca_175, Francob_99, Gilson_101, Gingerbug_48, Iter_58, IttyBittyPiggy_57, Jada_101, Janeemi_57, JasmineDragon_60, Joemato_55, JohnDoe_55, JohnThicc_59, Jstan_57, JuneStar_58, Karp_97, Kaylissa_56, Kenrey_102, LadyAstra_59, Lego_54, Lesiram_50, Limpid_93, Lizalica_54, London_56, Malibo_48, Maupel_101, MeganTheeKilla_99, Michkear_63, MiniMommy_60, MissSwiss_57, Moab_100, Mudpuppy_52, NiceHouse_187, Niobe_56, Nitro_58, Nova53_185, ObiToo_61, Origami_58, PandaPo_57, Patelgo_99, Phives_59, Phredrick_100, Pixelle_57, Powerpuff_57, Pumpkins_54, Reedo_54, Schaffner_55, SeresaTree_98, ShakeltOph_60, Sidious_47, Simpson_57, Skelbel_57, Snek_57, Soondubu_51, SparkleGoddess_99, Stigma_98, Subaru_56, Sweetums_51, Tallboi_56, Tbone_55, Teng_53, TforTroy_57, ThursdayNight_58,

Tian_56, Tuck_58, Turab_53, Tutumahutu_56, Tweety19_58, VResidence_55, VroomVroom_56, Warda_56, WaterT_74, Westy_103, Yang_57, YesChef_55,

Summary by start number:

Start 15:

- Found in 5 of 255 (2.0%) of genes in pham
- Manual Annotations of this start: 4 of 218
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DelaGarza_49 (GF), Gingerbug_48 (GF), Lesiram_50 (GF), Sweetums_51 (GF), Teng_53 (GF),

Start 16:

- Found in 7 of 255 (2.7%) of genes in pham
- Manual Annotations of this start: 2 of 218
- Called 42.9% of time when present
- Phage (with cluster) where this start called: AceofSpades_57 (AZ4), Emotion_61 (AZ4), VroomVroom_56 (AZ4),

Start 17:

- Found in 7 of 255 (2.7%) of genes in pham
- Manual Annotations of this start: 5 of 218
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AGrandiflora_57 (AZ1), Cyan_55 (AZ1), Joemato_55 (AZ1), Lego_54 (AZ1), Powerpuff_57 (AZ1), Simpson_57 (AZ1), YesChef_55 (AZ1),

Start 18:

- Found in 5 of 255 (2.0%) of genes in pham
- Manual Annotations of this start: 2 of 218
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AEgle_52 (AZ1), Adumb2043_53 (AZ1), Amploria_54 (AZ1), Tallboi_56 (AZ1), Turab_53 (AZ1),

Start 19:

- Found in 33 of 255 (12.9%) of genes in pham
- Manual Annotations of this start: 27 of 218
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Amyev_57 (AZ1), Ascela_58 (AZ1), Berrie_56 (AZ1), Cassia_55 (AZ1), Community_58 (AZ1), Crewmate_61 (AZ1), DrSierra_54 (AZ1), Elezi_55 (AZ1), Flutur_54 (AZ), Iter_58 (AZ1), IttyBittyPiggy_57 (AZ1), Janeemi_57 (AZ1), JohnDoe_55 (AZ1), Jstan_57 (AZ1), JuneStar_58 (AZ1), Kaylissa_56 (AZ1), Lizalica_54 (AZ1), Mudpuppy_52 (AZ1), ObiToo_61 (AZ1), Phives_59 (AZ1), Pixelle_57 (AZ1), Pumpkins_54 (AZ1), Schaffner_55 (AZ1), Subaru_56 (AZ1), Tbone_55 (AZ1), TforTroy_57 (AZ1), ThursdayNight_58 (AZ), Tian_56 (AZ1), Tuck_58 (AZ1), Tutumahutu_56 (AZ1), VResidence_55 (AZ1), Warda_56 (AZ1), Yang_57 (AZ1),

Start 20:

- Found in 6 of 255 (2.4%) of genes in pham
- Manual Annotations of this start: 5 of 218
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Asa16_56 (AZ1), Eraser_56 (AZ1), London_56 (AZ1), Niobe_56 (AZ1), Nitro_58 (AZ1), Skelbel_57 (AZ1),

Start 21:

- Found in 1 of 255 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 218
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cen1621_30 (EH),

Start 22:

- Found in 2 of 255 (0.8%) of genes in pham
- Manual Annotations of this start: 1 of 218
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Faust_98 (BK1), SeresaTree_98 (BK1),

Start 23:

- Found in 2 of 255 (0.8%) of genes in pham
- Manual Annotations of this start: 2 of 218
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Malibo_48 (DW), Sidious_47 (CZ7),

Start 24:

- Found in 145 of 255 (56.9%) of genes in pham
- Manual Annotations of this start: 132 of 218
- Called 100.0% of time when present
- Phage (with cluster) where this start called: 244_75 (E), ABCat_71 (E), Adnama_78 (E), Amao_74 (E), AmericanBeauty_78 (E), Argent26_78 (E), Asriel_73 (E), BaboJay_71 (E), BadStone_71 (E), Balomoji_74 (E), Barbarian_73 (E), Bask21_74 (E), Becksu_73 (E), Bench_77 (E), BigBubba_74 (E), BilboSwaggins_72 (E), Bogg_74 (E), Brewer_70 (E), Bruin_71 (E), Buck_75 (E), Budgie_80 (E), BugsBunny_74 (E), Cactus_77 (E), ChosenOne_74 (E), ChotaBhai_74 (E), Cjw1_74 (E), Command613_76 (E), Contagion_70 (E), Cookies_71 (E), CrystalP_73 (E), Czystczon1_75 (E), Daikon_76 (E), DoctorDiddles_73 (E), DrDrey_74 (E), Dumbo_74 (E), Dusk_71 (E), Easy2Say_75 (E), Elite2014_73 (E), Elph10_74 (E), Emmina_74 (E), Eureka_72 (E), FairyPath_75 (E), Filch_75 (E), FireRed_78 (E), Flypotenuse_70 (E), FoghornLeghorn_68 (E), Gage_76 (E), Gator_72 (E), Gemini_79 (E), Glexan_73 (E), Goku_72 (E), GoldenSpark_78 (E), Goldilocks_77 (E), GooberAzure_77 (E), Greep_78 (E), HanKaySha_74 (E), Harella_74 (E), Henry_72 (E), Highbury_73 (E), Holt_79 (E), Hoonter_77 (E), Hopey_74 (E), HufflyPuff_77 (E), IHOP_72 (E), Icee_75 (E), Inca_71 (E), JeTaime_74 (E), Kanye_71 (E), Kimchi_78 (E), Kostya_74 (E), Lilac_76 (E), Lilizi_75 (E), Lilpickle_73 (E), Livilaughbron_76 (E), MISSy_75 (E), MPhalcon_75 (E), MadamMonkfish_74 (E), Manda_75 (E), Marshmallow_72 (E), Maxxinista_76 (E), Mindy_73 (E), Miniwave_69 (E), Misfit_75 (E), Moldemort_77 (E), MollyToe_69 (E), Mosby_70 (E), Murica_77 (E), Murphy_74 (E), Myrale_74 (E), Nala_76 (E), NelitzaMV_72 (E), Nimrod_75 (E), NoSleep_75 (E), NonchalantPear_74 (E), OrionPax_73 (E), PaddyBaddy_74 (E), Palpatine_76 (E), Paperbeatsrock_73 (E), Pat3_72 (E), Petra64142_78 (E), Phaja_72 (E), Pharsalus_71 (E), PhatBacter_78 (E), Phaux_76 (E), Phrux_71 (E), Policronamos_77 (E), Porky_73 (E), Ptowny_71 (E), Pumpkin_77 (E), Quallification_75 (E), Rakim_75 (E), Rimmer_75 (E), RiverMonster_74 (E), Saints25_73 (E), Sassay_69 (E), ShamWow_74 (E), ShereKhan_73 (E), Simpliphy_73 (E), SirDuracell_73 (E), SophKB_71 (E), Sotrice96_75 (E), Stank_77 (E), Stark_75 (E), StellaBean_72 (E), StolenFromERC_77 (E), StormChicken_76 (E), TBrady12_77 (E), Tarkin_73 (E),

TeamEdward_76 (E), TeardropMSU_70 (E), Teaspoon_75 (E), Terminus_77 (E), Thimble_75 (E), Thresher_76 (E), Tomaszewski_69 (E), Toto_72 (E), Traaww1_70 (E), Tuco_75 (E), Ukulele_69 (E), Wiggin_76 (E), Willez_69 (E), Xandras_73 (E), YassJohnny_71 (E), Youngblood_77 (E), xkcd_77 (E),

Start 26:

- Found in 3 of 255 (1.2%) of genes in pham
- Manual Annotations of this start: 2 of 218
- Called 66.7% of time when present
- Phage (with cluster) where this start called: NiceHouse_187 (CE), WaterT_74 (GB),

Start 27:

- Found in 14 of 255 (5.5%) of genes in pham
- Manual Annotations of this start: 13 of 218
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Annadreamy_94 (BK1), Beuffert_94 (BK1), Blueeyedbeauty_96 (BK1), DeluluLabubu_100 (BK1), Emma1919_102 (BK1), Forrest_104 (BK1), Francob_99 (BK1), Gilson_101 (BK1), Jada_101 (BK1), Kenrey_102 (BK1), Limpid_93 (BK1), Maupel_101 (BK1), MeganTheeKilla_99 (BK1), Phredrick_100 (BK1),

Start 28:

- Found in 8 of 255 (3.1%) of genes in pham
- Manual Annotations of this start: 8 of 218
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Belfort_101 (BK1), Comrade_98 (BK1), Karp_97 (BK1), Moab_100 (BK1), Patelgo_99 (BK1), SparkleGoddess_99 (BK1), Stigma_98 (BK1), Westy_103 (BK1),

Start 29:

- Found in 1 of 255 (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: Michkear_63 (AZ),

Start 30:

- Found in 19 of 255 (7.5%) of genes in pham
- Manual Annotations of this start: 10 of 218
- Called 84.2% of time when present
- Phage (with cluster) where this start called: Adolin_58 (AZ1), AinMach_54 (AZ7), Aminay_54 (K7), DrManhattan_58 (AZ1), FiveHead_60 (AZ4), JasmineDragon_60 (AZ4), JohnThicc_59 (AZ4), LadyAstra_59 (AZ4), MiniMommy_60 (AZ4), MissSwiss_57 (AZ1), Origami_58 (AZ4), PandaPo_57 (AZ1), Reedo_54 (AZ1), ShakeltOph_60 (AZ4), Snek_57 (AZ3), Tweety19_58 (AZ3),

Start 31:

- Found in 3 of 255 (1.2%) of genes in pham
- Manual Annotations of this start: 3 of 218
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Dorin_173 (CG), Francesca_175 (CG), Nova53_185 (CG),

Start 32:

- Found in 8 of 255 (3.1%) of genes in pham
- Manual Annotations of this start: 1 of 218
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Exile_50 (AZ6), Soondubu_51 (AZ6),

Summary by clusters:

There are 16 clusters represented in this pham: AZ3, E, EH, AZ7, CG, CZ7, CE, GF, K7, BK1, DW, AZ1, AZ, AZ4, AZ6, GB,

Info for manual annotations of cluster AZ1:

- Start number 17 was manually annotated 5 times for cluster AZ1.
- Start number 18 was manually annotated 2 times for cluster AZ1.
- Start number 19 was manually annotated 27 times for cluster AZ1.
- Start number 20 was manually annotated 5 times for cluster AZ1.
- Start number 30 was manually annotated 4 times for cluster AZ1.

Info for manual annotations of cluster AZ3:

- Start number 30 was manually annotated 2 times for cluster AZ3.

Info for manual annotations of cluster AZ4:

- Start number 16 was manually annotated 2 times for cluster AZ4.
- Start number 30 was manually annotated 3 times for cluster AZ4.

Info for manual annotations of cluster AZ6:

- Start number 32 was manually annotated 1 time for cluster AZ6.

Info for manual annotations of cluster BK1:

- Start number 22 was manually annotated 1 time for cluster BK1.
- Start number 27 was manually annotated 13 times for cluster BK1.
- Start number 28 was manually annotated 8 times for cluster BK1.

Info for manual annotations of cluster CE:

- Start number 26 was manually annotated 1 time for cluster CE.

Info for manual annotations of cluster CG:

- Start number 31 was manually annotated 3 times for cluster CG.

Info for manual annotations of cluster CZ7:

- Start number 23 was manually annotated 1 time for cluster CZ7.

Info for manual annotations of cluster DW:

- Start number 23 was manually annotated 1 time for cluster DW.

Info for manual annotations of cluster E:

- Start number 24 was manually annotated 132 times for cluster E.

Info for manual annotations of cluster EH:

- Start number 21 was manually annotated 1 time for cluster EH.

Info for manual annotations of cluster GB:

- Start number 26 was manually annotated 1 time for cluster GB.

Info for manual annotations of cluster GF:

- Start number 15 was manually annotated 4 times for cluster GF.

Info for manual annotations of cluster K7:

- Start number 30 was manually annotated 1 time for cluster K7.

Gene Information:

Gene: 244_75 Start: 47793, Stop: 47966, Start Num: 24

Candidate Starts for 244_75:

(Start: 24 @47793 has 132 MA's), (35, 47844),

Gene: ABCat_71 Start: 48146, Stop: 48319, Start Num: 24

Candidate Starts for ABCat_71:

(Start: 24 @48146 has 132 MA's), (35, 48197),

Gene: AEgle_52 Start: 37591, Stop: 37782, Start Num: 18

Candidate Starts for AEgle_52:

(6, 37285), (Start: 18 @37591 has 2 MA's),

Gene: AGrandiflora_57 Start: 38760, Stop: 38960, Start Num: 17

Candidate Starts for AGrandiflora_57:

(2, 38211), (Start: 17 @38760 has 5 MA's), (45, 38892),

Gene: AceofSpades_57 Start: 39591, Stop: 39779, Start Num: 16

Candidate Starts for AceofSpades_57:

(Start: 16 @39591 has 2 MA's), (Start: 30 @39633 has 10 MA's),

Gene: Adnama_78 Start: 48172, Stop: 48345, Start Num: 24

Candidate Starts for Adnama_78:

(Start: 24 @48172 has 132 MA's), (35, 48223),

Gene: Adolin_58 Start: 37478, Stop: 37633, Start Num: 30

Candidate Starts for Adolin_58:

(Start: 30 @37478 has 10 MA's), (42, 37556),

Gene: Adumb2043_53 Start: 37614, Stop: 37805, Start Num: 18

Candidate Starts for Adumb2043_53:

(6, 37308), (Start: 18 @37614 has 2 MA's),

Gene: AinMach_54 Start: 37308, Stop: 37466, Start Num: 30

Candidate Starts for AinMach_54:

(Start: 30 @37308 has 10 MA's), (37, 37350), (38, 37356),

Gene: Amao_74 Start: 47566, Stop: 47739, Start Num: 24

Candidate Starts for Amao_74:

(Start: 24 @47566 has 132 MA's), (35, 47617),

Gene: AmericanBeauty_78 Start: 48315, Stop: 48488, Start Num: 24

Candidate Starts for AmericanBeauty_78:
(Start: 24 @48315 has 132 MA's), (35, 48366),

Gene: Aminay_54 Start: 38354, Stop: 38521, Start Num: 30
Candidate Starts for Aminay_54:
(Start: 30 @38354 has 10 MA's),

Gene: Amploria_54 Start: 37795, Stop: 37986, Start Num: 18
Candidate Starts for Amploria_54:
(6, 37489), (Start: 18 @37795 has 2 MA's),

Gene: Amyev_57 Start: 40846, Stop: 41031, Start Num: 19
Candidate Starts for Amyev_57:
(Start: 19 @40846 has 27 MA's),

Gene: Annadreamy_94 Start: 66362, Stop: 66547, Start Num: 27
Candidate Starts for Annadreamy_94:
(Start: 27 @66362 has 13 MA's), (40, 66434),

Gene: Argent26_78 Start: 47953, Stop: 48126, Start Num: 24
Candidate Starts for Argent26_78:
(Start: 24 @47953 has 132 MA's), (35, 48004),

Gene: Asa16_56 Start: 39543, Stop: 39728, Start Num: 20
Candidate Starts for Asa16_56:
(Start: 20 @39543 has 5 MA's),

Gene: Ascela_58 Start: 39002, Stop: 39196, Start Num: 19
Candidate Starts for Ascela_58:
(Start: 19 @39002 has 27 MA's),

Gene: Asriel_73 Start: 46509, Stop: 46682, Start Num: 24
Candidate Starts for Asriel_73:
(Start: 24 @46509 has 132 MA's), (35, 46560),

Gene: BaboJay_71 Start: 47346, Stop: 47519, Start Num: 24
Candidate Starts for BaboJay_71:
(Start: 24 @47346 has 132 MA's), (35, 47397),

Gene: BadStone_71 Start: 47715, Stop: 47888, Start Num: 24
Candidate Starts for BadStone_71:
(Start: 24 @47715 has 132 MA's), (35, 47766),

Gene: Balomoji_74 Start: 48276, Stop: 48449, Start Num: 24
Candidate Starts for Balomoji_74:
(Start: 24 @48276 has 132 MA's), (35, 48327),

Gene: Barbarian_73 Start: 46509, Stop: 46682, Start Num: 24
Candidate Starts for Barbarian_73:
(Start: 24 @46509 has 132 MA's), (35, 46560),

Gene: Bask21_74 Start: 47129, Stop: 47302, Start Num: 24
Candidate Starts for Bask21_74:

(Start: 24 @47129 has 132 MA's), (35, 47180),

Gene: Becksu_73 Start: 48345, Stop: 48524, Start Num: 24

Candidate Starts for Becksu_73:

(Start: 24 @48345 has 132 MA's), (35, 48396),

Gene: Belfort_101 Start: 68605, Stop: 68790, Start Num: 28

Candidate Starts for Belfort_101:

(Start: 28 @68605 has 8 MA's), (40, 68677),

Gene: Bench_77 Start: 47813, Stop: 47992, Start Num: 24

Candidate Starts for Bench_77:

(Start: 24 @47813 has 132 MA's), (35, 47864),

Gene: Berrie_56 Start: 38817, Stop: 38999, Start Num: 19

Candidate Starts for Berrie_56:

(Start: 19 @38817 has 27 MA's),

Gene: Beuffert_94 Start: 66921, Stop: 67106, Start Num: 27

Candidate Starts for Beuffert_94:

(Start: 27 @66921 has 13 MA's),

Gene: BigBubba_74 Start: 47525, Stop: 47704, Start Num: 24

Candidate Starts for BigBubba_74:

(Start: 24 @47525 has 132 MA's), (35, 47576),

Gene: BilboSwaggins_72 Start: 48154, Stop: 48327, Start Num: 24

Candidate Starts for BilboSwaggins_72:

(Start: 24 @48154 has 132 MA's), (35, 48205),

Gene: Blueeyedbeauty_96 Start: 66320, Stop: 66505, Start Num: 27

Candidate Starts for Blueeyedbeauty_96:

(Start: 27 @66320 has 13 MA's), (40, 66392),

Gene: Bogg_74 Start: 47092, Stop: 47265, Start Num: 24

Candidate Starts for Bogg_74:

(Start: 24 @47092 has 132 MA's), (35, 47143),

Gene: Brewer_70 Start: 46615, Stop: 46788, Start Num: 24

Candidate Starts for Brewer_70:

(Start: 24 @46615 has 132 MA's), (35, 46666),

Gene: Bruin_71 Start: 46689, Stop: 46868, Start Num: 24

Candidate Starts for Bruin_71:

(Start: 24 @46689 has 132 MA's), (35, 46740),

Gene: Buck_75 Start: 48394, Stop: 48567, Start Num: 24

Candidate Starts for Buck_75:

(Start: 24 @48394 has 132 MA's), (35, 48445),

Gene: Budgie_80 Start: 48184, Stop: 48363, Start Num: 24

Candidate Starts for Budgie_80:

(Start: 24 @48184 has 132 MA's), (35, 48235), (49, 48355),

Gene: BugsBunny_74 Start: 48221, Stop: 48400, Start Num: 24
Candidate Starts for BugsBunny_74:
(Start: 24 @48221 has 132 MA's), (35, 48272),

Gene: Cactus_77 Start: 47170, Stop: 47343, Start Num: 24
Candidate Starts for Cactus_77:
(Start: 24 @47170 has 132 MA's), (35, 47221),

Gene: Cassia_55 Start: 38504, Stop: 38698, Start Num: 19
Candidate Starts for Cassia_55:
(Start: 19 @38504 has 27 MA's),

Gene: Cen1621_30 Start: 22502, Stop: 22687, Start Num: 21
Candidate Starts for Cen1621_30:
(Start: 21 @22502 has 1 MA's),

Gene: ChosenOne_74 Start: 47170, Stop: 47343, Start Num: 24
Candidate Starts for ChosenOne_74:
(Start: 24 @47170 has 132 MA's), (35, 47221),

Gene: ChotaBhai_74 Start: 47494, Stop: 47667, Start Num: 24
Candidate Starts for ChotaBhai_74:
(Start: 24 @47494 has 132 MA's), (35, 47545),

Gene: Cjw1_74 Start: 48867, Stop: 49040, Start Num: 24
Candidate Starts for Cjw1_74:
(Start: 24 @48867 has 132 MA's), (35, 48918),

Gene: Command613_76 Start: 48209, Stop: 48382, Start Num: 24
Candidate Starts for Command613_76:
(Start: 24 @48209 has 132 MA's), (35, 48260),

Gene: Community_58 Start: 40395, Stop: 40577, Start Num: 19
Candidate Starts for Community_58:
(Start: 19 @40395 has 27 MA's),

Gene: Comrade_98 Start: 67922, Stop: 68107, Start Num: 28
Candidate Starts for Comrade_98:
(Start: 28 @67922 has 8 MA's), (40, 67994),

Gene: Contagion_70 Start: 46970, Stop: 47149, Start Num: 24
Candidate Starts for Contagion_70:
(Start: 24 @46970 has 132 MA's), (35, 47021),

Gene: Cookies_71 Start: 47351, Stop: 47524, Start Num: 24
Candidate Starts for Cookies_71:
(Start: 24 @47351 has 132 MA's), (35, 47402),

Gene: Crewmate_61 Start: 40124, Stop: 40318, Start Num: 19
Candidate Starts for Crewmate_61:
(Start: 19 @40124 has 27 MA's), (45, 40250),

Gene: CrystalP_73 Start: 48154, Stop: 48327, Start Num: 24
Candidate Starts for CrystalP_73:
(Start: 24 @48154 has 132 MA's), (35, 48205),

Gene: Cyan_55 Start: 38301, Stop: 38501, Start Num: 17
Candidate Starts for Cyan_55:
(Start: 17 @38301 has 5 MA's), (45, 38433),

Gene: Czyszczone1_75 Start: 47676, Stop: 47855, Start Num: 24
Candidate Starts for Czyszczone1_75:
(Start: 24 @47676 has 132 MA's), (35, 47727),

Gene: Daikon_76 Start: 48297, Stop: 48470, Start Num: 24
Candidate Starts for Daikon_76:
(Start: 24 @48297 has 132 MA's), (35, 48348),

Gene: DelaGarza_49 Start: 28678, Stop: 28896, Start Num: 15
Candidate Starts for DelaGarza_49:
(Start: 15 @28678 has 4 MA's), (25, 28726), (Start: 32 @28741 has 1 MA's),

Gene: DeluluLabubu_100 Start: 66761, Stop: 66946, Start Num: 27
Candidate Starts for DeluluLabubu_100:
(Start: 27 @66761 has 13 MA's),

Gene: DoctorDiddles_73 Start: 47538, Stop: 47711, Start Num: 24
Candidate Starts for DoctorDiddles_73:
(Start: 24 @47538 has 132 MA's), (35, 47589),

Gene: Dorin_173 Start: 95195, Stop: 95365, Start Num: 31
Candidate Starts for Dorin_173:
(Start: 31 @95195 has 3 MA's), (38, 95243), (40, 95258), (45, 95288),

Gene: DrDrey_74 Start: 48595, Stop: 48774, Start Num: 24
Candidate Starts for DrDrey_74:
(Start: 24 @48595 has 132 MA's), (35, 48646),

Gene: DrManhattan_58 Start: 37046, Stop: 37201, Start Num: 30
Candidate Starts for DrManhattan_58:
(Start: 30 @37046 has 10 MA's), (42, 37124),

Gene: DrSierra_54 Start: 37220, Stop: 37399, Start Num: 19
Candidate Starts for DrSierra_54:
(Start: 19 @37220 has 27 MA's),

Gene: Dumbo_74 Start: 47075, Stop: 47248, Start Num: 24
Candidate Starts for Dumbo_74:
(Start: 24 @47075 has 132 MA's), (35, 47126),

Gene: Dusk_71 Start: 47375, Stop: 47548, Start Num: 24
Candidate Starts for Dusk_71:
(Start: 24 @47375 has 132 MA's),

Gene: Easy2Say_75 Start: 48619, Stop: 48792, Start Num: 24

Candidate Starts for Easy2Say_75:
(Start: 24 @48619 has 132 MA's), (35, 48670),

Gene: Elezi_55 Start: 39303, Stop: 39485, Start Num: 19
Candidate Starts for Elezi_55:
(9, 39096), (Start: 19 @39303 has 27 MA's),

Gene: Elite2014_73 Start: 47169, Stop: 47342, Start Num: 24
Candidate Starts for Elite2014_73:
(Start: 24 @47169 has 132 MA's), (35, 47220),

Gene: Elph10_74 Start: 47174, Stop: 47353, Start Num: 24
Candidate Starts for Elph10_74:
(Start: 24 @47174 has 132 MA's), (35, 47225),

Gene: Emma1919_102 Start: 67382, Stop: 67567, Start Num: 27
Candidate Starts for Emma1919_102:
(Start: 27 @67382 has 13 MA's),

Gene: Emmina_74 Start: 47076, Stop: 47249, Start Num: 24
Candidate Starts for Emmina_74:
(Start: 24 @47076 has 132 MA's), (35, 47127),

Gene: Emotion_61 Start: 40785, Stop: 40988, Start Num: 16
Candidate Starts for Emotion_61:
(11, 40701), (Start: 16 @40785 has 2 MA's), (Start: 30 @40836 has 10 MA's),

Gene: Eraser_56 Start: 39550, Stop: 39735, Start Num: 20
Candidate Starts for Eraser_56:
(Start: 20 @39550 has 5 MA's),

Gene: Eureka_72 Start: 47640, Stop: 47813, Start Num: 24
Candidate Starts for Eureka_72:
(Start: 24 @47640 has 132 MA's), (35, 47691),

Gene: Exile_50 Start: 40505, Stop: 40657, Start Num: 32
Candidate Starts for Exile_50:
(Start: 32 @40505 has 1 MA's), (39, 40547), (48, 40637),

Gene: FairyPath_75 Start: 48288, Stop: 48461, Start Num: 24
Candidate Starts for FairyPath_75:
(Start: 24 @48288 has 132 MA's), (35, 48339),

Gene: Faust_98 Start: 68011, Stop: 68205, Start Num: 22
Candidate Starts for Faust_98:
(Start: 22 @68011 has 1 MA's), (35, 68071), (40, 68098),

Gene: Filch_75 Start: 47101, Stop: 47280, Start Num: 24
Candidate Starts for Filch_75:
(Start: 24 @47101 has 132 MA's), (35, 47152),

Gene: FireRed_78 Start: 48663, Stop: 48836, Start Num: 24
Candidate Starts for FireRed_78:

(Start: 24 @48663 has 132 MA's), (35, 48714),

Gene: FiveHead_60 Start: 39271, Stop: 39417, Start Num: 30

Candidate Starts for FiveHead_60:

(Start: 16 @39229 has 2 MA's), (Start: 30 @39271 has 10 MA's), (42, 39349),

Gene: Flutur_54 Start: 38613, Stop: 38807, Start Num: 19

Candidate Starts for Flutur_54:

(Start: 19 @38613 has 27 MA's), (45, 38739),

Gene: Flypotenuse_70 Start: 47160, Stop: 47333, Start Num: 24

Candidate Starts for Flypotenuse_70:

(Start: 24 @47160 has 132 MA's), (35, 47211),

Gene: FoghornLeghorn_68 Start: 46173, Stop: 46346, Start Num: 24

Candidate Starts for FoghornLeghorn_68:

(Start: 24 @46173 has 132 MA's), (35, 46224),

Gene: Forrest_104 Start: 69125, Stop: 69310, Start Num: 27

Candidate Starts for Forrest_104:

(Start: 27 @69125 has 13 MA's),

Gene: Francesca_175 Start: 96114, Stop: 96284, Start Num: 31

Candidate Starts for Francesca_175:

(Start: 31 @96114 has 3 MA's), (38, 96162), (40, 96177), (45, 96207),

Gene: Francob_99 Start: 67565, Stop: 67750, Start Num: 27

Candidate Starts for Francob_99:

(Start: 27 @67565 has 13 MA's), (40, 67637),

Gene: Gage_76 Start: 47953, Stop: 48126, Start Num: 24

Candidate Starts for Gage_76:

(Start: 24 @47953 has 132 MA's), (35, 48004),

Gene: Gator_72 Start: 48006, Stop: 48185, Start Num: 24

Candidate Starts for Gator_72:

(Start: 24 @48006 has 132 MA's), (35, 48057),

Gene: Gemini_79 Start: 48470, Stop: 48643, Start Num: 24

Candidate Starts for Gemini_79:

(Start: 24 @48470 has 132 MA's), (35, 48521),

Gene: Gilson_101 Start: 67344, Stop: 67529, Start Num: 27

Candidate Starts for Gilson_101:

(Start: 27 @67344 has 13 MA's),

Gene: Gingerbug_48 Start: 29164, Stop: 29382, Start Num: 15

Candidate Starts for Gingerbug_48:

(Start: 15 @29164 has 4 MA's), (25, 29212), (Start: 32 @29227 has 1 MA's),

Gene: Glexan_73 Start: 48290, Stop: 48463, Start Num: 24

Candidate Starts for Glexan_73:

(Start: 24 @48290 has 132 MA's), (35, 48341),

Gene: Goku_72 Start: 47369, Stop: 47542, Start Num: 24
Candidate Starts for Goku_72:
(Start: 24 @47369 has 132 MA's), (35, 47420),

Gene: GoldenSpark_78 Start: 47953, Stop: 48126, Start Num: 24
Candidate Starts for GoldenSpark_78:
(Start: 24 @47953 has 132 MA's), (35, 48004),

Gene: Goldilocks_77 Start: 47451, Stop: 47624, Start Num: 24
Candidate Starts for Goldilocks_77:
(Start: 24 @47451 has 132 MA's), (35, 47502),

Gene: GooberAzure_77 Start: 47953, Stop: 48126, Start Num: 24
Candidate Starts for GooberAzure_77:
(Start: 24 @47953 has 132 MA's), (35, 48004),

Gene: Greep_78 Start: 48952, Stop: 49131, Start Num: 24
Candidate Starts for Greep_78:
(Start: 24 @48952 has 132 MA's), (35, 49003),

Gene: HanKaySha_74 Start: 47254, Stop: 47433, Start Num: 24
Candidate Starts for HanKaySha_74:
(Start: 24 @47254 has 132 MA's), (35, 47305),

Gene: Harella_74 Start: 48806, Stop: 48979, Start Num: 24
Candidate Starts for Harella_74:
(Start: 24 @48806 has 132 MA's), (35, 48857),

Gene: Henry_72 Start: 47594, Stop: 47767, Start Num: 24
Candidate Starts for Henry_72:
(Start: 24 @47594 has 132 MA's), (35, 47645),

Gene: Highbury_73 Start: 47242, Stop: 47415, Start Num: 24
Candidate Starts for Highbury_73:
(Start: 24 @47242 has 132 MA's), (35, 47293),

Gene: Holt_79 Start: 48367, Stop: 48540, Start Num: 24
Candidate Starts for Holt_79:
(Start: 24 @48367 has 132 MA's), (35, 48418),

Gene: Hoonter_77 Start: 47953, Stop: 48126, Start Num: 24
Candidate Starts for Hoonter_77:
(Start: 24 @47953 has 132 MA's), (35, 48004),

Gene: Hopecy_74 Start: 47786, Stop: 47965, Start Num: 24
Candidate Starts for Hopecy_74:
(Start: 24 @47786 has 132 MA's), (35, 47837),

Gene: HufflyPuff_77 Start: 48619, Stop: 48792, Start Num: 24
Candidate Starts for HufflyPuff_77:
(Start: 24 @48619 has 132 MA's), (35, 48670),

Gene: IHOP_72 Start: 47718, Stop: 47891, Start Num: 24
Candidate Starts for IHOP_72:
(Start: 24 @47718 has 132 MA's), (35, 47769),

Gene: Icee_75 Start: 47617, Stop: 47790, Start Num: 24
Candidate Starts for Icee_75:
(Start: 24 @47617 has 132 MA's), (35, 47668),

Gene: Inca_71 Start: 46243, Stop: 46416, Start Num: 24
Candidate Starts for Inca_71:
(Start: 24 @46243 has 132 MA's), (35, 46294),

Gene: Iter_58 Start: 38994, Stop: 39182, Start Num: 19
Candidate Starts for Iter_58:
(Start: 19 @38994 has 27 MA's),

Gene: IttyBittyPiggy_57 Start: 38132, Stop: 38326, Start Num: 19
Candidate Starts for IttyBittyPiggy_57:
(Start: 19 @38132 has 27 MA's), (48, 38306),

Gene: Jada_101 Start: 67857, Stop: 68042, Start Num: 27
Candidate Starts for Jada_101:
(Start: 27 @67857 has 13 MA's),

Gene: Janeemi_57 Start: 39872, Stop: 40054, Start Num: 19
Candidate Starts for Janeemi_57:
(Start: 19 @39872 has 27 MA's), (43, 39989),

Gene: JasmineDragon_60 Start: 40141, Stop: 40287, Start Num: 30
Candidate Starts for JasmineDragon_60:
(Start: 30 @40141 has 10 MA's), (42, 40219),

Gene: JeTaime_74 Start: 48435, Stop: 48608, Start Num: 24
Candidate Starts for JeTaime_74:
(Start: 24 @48435 has 132 MA's), (35, 48486),

Gene: Joemato_55 Start: 38382, Stop: 38582, Start Num: 17
Candidate Starts for Joemato_55:
(2, 37833), (Start: 17 @38382 has 5 MA's), (45, 38514),

Gene: JohnDoe_55 Start: 38368, Stop: 38562, Start Num: 19
Candidate Starts for JohnDoe_55:
(Start: 19 @38368 has 27 MA's), (45, 38494),

Gene: JohnThicc_59 Start: 39271, Stop: 39417, Start Num: 30
Candidate Starts for JohnThicc_59:
(Start: 16 @39229 has 2 MA's), (Start: 30 @39271 has 10 MA's), (42, 39349),

Gene: Jstan_57 Start: 39307, Stop: 39489, Start Num: 19
Candidate Starts for Jstan_57:
(9, 39100), (Start: 19 @39307 has 27 MA's),

Gene: JuneStar_58 Start: 41416, Stop: 41610, Start Num: 19

Candidate Starts for JuneStar_58:
(10, 41221), (Start: 19 @41416 has 27 MA's),

Gene: Kanye_71 Start: 47299, Stop: 47472, Start Num: 24
Candidate Starts for Kanye_71:
(Start: 24 @47299 has 132 MA's), (35, 47350),

Gene: Karp_97 Start: 67879, Stop: 68064, Start Num: 28
Candidate Starts for Karp_97:
(Start: 28 @67879 has 8 MA's), (40, 67951),

Gene: Kaylissa_56 Start: 38763, Stop: 38960, Start Num: 19
Candidate Starts for Kaylissa_56:
(Start: 19 @38763 has 27 MA's), (45, 38892),

Gene: Kenrey_102 Start: 67572, Stop: 67757, Start Num: 27
Candidate Starts for Kenrey_102:
(Start: 27 @67572 has 13 MA's), (40, 67644),

Gene: Kimchi_78 Start: 47956, Stop: 48129, Start Num: 24
Candidate Starts for Kimchi_78:
(Start: 24 @47956 has 132 MA's), (35, 48007),

Gene: Kostya_74 Start: 47817, Stop: 47990, Start Num: 24
Candidate Starts for Kostya_74:
(Start: 24 @47817 has 132 MA's), (35, 47868),

Gene: LadyAstra_59 Start: 39371, Stop: 39517, Start Num: 30
Candidate Starts for LadyAstra_59:
(Start: 16 @39329 has 2 MA's), (Start: 30 @39371 has 10 MA's), (42, 39449),

Gene: Lego_54 Start: 38079, Stop: 38279, Start Num: 17
Candidate Starts for Lego_54:
(1, 37506), (3, 37554), (7, 37797), (Start: 17 @38079 has 5 MA's), (45, 38211),

Gene: Lesiram_50 Start: 28642, Stop: 28860, Start Num: 15
Candidate Starts for Lesiram_50:
(Start: 15 @28642 has 4 MA's), (Start: 32 @28705 has 1 MA's), (41, 28774),

Gene: Lilac_76 Start: 47571, Stop: 47750, Start Num: 24
Candidate Starts for Lilac_76:
(Start: 24 @47571 has 132 MA's), (35, 47622),

Gene: Lilizi_75 Start: 47284, Stop: 47463, Start Num: 24
Candidate Starts for Lilizi_75:
(Start: 24 @47284 has 132 MA's), (35, 47335),

Gene: Lilpickle_73 Start: 47169, Stop: 47342, Start Num: 24
Candidate Starts for Lilpickle_73:
(Start: 24 @47169 has 132 MA's), (35, 47220),

Gene: Limpid_93 Start: 66361, Stop: 66546, Start Num: 27
Candidate Starts for Limpid_93:

(Start: 27 @66361 has 13 MA's), (40, 66433),

Gene: Liveloughbron_76 Start: 48747, Stop: 48926, Start Num: 24

Candidate Starts for Liveloughbron_76:

(Start: 24 @48747 has 132 MA's), (35, 48798),

Gene: Lizalica_54 Start: 37826, Stop: 38008, Start Num: 19

Candidate Starts for Lizalica_54:

(Start: 19 @37826 has 27 MA's),

Gene: London_56 Start: 39541, Stop: 39726, Start Num: 20

Candidate Starts for London_56:

(Start: 20 @39541 has 5 MA's),

Gene: MISSy_75 Start: 47675, Stop: 47854, Start Num: 24

Candidate Starts for MISSy_75:

(Start: 24 @47675 has 132 MA's), (35, 47726),

Gene: MPhalcon_75 Start: 47668, Stop: 47847, Start Num: 24

Candidate Starts for MPhalcon_75:

(Start: 24 @47668 has 132 MA's), (35, 47719),

Gene: MadamMonkfish_74 Start: 46893, Stop: 47066, Start Num: 24

Candidate Starts for MadamMonkfish_74:

(Start: 24 @46893 has 132 MA's), (35, 46944),

Gene: Malibo_48 Start: 36272, Stop: 36448, Start Num: 23

Candidate Starts for Malibo_48:

(12, 36155), (Start: 23 @36272 has 2 MA's),

Gene: Manda_75 Start: 48755, Stop: 48928, Start Num: 24

Candidate Starts for Manda_75:

(Start: 24 @48755 has 132 MA's), (35, 48806),

Gene: Marshmallow_72 Start: 48448, Stop: 48621, Start Num: 24

Candidate Starts for Marshmallow_72:

(Start: 24 @48448 has 132 MA's), (35, 48499),

Gene: Maupel_101 Start: 67344, Stop: 67529, Start Num: 27

Candidate Starts for Maupel_101:

(Start: 27 @67344 has 13 MA's),

Gene: Maxxinista_76 Start: 47544, Stop: 47723, Start Num: 24

Candidate Starts for Maxxinista_76:

(Start: 24 @47544 has 132 MA's), (35, 47595),

Gene: MeganTheeKilla_99 Start: 66705, Stop: 66854, Start Num: 27

Candidate Starts for MeganTheeKilla_99:

(Start: 27 @66705 has 13 MA's),

Gene: Michkear_63 Start: 43369, Stop: 43527, Start Num: 29

Candidate Starts for Michkear_63:

(29, 43369),

Gene: Mindy_73 Start: 46760, Stop: 46933, Start Num: 24
Candidate Starts for Mindy_73:
(Start: 24 @46760 has 132 MA's), (35, 46811),

Gene: MiniMommy_60 Start: 40144, Stop: 40290, Start Num: 30
Candidate Starts for MiniMommy_60:
(Start: 30 @40144 has 10 MA's), (42, 40222),

Gene: Miniwave_69 Start: 47213, Stop: 47386, Start Num: 24
Candidate Starts for Miniwave_69:
(Start: 24 @47213 has 132 MA's), (35, 47264),

Gene: Misfit_75 Start: 48687, Stop: 48866, Start Num: 24
Candidate Starts for Misfit_75:
(Start: 24 @48687 has 132 MA's), (35, 48738),

Gene: MissSwiss_57 Start: 37199, Stop: 37351, Start Num: 30
Candidate Starts for MissSwiss_57:
(Start: 30 @37199 has 10 MA's),

Gene: Moab_100 Start: 69731, Stop: 69916, Start Num: 28
Candidate Starts for Moab_100:
(Start: 28 @69731 has 8 MA's), (40, 69803),

Gene: Moldemort_77 Start: 47772, Stop: 47945, Start Num: 24
Candidate Starts for Moldemort_77:
(Start: 24 @47772 has 132 MA's), (35, 47823),

Gene: MollyToe_69 Start: 46514, Stop: 46687, Start Num: 24
Candidate Starts for MollyToe_69:
(Start: 24 @46514 has 132 MA's), (35, 46565),

Gene: Mosby_70 Start: 46970, Stop: 47149, Start Num: 24
Candidate Starts for Mosby_70:
(Start: 24 @46970 has 132 MA's), (35, 47021),

Gene: Mudpuppy_52 Start: 38242, Stop: 38436, Start Num: 19
Candidate Starts for Mudpuppy_52:
(Start: 19 @38242 has 27 MA's), (45, 38368),

Gene: Murica_77 Start: 48619, Stop: 48792, Start Num: 24
Candidate Starts for Murica_77:
(Start: 24 @48619 has 132 MA's), (35, 48670),

Gene: Murphy_74 Start: 48056, Stop: 48235, Start Num: 24
Candidate Starts for Murphy_74:
(Start: 24 @48056 has 132 MA's), (35, 48107),

Gene: Myrale_74 Start: 48313, Stop: 48486, Start Num: 24
Candidate Starts for Myrale_74:
(Start: 24 @48313 has 132 MA's), (35, 48364),

Gene: Nala_76 Start: 48177, Stop: 48350, Start Num: 24

Candidate Starts for Nala_76:

(Start: 24 @48177 has 132 MA's), (35, 48228),

Gene: NelitzaMV_72 Start: 47259, Stop: 47432, Start Num: 24

Candidate Starts for NelitzaMV_72:

(Start: 24 @47259 has 132 MA's), (35, 47310),

Gene: NiceHouse_187 Start: 105087, Stop: 105269, Start Num: 26

Candidate Starts for NiceHouse_187:

(Start: 26 @105087 has 2 MA's), (Start: 32 @105102 has 1 MA's), (36, 105138), (38, 105147), (40, 105162),

Gene: Nimrod_75 Start: 48880, Stop: 49053, Start Num: 24

Candidate Starts for Nimrod_75:

(Start: 24 @48880 has 132 MA's), (35, 48931),

Gene: Niobe_56 Start: 39544, Stop: 39729, Start Num: 20

Candidate Starts for Niobe_56:

(Start: 20 @39544 has 5 MA's),

Gene: Nitro_58 Start: 40465, Stop: 40653, Start Num: 20

Candidate Starts for Nitro_58:

(Start: 20 @40465 has 5 MA's),

Gene: NoSleep_75 Start: 47514, Stop: 47687, Start Num: 24

Candidate Starts for NoSleep_75:

(Start: 24 @47514 has 132 MA's), (35, 47565),

Gene: NonchalantPear_74 Start: 47367, Stop: 47540, Start Num: 24

Candidate Starts for NonchalantPear_74:

(Start: 24 @47367 has 132 MA's), (35, 47418),

Gene: Nova53_185 Start: 97990, Stop: 98160, Start Num: 31

Candidate Starts for Nova53_185:

(Start: 26 @97978 has 2 MA's), (Start: 31 @97990 has 3 MA's), (38, 98038), (40, 98053), (45, 98083),

Gene: ObiToo_61 Start: 39721, Stop: 39915, Start Num: 19

Candidate Starts for ObiToo_61:

(Start: 19 @39721 has 27 MA's), (45, 39847), (47, 39874),

Gene: Origami_58 Start: 39163, Stop: 39309, Start Num: 30

Candidate Starts for Origami_58:

(Start: 16 @39121 has 2 MA's), (Start: 30 @39163 has 10 MA's), (42, 39241),

Gene: OrionPax_73 Start: 47265, Stop: 47438, Start Num: 24

Candidate Starts for OrionPax_73:

(Start: 24 @47265 has 132 MA's), (35, 47316),

Gene: PaddyBaddy_74 Start: 47268, Stop: 47447, Start Num: 24

Candidate Starts for PaddyBaddy_74:

(Start: 24 @47268 has 132 MA's), (35, 47319),

Gene: Palpatine_76 Start: 48646, Stop: 48825, Start Num: 24
Candidate Starts for Palpatine_76:
(Start: 24 @48646 has 132 MA's), (35, 48697),

Gene: PandaPo_57 Start: 37207, Stop: 37359, Start Num: 30
Candidate Starts for PandaPo_57:
(Start: 30 @37207 has 10 MA's),

Gene: Paperbeatsrock_73 Start: 47891, Stop: 48064, Start Num: 24
Candidate Starts for Paperbeatsrock_73:
(Start: 24 @47891 has 132 MA's), (35, 47942),

Gene: Pat3_72 Start: 46423, Stop: 46596, Start Num: 24
Candidate Starts for Pat3_72:
(Start: 24 @46423 has 132 MA's), (35, 46474),

Gene: Patelgo_99 Start: 68817, Stop: 69002, Start Num: 28
Candidate Starts for Patelgo_99:
(Start: 28 @68817 has 8 MA's), (40, 68889),

Gene: Petra64142_78 Start: 49110, Stop: 49283, Start Num: 24
Candidate Starts for Petra64142_78:
(Start: 24 @49110 has 132 MA's), (35, 49161),

Gene: Phaja_72 Start: 47717, Stop: 47890, Start Num: 24
Candidate Starts for Phaja_72:
(Start: 24 @47717 has 132 MA's), (35, 47768),

Gene: Pharsalus_71 Start: 47691, Stop: 47864, Start Num: 24
Candidate Starts for Pharsalus_71:
(Start: 24 @47691 has 132 MA's), (35, 47742),

Gene: PhatBacter_78 Start: 48663, Stop: 48842, Start Num: 24
Candidate Starts for PhatBacter_78:
(Start: 24 @48663 has 132 MA's), (35, 48714),

Gene: Phaux_76 Start: 48658, Stop: 48837, Start Num: 24
Candidate Starts for Phaux_76:
(Start: 24 @48658 has 132 MA's), (35, 48709),

Gene: Phives_59 Start: 40511, Stop: 40693, Start Num: 19
Candidate Starts for Phives_59:
(4, 40142), (Start: 19 @40511 has 27 MA's),

Gene: Phredrick_100 Start: 66672, Stop: 66857, Start Num: 27
Candidate Starts for Phredrick_100:
(Start: 27 @66672 has 13 MA's),

Gene: Phrux_71 Start: 47254, Stop: 47433, Start Num: 24
Candidate Starts for Phrux_71:
(Start: 24 @47254 has 132 MA's), (35, 47305),

Gene: Pixelle_57 Start: 40947, Stop: 41132, Start Num: 19

Candidate Starts for Pixelle_57:
(5, 40599), (Start: 19 @40947 has 27 MA's),

Gene: Policronamos_77 Start: 48658, Stop: 48837, Start Num: 24
Candidate Starts for Policronamos_77:
(Start: 24 @48658 has 132 MA's), (35, 48709),

Gene: Porky_73 Start: 47084, Stop: 47257, Start Num: 24
Candidate Starts for Porky_73:
(Start: 24 @47084 has 132 MA's), (35, 47135),

Gene: Powerpuff_57 Start: 39483, Stop: 39683, Start Num: 17
Candidate Starts for Powerpuff_57:
(Start: 17 @39483 has 5 MA's), (45, 39615),

Gene: Ptowny_71 Start: 46553, Stop: 46726, Start Num: 24
Candidate Starts for Ptowny_71:
(Start: 24 @46553 has 132 MA's), (35, 46604),

Gene: Pumpkin_77 Start: 48312, Stop: 48491, Start Num: 24
Candidate Starts for Pumpkin_77:
(Start: 24 @48312 has 132 MA's), (35, 48363),

Gene: Pumpkins_54 Start: 39127, Stop: 39321, Start Num: 19
Candidate Starts for Pumpkins_54:
(Start: 19 @39127 has 27 MA's),

Gene: Quallification_75 Start: 48299, Stop: 48472, Start Num: 24
Candidate Starts for Quallification_75:
(Start: 24 @48299 has 132 MA's), (35, 48350),

Gene: Rakim_75 Start: 47768, Stop: 47947, Start Num: 24
Candidate Starts for Rakim_75:
(Start: 24 @47768 has 132 MA's), (35, 47819),

Gene: Reedo_54 Start: 36267, Stop: 36416, Start Num: 30
Candidate Starts for Reedo_54:
(Start: 30 @36267 has 10 MA's), (42, 36342),

Gene: Rimmer_75 Start: 48004, Stop: 48177, Start Num: 24
Candidate Starts for Rimmer_75:
(Start: 24 @48004 has 132 MA's), (35, 48055),

Gene: RiverMonster_74 Start: 47832, Stop: 48011, Start Num: 24
Candidate Starts for RiverMonster_74:
(Start: 24 @47832 has 132 MA's), (35, 47883),

Gene: Saints25_73 Start: 47242, Stop: 47415, Start Num: 24
Candidate Starts for Saints25_73:
(Start: 24 @47242 has 132 MA's), (35, 47293),

Gene: Sassay_69 Start: 45932, Stop: 46111, Start Num: 24
Candidate Starts for Sassay_69:

(Start: 24 @45932 has 132 MA's), (35, 45983),

Gene: Schaffner_55 Start: 38968, Stop: 39162, Start Num: 19

Candidate Starts for Schaffner_55:

(10, 38773), (Start: 19 @38968 has 27 MA's),

Gene: SeresaTree_98 Start: 67393, Stop: 67587, Start Num: 22

Candidate Starts for SeresaTree_98:

(Start: 22 @67393 has 1 MA's), (35, 67453), (40, 67480),

Gene: ShakeltOph_60 Start: 40141, Stop: 40287, Start Num: 30

Candidate Starts for ShakeltOph_60:

(Start: 30 @40141 has 10 MA's), (42, 40219),

Gene: ShamWow_74 Start: 48154, Stop: 48327, Start Num: 24

Candidate Starts for ShamWow_74:

(Start: 24 @48154 has 132 MA's), (35, 48205),

Gene: ShereKhan_73 Start: 48223, Stop: 48396, Start Num: 24

Candidate Starts for ShereKhan_73:

(Start: 24 @48223 has 132 MA's), (35, 48274),

Gene: Sidious_47 Start: 36440, Stop: 36616, Start Num: 23

Candidate Starts for Sidious_47:

(Start: 23 @36440 has 2 MA's), (41, 36527),

Gene: Simpliphy_73 Start: 47232, Stop: 47405, Start Num: 24

Candidate Starts for Simpliphy_73:

(Start: 24 @47232 has 132 MA's), (35, 47283),

Gene: Simpson_57 Start: 38386, Stop: 38586, Start Num: 17

Candidate Starts for Simpson_57:

(2, 37837), (Start: 17 @38386 has 5 MA's), (45, 38518),

Gene: SirDuracell_73 Start: 46518, Stop: 46691, Start Num: 24

Candidate Starts for SirDuracell_73:

(Start: 24 @46518 has 132 MA's), (35, 46569),

Gene: Skelbel_57 Start: 39544, Stop: 39729, Start Num: 20

Candidate Starts for Skelbel_57:

(Start: 20 @39544 has 5 MA's),

Gene: Snek_57 Start: 37403, Stop: 37558, Start Num: 30

Candidate Starts for Snek_57:

(Start: 30 @37403 has 10 MA's), (48, 37541),

Gene: Soondubu_51 Start: 41018, Stop: 41170, Start Num: 32

Candidate Starts for Soondubu_51:

(Start: 32 @41018 has 1 MA's), (39, 41060), (48, 41150),

Gene: SophKB_71 Start: 46910, Stop: 47083, Start Num: 24

Candidate Starts for SophKB_71:

(Start: 24 @46910 has 132 MA's), (35, 46961),

Gene: Sotrice96_75 Start: 47913, Stop: 48086, Start Num: 24
Candidate Starts for Sotrice96_75:
(Start: 24 @47913 has 132 MA's), (35, 47964),

Gene: SparkleGoddess_99 Start: 68222, Stop: 68407, Start Num: 28
Candidate Starts for SparkleGoddess_99:
(Start: 28 @68222 has 8 MA's), (40, 68294),

Gene: Stank_77 Start: 48171, Stop: 48344, Start Num: 24
Candidate Starts for Stank_77:
(Start: 24 @48171 has 132 MA's), (35, 48222),

Gene: Stark_75 Start: 47715, Stop: 47894, Start Num: 24
Candidate Starts for Stark_75:
(Start: 24 @47715 has 132 MA's), (35, 47766),

Gene: StellaBean_72 Start: 47478, Stop: 47651, Start Num: 24
Candidate Starts for StellaBean_72:
(Start: 24 @47478 has 132 MA's), (35, 47529),

Gene: Stigma_98 Start: 68230, Stop: 68415, Start Num: 28
Candidate Starts for Stigma_98:
(Start: 28 @68230 has 8 MA's), (40, 68302),

Gene: StolenFromERC_77 Start: 47953, Stop: 48126, Start Num: 24
Candidate Starts for StolenFromERC_77:
(Start: 24 @47953 has 132 MA's), (35, 48004),

Gene: StormChicken_76 Start: 48611, Stop: 48784, Start Num: 24
Candidate Starts for StormChicken_76:
(Start: 24 @48611 has 132 MA's), (35, 48662),

Gene: Subaru_56 Start: 39303, Stop: 39485, Start Num: 19
Candidate Starts for Subaru_56:
(9, 39096), (Start: 19 @39303 has 27 MA's),

Gene: Sweetums_51 Start: 28762, Stop: 28980, Start Num: 15
Candidate Starts for Sweetums_51:
(Start: 15 @28762 has 4 MA's), (25, 28810), (Start: 32 @28825 has 1 MA's),

Gene: TBrady12_77 Start: 47652, Stop: 47825, Start Num: 24
Candidate Starts for TBrady12_77:
(Start: 24 @47652 has 132 MA's), (35, 47703),

Gene: Tallboi_56 Start: 39686, Stop: 39874, Start Num: 18
Candidate Starts for Tallboi_56:
(Start: 18 @39686 has 2 MA's),

Gene: Tarkin_73 Start: 47900, Stop: 48073, Start Num: 24
Candidate Starts for Tarkin_73:
(Start: 24 @47900 has 132 MA's), (35, 47951),

Gene: Tbone_55 Start: 38934, Stop: 39128, Start Num: 19

Candidate Starts for Tbone_55:

(Start: 19 @38934 has 27 MA's), (45, 39060),

Gene: TeamEdward_76 Start: 48605, Stop: 48778, Start Num: 24

Candidate Starts for TeamEdward_76:

(Start: 24 @48605 has 132 MA's), (35, 48656),

Gene: TeardropMSU_70 Start: 46900, Stop: 47073, Start Num: 24

Candidate Starts for TeardropMSU_70:

(Start: 24 @46900 has 132 MA's), (35, 46951),

Gene: Teaspoon_75 Start: 47794, Stop: 47967, Start Num: 24

Candidate Starts for Teaspoon_75:

(Start: 24 @47794 has 132 MA's), (35, 47845),

Gene: Teng_53 Start: 28666, Stop: 28884, Start Num: 15

Candidate Starts for Teng_53:

(Start: 15 @28666 has 4 MA's), (25, 28714), (Start: 32 @28729 has 1 MA's),

Gene: Terminus_77 Start: 48687, Stop: 48866, Start Num: 24

Candidate Starts for Terminus_77:

(Start: 24 @48687 has 132 MA's), (35, 48738),

Gene: TforTroy_57 Start: 39052, Stop: 39246, Start Num: 19

Candidate Starts for TforTroy_57:

(10, 38854), (Start: 19 @39052 has 27 MA's), (45, 39178),

Gene: Thimble_75 Start: 47135, Stop: 47314, Start Num: 24

Candidate Starts for Thimble_75:

(Start: 24 @47135 has 132 MA's), (35, 47186),

Gene: Thresher_76 Start: 48774, Stop: 48953, Start Num: 24

Candidate Starts for Thresher_76:

(Start: 24 @48774 has 132 MA's), (35, 48825),

Gene: ThursdayNight_58 Start: 39681, Stop: 39881, Start Num: 19

Candidate Starts for ThursdayNight_58:

(Start: 19 @39681 has 27 MA's), (48, 39864),

Gene: Tian_56 Start: 40845, Stop: 41030, Start Num: 19

Candidate Starts for Tian_56:

(Start: 19 @40845 has 27 MA's),

Gene: Tomaszewski_69 Start: 47063, Stop: 47236, Start Num: 24

Candidate Starts for Tomaszewski_69:

(Start: 24 @47063 has 132 MA's), (35, 47114),

Gene: Toto_72 Start: 48154, Stop: 48327, Start Num: 24

Candidate Starts for Toto_72:

(Start: 24 @48154 has 132 MA's), (35, 48205),

Gene: Traaww1_70 Start: 47338, Stop: 47511, Start Num: 24

Candidate Starts for Traaww1_70:
(Start: 24 @47338 has 132 MA's), (35, 47389),

Gene: Tuck_58 Start: 40300, Stop: 40482, Start Num: 19
Candidate Starts for Tuck_58:
(Start: 19 @40300 has 27 MA's),

Gene: Tuco_75 Start: 48662, Stop: 48835, Start Num: 24
Candidate Starts for Tuco_75:
(Start: 24 @48662 has 132 MA's), (35, 48713),

Gene: Turab_53 Start: 37635, Stop: 37826, Start Num: 18
Candidate Starts for Turab_53:
(6, 37329), (Start: 18 @37635 has 2 MA's),

Gene: Tutumahutu_56 Start: 38356, Stop: 38553, Start Num: 19
Candidate Starts for Tutumahutu_56:
(Start: 19 @38356 has 27 MA's), (45, 38485),

Gene: Tweety19_58 Start: 37403, Stop: 37558, Start Num: 30
Candidate Starts for Tweety19_58:
(Start: 30 @37403 has 10 MA's), (48, 37541),

Gene: Ukulele_69 Start: 47045, Stop: 47218, Start Num: 24
Candidate Starts for Ukulele_69:
(Start: 24 @47045 has 132 MA's), (35, 47096),

Gene: VResidence_55 Start: 37492, Stop: 37677, Start Num: 19
Candidate Starts for VResidence_55:
(Start: 19 @37492 has 27 MA's),

Gene: VroomVroom_56 Start: 39271, Stop: 39462, Start Num: 16
Candidate Starts for VroomVroom_56:
(3, 38755), (8, 39007), (13, 39190), (Start: 16 @39271 has 2 MA's), (Start: 30 @39316 has 10 MA's),
(42, 39394), (46, 39427),

Gene: Warda_56 Start: 38671, Stop: 38853, Start Num: 19
Candidate Starts for Warda_56:
(Start: 19 @38671 has 27 MA's),

Gene: WaterT_74 Start: 43421, Stop: 43254, Start Num: 26
Candidate Starts for WaterT_74:
(14, 43508), (Start: 26 @43421 has 2 MA's), (33, 43391), (34, 43382), (44, 43319), (47, 43289), (48,
43268),

Gene: Westy_103 Start: 69242, Stop: 69427, Start Num: 28
Candidate Starts for Westy_103:
(Start: 28 @69242 has 8 MA's), (40, 69314),

Gene: Wiggin_76 Start: 47739, Stop: 47912, Start Num: 24
Candidate Starts for Wiggin_76:
(Start: 24 @47739 has 132 MA's), (35, 47790),

Gene: Willez_69 Start: 45932, Stop: 46111, Start Num: 24
Candidate Starts for Willez_69:
(Start: 24 @45932 has 132 MA's), (35, 45983),

Gene: Xandras_73 Start: 47147, Stop: 47326, Start Num: 24
Candidate Starts for Xandras_73:
(Start: 24 @47147 has 132 MA's), (35, 47198),

Gene: Yang_57 Start: 39052, Stop: 39246, Start Num: 19
Candidate Starts for Yang_57:
(Start: 19 @39052 has 27 MA's), (48, 39226),

Gene: YassJohnny_71 Start: 47102, Stop: 47275, Start Num: 24
Candidate Starts for YassJohnny_71:
(Start: 24 @47102 has 132 MA's), (35, 47153),

Gene: YesChef_55 Start: 38342, Stop: 38542, Start Num: 17
Candidate Starts for YesChef_55:
(Start: 17 @38342 has 5 MA's), (45, 38474),

Gene: Youngblood_77 Start: 48614, Stop: 48793, Start Num: 24
Candidate Starts for Youngblood_77:
(Start: 24 @48614 has 132 MA's), (35, 48665),

Gene: xkcd_77 Start: 48804, Stop: 48977, Start Num: 24
Candidate Starts for xkcd_77:
(Start: 24 @48804 has 132 MA's), (35, 48855),