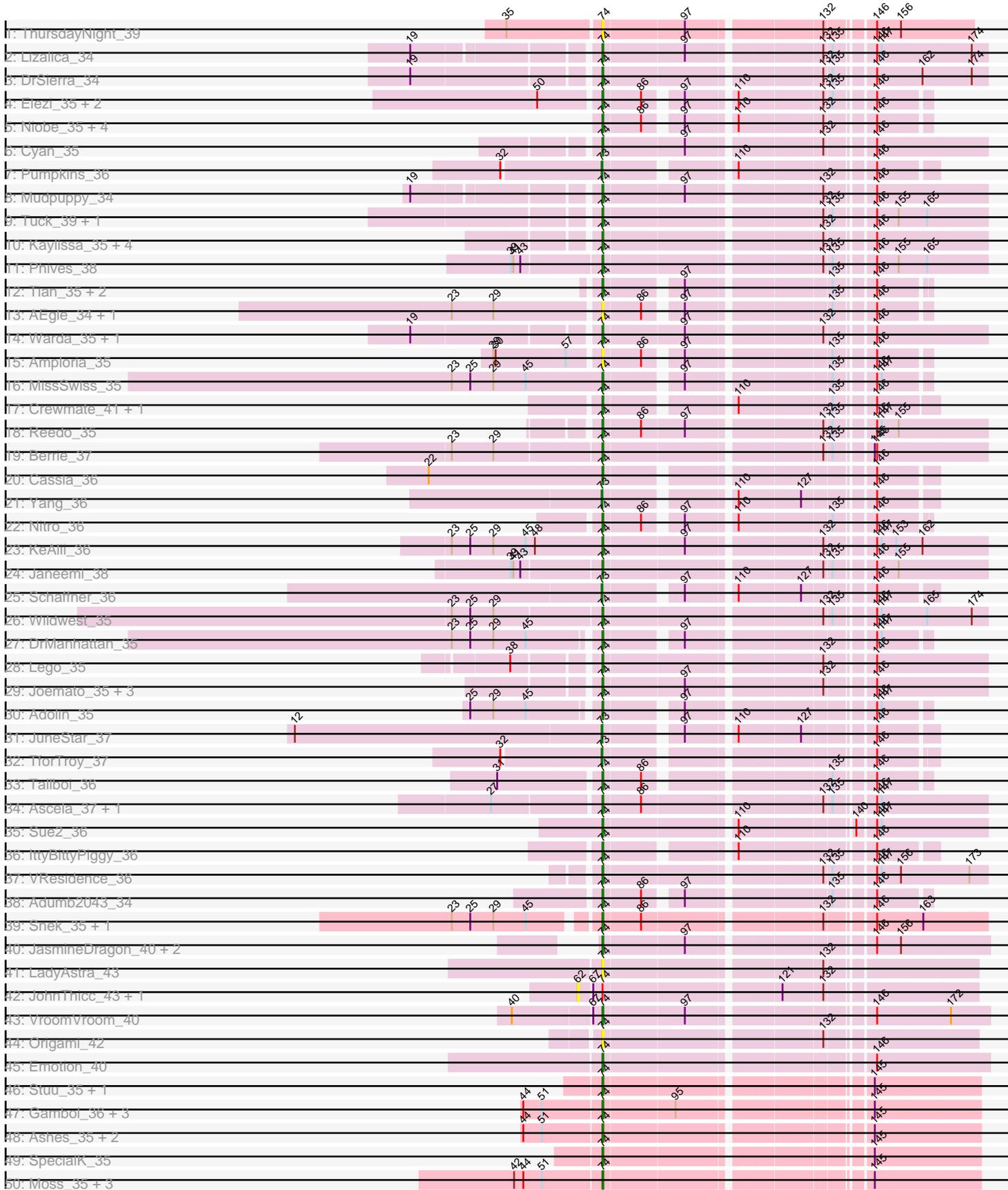
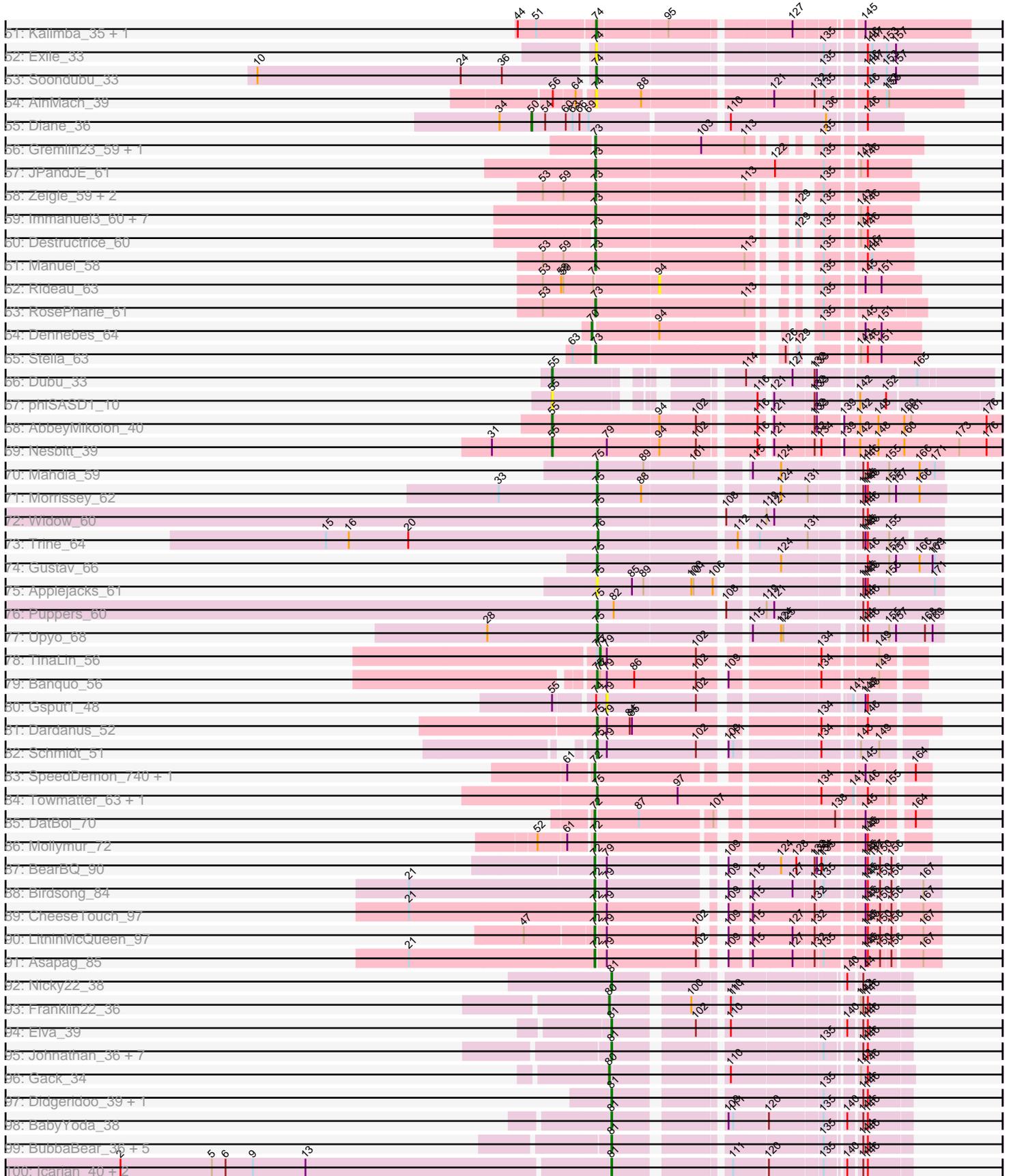


Pham 283455



Pham 283455



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 283455 Report

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

Pham number 283455 has 243 members, 39 are drafts.

Phages represented in each track:

- Track 1 : ThursdayNight_39
- Track 2 : Lizalica_34
- Track 3 : DrSierra_34
- Track 4 : Elezi_35, London_35, Subaru_36
- Track 5 : Niobe_35, Eraser_35, Skelbel_36, Jstan_37, Asa16_35
- Track 6 : Cyan_35
- Track 7 : Pumpkins_36
- Track 8 : Mudpuppy_34
- Track 9 : Tuck_39, Community_38
- Track 10 : Kaylissa_35, JohnDoe_35, AGrandiflora_36, Powerpuff_37, YesChef_35
- Track 11 : Phives_38
- Track 12 : Tian_35, Pixelle_35, Amyev_35
- Track 13 : AEgle_34, Turab_34
- Track 14 : Warda_35, Tbone_34
- Track 15 : Amploria_35
- Track 16 : MissSwiss_35
- Track 17 : Crewmate_41, ObiToo_40
- Track 18 : Reedo_35
- Track 19 : Berrie_37
- Track 20 : Cassia_36
- Track 21 : Yang_36
- Track 22 : Nitro_36
- Track 23 : KeAlii_36
- Track 24 : Janeemi_38
- Track 25 : Schaffner_36
- Track 26 : Wildwest_35
- Track 27 : DrManhattan_35
- Track 28 : Lego_35
- Track 29 : Joemato_35, Tutumahutu_35, Simpson_37, Flutur_35
- Track 30 : Adolin_35
- Track 31 : JuneStar_37
- Track 32 : TforTroy_37
- Track 33 : Tallboi_36
- Track 34 : Ascela_37, Iter_37
- Track 35 : Sue2_36
- Track 36 : IttyBittyPiggy_36
- Track 37 : VResidence_36

- Track 38 : Adumb2043_34
- Track 39 : Snek_35, Tweety19_35
- Track 40 : JasmineDragon_40, ShakeltOph_40, MiniMommy_39
- Track 41 : LadyAstra_43
- Track 42 : JohnThicc_43, FiveHead_44
- Track 43 : VroomVroom_40
- Track 44 : Origami_42
- Track 45 : Emotion_40
- Track 46 : Stuu_35, Mysterium_35
- Track 47 : Gambol_36, Sooty_35, Sabourin_35, Cappuccino_35
- Track 48 : Ashes_35, Halsey_35, Beaupre_35
- Track 49 : SpecialK_35
- Track 50 : Moss_35, Giorgio_35, RockScotty_35, Gumpizza_35
- Track 51 : Kalimba_35, Donkey_35
- Track 52 : Exile_33
- Track 53 : Soondubu_33
- Track 54 : AinMach_39
- Track 55 : Diane_36
- Track 56 : Gremlin23_59, Vorvolakos_59
- Track 57 : JPandJE_61
- Track 58 : Zeigle_59, Kumquat_59, WRightOn_63
- Track 59 : Immanuel3_60, ToriToki_61, HaugeAnator_61, ZooBear_61, Romero_61, Treat_61, Olicious_61, Percastrophe_61
- Track 60 : Destructrice_60
- Track 61 : Manuel_58
- Track 62 : Rideau_63
- Track 63 : RosePharie_61
- Track 64 : Dennebes_64
- Track 65 : Stella_63
- Track 66 : Dubu_33
- Track 67 : phiSASD1_10
- Track 68 : AbbeyMikolon_40
- Track 69 : Nesbitt_39
- Track 70 : Mahdia_59
- Track 71 : Morrissey_62
- Track 72 : Widow_60
- Track 73 : Trine_64
- Track 74 : Gustav_66
- Track 75 : Applejacks_61
- Track 76 : Puppies_60
- Track 77 : Upyo_68
- Track 78 : TinaLin_56
- Track 79 : Banquo_56
- Track 80 : Gspu1_48
- Track 81 : Dardanus_52
- Track 82 : Schmidt_51
- Track 83 : SpeedDemon_740, Bantam_72
- Track 84 : Towmatter_63, Daredevil_63
- Track 85 : DatBoi_70
- Track 86 : Mollymur_72
- Track 87 : BearBQ_90
- Track 88 : Birdsong_84
- Track 89 : CheeseTouch_97

- Track 90 : LitninMcQueen_97
- Track 91 : Asapag_85
- Track 92 : Nicky22_38
- Track 93 : Franklin22_36
- Track 94 : Elva_39
- Track 95 : Johnathan_36, AnnaLie_38, CroZenni_37, BelmontSKP_38, Arroyo_38, Burritobowl_37, DickRichards_36, IndyLu_36
- Track 96 : Gack_34
- Track 97 : Didgeridoo_39, Kate33_37
- Track 98 : BabyYoda_38
- Track 99 : BubbaBear_36, Abigail_36, SansAfet_38, Milomuff_37, LimaBean_36, Solea_38
- Track 100 : Icarian_40, Akino08_38, Loviatar_38
- Track 101 : Bengal_38, Albright_35, Avocadoman_36, Doobus_36
- Track 102 : AylexOG_39
- Track 103 : AvGardian_39
- Track 104 : Stoor_38
- Track 105 : Albedo_37, Kenzers_37, Lynlen_37, SirBeanington_37
- Track 106 : Rollins_34, Coltrane_34, Clayda5_35, Brahms_34, Armstrong_34, Vitas_34, Skylord_34, Bernstein_34
- Track 107 : CupcakePrincess_38, Jabb_38, Eula_38, Jovita_38, MsUbiquitous_38
- Track 108 : PastaFagioli_36
- Track 109 : Softsoap_37
- Track 110 : SarBear_37, Slay_38, Lilo27_38
- Track 111 : FlameThrower_35, Celaena_35, Bachaco_35
- Track 112 : Rona_35
- Track 113 : WalkingDead_39
- Track 114 : ChiliPepper_34, Kamdara_35, Dismas_35
- Track 115 : Sharkboy_36
- Track 116 : Finalfrontier_37
- Track 117 : Quenya_36
- Track 118 : Stromboli_38, DirtyBubble_37
- Track 119 : Lahqtemish_36
- Track 120 : Kieran_35
- Track 121 : SanaSana_40
- Track 122 : Katzastrophic_36
- Track 123 : Swervy_38
- Track 124 : Cashington_35, BabyDaisy_36
- Track 125 : QMacho_39, Pecas_37
- Track 126 : Phisb_38, TukTuk_38
- Track 127 : Teagster_38
- Track 128 : PondAmelia_48
- Track 129 : PhigPhack_38
- Track 130 : Gretchen_45, Percival_46, SuperHands_45
- Track 131 : Barnstormer_43
- Track 132 : SuMoo_46
- Track 133 : Mabodamaca_44
- Track 134 : UtzChips_43
- Track 135 : GardenState_44
- Track 136 : Cen1621_40
- Track 137 : Forester_73
- Track 138 : Honk_41
- Track 139 : Floof_46

- Track 140 : Caron_47
- Track 141 : IAmGroot_44
- Track 142 : CallinAllBarbz_37
- Track 143 : Jankie_35, GrimEater_33
- Track 144 : Elfy_36
- Track 145 : BaileyBlu_37
- Track 146 : Attoomi_32
- Track 147 : GMA4_60
- Track 148 : TinyDot_60
- Track 149 : Samy_60
- Track 150 : BFK20_ORF52
- Track 151 : EmiRose_43
- Track 152 : REQ3_19

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

The start number called the most often in the published annotations is 74, it was called in 79 of the 204 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AEgle_34, AGrandiflora_36, Adolin_35, Adumb2043_34, AinMach_39, Amploria_35, Amyev_35, Asa16_35, Ascela_37, Ashes_35, BaileyBlu_37, Barnstormer_43, Beaupre_35, Berrie_37, CallinAllBarbz_37, Cappuccino_35, Caron_47, Cassia_36, Cen1621_40, Community_38, Crewmate_41, Cyan_35, Donkey_35, DrManhattan_35, DrSierra_34, Elezi_35, Elfy_36, Emotion_40, Eraser_35, Exile_33, Floof_46, Flutur_35, Forester_73, Gambol_36, GardenState_44, Giorgio_35, Gretchen_45, GrimEater_33, Gumpizza_35, Halsey_35, Honk_41, IAmGroot_44, Iter_37, IttyBittyPiggy_36, Janeemi_38, Jankie_35, JasmineDragon_40, Joemato_35, JohnDoe_35, Jstan_37, Kalimba_35, Kaylissa_35, KeAlii_36, LadyAstra_43, Lego_35, Lizalica_34, London_35, Mabodamaca_44, MiniMommy_39, MissSwiss_35, Moss_35, Mudpuppy_34, Mysterium_35, Niobe_35, Nitro_36, ObiToo_40, Origami_42, Percival_46, Phives_38, Pixelle_35, Powerpuff_37, Reedo_35, RockScotty_35, Sabourin_35, ShakeltOph_40, Simpson_37, Skelbel_36, Snek_35, Soondubu_33, Sooty_35, SpecialK_35, Stuu_35, SuMoo_46, Subaru_36, Sue2_36, SuperHands_45, Tallboi_36, Tbone_34, ThursdayNight_39, Tian_35, Tuck_39, Turab_34, Tutumahutu_35, Tweety19_35, UtzChips_43, VResidence_36, VroomVroom_40, Warda_35, Wildwest_35, YesChef_35,

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

- FiveHead_44, Gsput1_48, JohnThicc_43,

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

- AbbeyMikolon_40, Abigail_36, Akino08_38, Albedo_37, Albright_35, AnnaLie_38, Applejacks_61, Armstrong_34, Arroyo_38, Asapag_85, Attoomi_32, AvGuardian_39, Avocadoman_36, AylexOG_39, BFK20_ORF52, BabyDaisy_36, BabyYoda_38, Bachaco_35, Banquo_56, Bantam_72, BearBQ_90, BelmontSKP_38, Bengal_38, Bernstein_34, Birdsong_84, Brahms_34, BubbaBear_36, Burritobowl_37, Cashington_35, Celaena_35, CheeseTouch_97, ChiliPepper_34, Clayda5_35, Coltrane_34, CroZenni_37, CupcakePrincess_38, Dardanus_52, Daredevil_63, DatBoi_70, Dennebes_64, Destructrice_60, Diane_36, DickRichards_36,

Didgeridoo_39, DirtyBubble_37, Dismas_35, Doobus_36, Dubu_33, Elva_39, EmiRose_43, Eula_38, Finalfrontier_37, FlameThrower_35, Franklin22_36, GMA4_60, Gack_34, Gremlin23_59, Gustav_66, HaugeAnator_61, Icarian_40, Immanuel3_60, IndyLu_36, JPandJE_61, Jabb_38, Johnathan_36, Jovita_38, JuneStar_37, Kamdara_35, Kate33_37, Katzastrophic_36, Kenzers_37, Kieran_35, Kumquat_59, Lahqtemish_36, Lilo27_38, LimaBean_36, LitninMcQueen_97, Loviatar_38, Lynlen_37, Mahdia_59, Manuel_58, Milomuff_37, Mollymur_72, Morrissey_62, MsUbiquitous_38, Nesbitt_39, Nicky22_38, Olicious_61, PastaFagioli_36, Pecas_37, Percastrophe_61, PhigPhack_38, Phisb_38, PondAmelia_48, Pumpkins_36, Puppies_60, QMacho_39, Quenya_36, REQ3_19, Rideau_63, Rollins_34, Romero_61, Rona_35, RosePharie_61, Samy_60, SanaSana_40, SansAfet_38, SarBear_37, Schaffner_36, Schmidt_51, Sharkboy_36, SirBeanington_37, Skylord_34, Slay_38, Softsoap_37, Solea_38, SpeedDemon_740, Stella_63, Stoor_38, Stromboli_38, Swervy_38, Teagster_38, TforTroy_37, TinaLin_56, TinyDot_60, ToriToki_61, Towmatter_63, Treat_61, Trine_64, TukTuk_38, Upyo_68, Vitas_34, Vorvolakos_59, WRightOn_63, WalkingDead_39, Widow_60, Yang_36, Zeigle_59, ZooBear_61, phiSASD1_10,

Summary by start number:

Start 50:

- Found in 4 of 243 (1.6%) of genes in pham
- Manual Annotations of this start: 1 of 204
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Diane_36 (BD2),

Start 55:

- Found in 6 of 243 (2.5%) of genes in pham
- Manual Annotations of this start: 4 of 204
- Called 83.3% of time when present
- Phage (with cluster) where this start called: AbbeyMikolon_40 (BL), Attoomi_32 (singleton), Dubu_33 (BJ), Nesbitt_39 (BL), phiSASD1_10 (BJ),

Start 62:

- Found in 2 of 243 (0.8%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: FiveHead_44 (AZ4), JohnThicc_43 (AZ4),

Start 65:

- Found in 1 of 243 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 204
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Samy_60 (singleton),

Start 70:

- Found in 1 of 243 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 204
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Dennebes_64 (BF),

Start 72:

- Found in 11 of 243 (4.5%) of genes in pham
- Manual Annotations of this start: 9 of 204
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Asapag_85 (DN1), Bantam_72 (DL), BearBQ_90 (DN), Birdsong_84 (DN), CheeseTouch_97 (DN1), DatBoi_70 (DL), GMA4_60 (singleton), LitninMcQueen_97 (DN1), Mollymur_72 (DL), REQ3_19 (singleton), SpeedDemon_740 (DL),

Start 73:

- Found in 23 of 243 (9.5%) of genes in pham
- Manual Annotations of this start: 23 of 204
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Destructrice_60 (BF), Gremlin23_59 (BF), HaugeAnator_61 (BF), Immanuel3_60 (BF), JPandJE_61 (BF), JuneStar_37 (AZ1), Kumquat_59 (BF), Manuel_58 (BF), Olicious_61 (BF), Percastrophe_61 (BF), Pumpkins_36 (AZ1), Romero_61 (BF), RosePharie_61 (BF), Schaffner_36 (AZ1), Stella_63 (BF), TforTroy_37 (AZ1), ToriToki_61 (BF), Treat_61 (BF), Vorvolakos_59 (BF), WRightOn_63 (BF), Yang_36 (AZ1), Zeigle_59 (BF), ZooBear_61 (BF),

Start 74:

- Found in 103 of 243 (42.4%) of genes in pham
- Manual Annotations of this start: 79 of 204
- Called 97.1% of time when present
- Phage (with cluster) where this start called: AEgle_34 (AZ1), AGrandiflora_36 (AZ1), Adolin_35 (AZ1), Adumb2043_34 (AZ1), AinMach_39 (AZ7), Amploria_35 (AZ1), Amyev_35 (AZ1), Asa16_35 (AZ1), Ascela_37 (AZ1), Ashes_35 (AZ5), BaileyBlu_37 (FP), Barnstormer_43 (EH), Beaupre_35 (AZ5), Berrie_37 (AZ1), CallinAllBarbz_37 (FP), Cappuccino_35 (AZ5), Caron_47 (EH), Cassia_36 (AZ1), Cen1621_40 (EH), Community_38 (AZ1), Crewmate_41 (AZ1), Cyan_35 (AZ1), Donkey_35 (AZ5), DrManhattan_35 (AZ1), DrSierra_34 (AZ1), Elezi_35 (AZ1), Elfy_36 (FP), Emotion_40 (AZ4), Eraser_35 (AZ1), Exile_33 (AZ6), Floof_46 (EH), Flutur_35 (AZ), Forester_73 (EH), Gambol_36 (AZ5), GardenState_44 (EH), Giorgio_35 (AZ5), Gretchen_45 (EH), GrimEater_33 (FP), Gumpizza_35 (AZ5), Halsey_35 (AZ5), Honk_41 (EH), IAmGroot_44 (EH), Iter_37 (AZ1), IttyBittyPiggy_36 (AZ1), Janeemi_38 (AZ1), Jankie_35 (FP), JasmineDragon_40 (AZ4), Joemato_35 (AZ1), JohnDoe_35 (AZ1), Jstan_37 (AZ1), Kalimba_35 (AZ5), Kaylissa_35 (AZ1), KeAlii_36 (AZ1), LadyAstra_43 (AZ4), Lego_35 (AZ1), Lizalica_34 (AZ1), London_35 (AZ1), Mabodamaca_44 (EH), MiniMommy_39 (AZ4), MissSwiss_35 (AZ1), Moss_35 (AZ5), Mudpuppy_34 (AZ1), Mysterium_35 (AZ5), Niobe_35 (AZ1), Nitro_36 (AZ1), ObiToo_40 (AZ1), Origami_42 (AZ4), Percival_46 (EH), Phives_38 (AZ1), Pixelle_35 (AZ1), Powerpuff_37 (AZ1), Reedo_35 (AZ1), RockScotty_35 (AZ5), Sabourin_35 (AZ5), ShakeltOph_40 (AZ4), Simpson_37 (AZ1), Skelbel_36 (AZ1), Snek_35 (AZ3), Soondubu_33 (AZ6), Sooty_35 (AZ5), SpecialK_35 (AZ5), Stuu_35 (AZ5), SuMoo_46 (EH), Subaru_36 (AZ1), Sue2_36 (AZ1), SuperHands_45 (EH), Tallboi_36 (AZ1), Tbone_34 (AZ1), ThursdayNight_39 (AZ), Tian_35 (AZ1), Tuck_39 (AZ1), Turab_34 (AZ1), Tutumahutu_35 (AZ1), Tweety19_35 (AZ3), UtzChips_43 (EH), VResidence_36 (AZ1), VroomVroom_40 (AZ4), Warda_35 (AZ1), Wildwest_35 (AZ1), YesChef_35 (AZ1),

Start 75:

- Found in 16 of 243 (6.6%) of genes in pham
- Manual Annotations of this start: 13 of 204
- Called 93.8% of time when present

- Phage (with cluster) where this start called: Applejacks_61 (CD), BFK20_ORF52 (singleton), Banquo_56 (CU1), Dardanus_52 (CU3), Daredevil_63 (DL), EmiRose_43 (singleton), Gustav_66 (CD), Mahdia_59 (CD), Morrissey_62 (CD), Puppies_60 (CD), Schmidt_51 (CU4), TinyDot_60 (singleton), Towmatter_63 (DL), Upyo_68 (CD), Widow_60 (CD),

Start 76:

- Found in 1 of 243 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 204
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Trine_64 (CD),

Start 77:

- Found in 2 of 243 (0.8%) of genes in pham
- Manual Annotations of this start: 1 of 204
- Called 50.0% of time when present
- Phage (with cluster) where this start called: TinaLin_56 (CU1),

Start 78:

- Found in 1 of 243 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 204
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Teagster_38 (EB),

Start 79:

- Found in 12 of 243 (4.9%) of genes in pham
- No Manual Annotations of this start.
- Called 8.3% of time when present
- Phage (with cluster) where this start called: Gspu1_48 (CU2),

Start 80:

- Found in 21 of 243 (8.6%) of genes in pham
- Manual Annotations of this start: 20 of 204
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Armstrong_34 (EB), Bachaco_35 (EB), Bernstein_34 (EB), Brahms_34 (EB), Celaena_35 (EB), ChiliPepper_34 (EB), Clayda5_35 (EB), Coltrane_34 (EB), Dismas_35 (EB), FlameThrower_35 (EB), Franklin22_36 (EB), Gack_34 (EB), Kamdara_35 (EB), Katzastrophic_36 (EB), Kieran_35 (EB), Quenya_36 (EB), Rollins_34 (EB), Rona_35 (EB), Sharkboy_36 (EB), Skylord_34 (EB), Vitas_34 (EB),

Start 81:

- Found in 58 of 243 (23.9%) of genes in pham
- Manual Annotations of this start: 50 of 204
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abigail_36 (EB), Akino08_38 (EB), Albedo_37 (EB), Albright_35 (EB), AnnaLie_38 (EB), Arroyo_38 (EB), AvGuardian_39 (EB), Avocadoman_36 (EB), AylexOG_39 (EB), BabyDaisy_36 (EB), BabyYoda_38 (EB), BelmontSKP_38 (EB), Bengal_38 (EB), BubbaBear_36 (EB), Burritobowl_37 (EB), Cashington_35 (EB), CroZenni_37 (EB), CupcakePrincess_38 (EB), DickRichards_36 (EB), Didgeridoo_39 (EB), DirtyBubble_37 (EB), Doobus_36 (EB), Elva_39 (EB), Eula_38 (EB), Finalfrontier_37 (EB), Icarian_40 (EB), IndyLu_36 (EB), Jabb_38 (EB), Johnathan_36 (EB), Jovita_38 (EB), Kate33_37 (EB), Kenzers_37

(EB), Lahqtemish_36 (EB), Lilo27_38 (EB), LimaBean_36 (EB), Loviatar_38 (EB), Lynlen_37 (EB), Milomuff_37 (EB), MsUbiquitous_38 (EB), Nicky22_38 (EB), PastaFagioli_36 (EB), Pecas_37 (EB), PhigPhack_38 (EB), Phisb_38 (EB), PondAmelia_48 (EB), QMacho_39 (EB), SanaSana_40 (EB), SansAfet_38 (EB), SarBear_37 (EB), SirBeanington_37 (EB), Slay_38 (EB), Softsoap_37 (EB), Solea_38 (EB), Stoor_38 (EB), Stromboli_38 (EB), Swervy_38 (EB), TukTuk_38 (EB), WalkingDead_39 (EB),

Start 94:

- Found in 4 of 243 (1.6%) of genes in pham
- No Manual Annotations of this start.
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Rideau_63 (BF),

Summary by clusters:

There are 23 clusters represented in this pham: FP, DN, BF, BL, DL, BJ, CU4, CU3, CU2, CU1, DN1, BD2, EH, CD, singleton, AZ, EB, AZ1, AZ3, AZ4, AZ5, AZ6, AZ7,

Info for manual annotations of cluster AZ1:

- Start number 73 was manually annotated 5 times for cluster AZ1.
- Start number 74 was manually annotated 41 times for cluster AZ1.

Info for manual annotations of cluster AZ3:

- Start number 74 was manually annotated 2 times for cluster AZ3.

Info for manual annotations of cluster AZ4:

- Start number 74 was manually annotated 5 times for cluster AZ4.

Info for manual annotations of cluster AZ5:

- Start number 74 was manually annotated 16 times for cluster AZ5.

Info for manual annotations of cluster AZ6:

- Start number 74 was manually annotated 1 time for cluster AZ6.

Info for manual annotations of cluster BD2:

- Start number 50 was manually annotated 1 time for cluster BD2.

Info for manual annotations of cluster BF:

- Start number 70 was manually annotated 1 time for cluster BF.
- Start number 73 was manually annotated 18 times for cluster BF.

Info for manual annotations of cluster BJ:

- Start number 55 was manually annotated 1 time for cluster BJ.

Info for manual annotations of cluster BL:

- Start number 55 was manually annotated 2 times for cluster BL.

Info for manual annotations of cluster CD:

- Start number 75 was manually annotated 6 times for cluster CD.
- Start number 76 was manually annotated 1 time for cluster CD.

Info for manual annotations of cluster CU1:

- Start number 75 was manually annotated 1 time for cluster CU1.
- Start number 77 was manually annotated 1 time for cluster CU1.

Info for manual annotations of cluster CU3:

- Start number 75 was manually annotated 1 time for cluster CU3.

Info for manual annotations of cluster CU4:

- Start number 75 was manually annotated 1 time for cluster CU4.

Info for manual annotations of cluster DL:

- Start number 72 was manually annotated 4 times for cluster DL.
- Start number 75 was manually annotated 2 times for cluster DL.

Info for manual annotations of cluster DN:

- Start number 72 was manually annotated 2 times for cluster DN.

Info for manual annotations of cluster DN1:

- Start number 72 was manually annotated 3 times for cluster DN1.

Info for manual annotations of cluster EB:

- Start number 78 was manually annotated 1 time for cluster EB.
- Start number 80 was manually annotated 20 times for cluster EB.
- Start number 81 was manually annotated 50 times for cluster EB.

Info for manual annotations of cluster EH:

- Start number 74 was manually annotated 12 times for cluster EH.

Info for manual annotations of cluster FP:

- Start number 74 was manually annotated 2 times for cluster FP.

Gene Information:

Gene: AEgle_34 Start: 25272, Stop: 25622, Start Num: 74

Candidate Starts for AEgle_34:

(23, 25092), (29, 25146), (Start: 74 @25272 has 79 MA's), (86, 25317), (97, 25356), (135, 25518), (146, 25560),

Gene: AGrandiflora_36 Start: 25133, Stop: 25576, Start Num: 74

Candidate Starts for AGrandiflora_36:

(Start: 74 @25133 has 79 MA's), (132, 25385), (146, 25436),

Gene: AbbeyMikolon_40 Start: 26256, Stop: 26795, Start Num: 55

Candidate Starts for AbbeyMikolon_40:

(Start: 55 @26256 has 4 MA's), (94, 26391), (102, 26439), (116, 26499), (121, 26511), (132, 26559), (133, 26562), (139, 26589), (142, 26610), (148, 26634), (160, 26667), (161, 26676), (176, 26775),

Gene: Abigail_36 Start: 25222, Stop: 25548, Start Num: 81

Candidate Starts for Abigail_36:

(Start: 81 @25222 has 50 MA's), (135, 25453), (144, 25489), (146, 25495),

Gene: Adolin_35 Start: 24126, Stop: 24476, Start Num: 74

Candidate Starts for Adolin_35:

(25, 23973), (29, 24003), (45, 24045), (Start: 74 @24126 has 79 MA's), (97, 24210), (146, 24414), (147, 24420),

Gene: Adumb2043_34 Start: 25291, Stop: 25641, Start Num: 74

Candidate Starts for Adumb2043_34:

(Start: 74 @25291 has 79 MA's), (86, 25336), (97, 25375), (135, 25537), (146, 25579),

Gene: AinMach_39 Start: 26488, Stop: 26916, Start Num: 74

Candidate Starts for AinMach_39:

(56, 26443), (64, 26470), (Start: 74 @26488 has 79 MA's), (88, 26545), (121, 26695), (132, 26743), (135, 26752), (146, 26794), (153, 26818), (155, 26821),

Gene: Akino08_38 Start: 27649, Stop: 27975, Start Num: 81

Candidate Starts for Akino08_38:

(2, 27016), (5, 27136), (6, 27154), (9, 27190), (13, 27259), (Start: 81 @27649 has 50 MA's), (111, 27775), (120, 27817), (135, 27880), (140, 27901), (144, 27916), (146, 27922),

Gene: Albedo_37 Start: 25772, Stop: 26098, Start Num: 81

Candidate Starts for Albedo_37:

(Start: 81 @25772 has 50 MA's), (110, 25895), (140, 26024), (144, 26039),

Gene: Albright_35 Start: 24924, Stop: 25250, Start Num: 81

Candidate Starts for Albright_35:

(Start: 81 @24924 has 50 MA's), (135, 25155), (144, 25191), (146, 25197),

Gene: Amploria_35 Start: 25474, Stop: 25824, Start Num: 74

Candidate Starts for Amploria_35:

(29, 25345), (30, 25348), (57, 25438), (Start: 74 @25474 has 79 MA's), (86, 25519), (97, 25558), (135, 25720), (146, 25762),

Gene: Amyev_35 Start: 26817, Stop: 27164, Start Num: 74

Candidate Starts for Amyev_35:

(Start: 74 @26817 has 79 MA's), (97, 26901), (135, 27063), (146, 27105),

Gene: AnnaLie_38 Start: 26045, Stop: 26371, Start Num: 81

Candidate Starts for AnnaLie_38:

(Start: 81 @26045 has 50 MA's), (135, 26276), (144, 26312), (146, 26318),

Gene: Applejacks_61 Start: 41338, Stop: 41739, Start Num: 75

Candidate Starts for Applejacks_61:

(Start: 75 @41338 has 13 MA's), (85, 41383), (89, 41398), (100, 41458), (101, 41461), (106, 41485), (144, 41638), (145, 41641), (146, 41644), (155, 41671), (171, 41728),

Gene: Armstrong_34 Start: 23647, Stop: 23988, Start Num: 80

Candidate Starts for Armstrong_34:

(Start: 80 @23647 has 20 MA's), (102, 23740), (146, 23920),

Gene: Arroyo_38 Start: 26083, Stop: 26409, Start Num: 81

Candidate Starts for Arroyo_38:

(Start: 81 @26083 has 50 MA's), (135, 26314), (144, 26350), (146, 26356),

Gene: Asa16_35 Start: 26861, Stop: 27211, Start Num: 74

Candidate Starts for Asa16_35:

(Start: 74 @26861 has 79 MA's), (86, 26906), (97, 26945), (110, 26999), (132, 27098), (146, 27149),

Gene: Asapag_85 Start: 49353, Stop: 49730, Start Num: 72

Candidate Starts for Asapag_85:

(21, 49113), (Start: 72 @49353 has 9 MA's), (79, 49365), (102, 49482), (109, 49494), (115, 49515), (127, 49566), (132, 49590), (135, 49599), (145, 49644), (146, 49647), (150, 49662), (156, 49674), (167, 49707),

Gene: Ascela_37 Start: 25854, Stop: 26297, Start Num: 74

Candidate Starts for Ascela_37:

(27, 25725), (Start: 74 @25854 has 79 MA's), (86, 25899), (132, 26106), (135, 26115), (146, 26157), (147, 26163),

Gene: Ashes_35 Start: 24212, Stop: 24646, Start Num: 74

Candidate Starts for Ashes_35:

(44, 24116), (51, 24140), (Start: 74 @24212 has 79 MA's), (145, 24512),

Gene: Attoomi_32 Start: 23857, Stop: 24264, Start Num: 55

Candidate Starts for Attoomi_32:

(Start: 55 @23857 has 4 MA's), (83, 23938), (93, 23971), (96, 23995), (102, 24028), (132, 24148), (134, 24154), (135, 24157), (144, 24193), (145, 24196), (146, 24199),

Gene: AvGardian_39 Start: 26215, Stop: 26541, Start Num: 81

Candidate Starts for AvGardian_39:

(4, 25681), (Start: 81 @26215 has 50 MA's), (110, 26338), (144, 26482), (146, 26488),

Gene: Avocadoman_36 Start: 25161, Stop: 25487, Start Num: 81

Candidate Starts for Avocadoman_36:

(Start: 81 @25161 has 50 MA's), (135, 25392), (144, 25428), (146, 25434),

Gene: AylexOG_39 Start: 26118, Stop: 26444, Start Num: 81

Candidate Starts for AylexOG_39:

(Start: 81 @26118 has 50 MA's), (110, 26241), (140, 26370), (144, 26385),

Gene: BFK20_ORF52 Start: 41172, Stop: 41558, Start Num: 75

Candidate Starts for BFK20_ORF52:

(Start: 75 @41172 has 13 MA's), (92, 41238), (121, 41385), (123, 41391), (129, 41415), (130, 41421), (151, 41505),

Gene: BabyDaisy_36 Start: 25684, Stop: 26010, Start Num: 81

Candidate Starts for BabyDaisy_36:

(Start: 81 @25684 has 50 MA's), (105, 25792), (135, 25915), (144, 25951), (146, 25957),

Gene: BabyYoda_38 Start: 26829, Stop: 27155, Start Num: 81

Candidate Starts for BabyYoda_38:

(Start: 81 @26829 has 50 MA's), (109, 26949), (111, 26955), (120, 26997), (135, 27060), (140, 27081), (144, 27096), (146, 27102),

Gene: Bachaco_35 Start: 26844, Stop: 27173, Start Num: 80

Candidate Starts for Bachaco_35:

(Start: 80 @26844 has 20 MA's), (109, 26964), (110, 26967), (111, 26970), (144, 27111), (146, 27117),

Gene: BaileyBlu_37 Start: 25414, Stop: 25836, Start Num: 74

Candidate Starts for BaileyBlu_37:

(24, 25246), (36, 25300), (Start: 74 @25414 has 79 MA's), (86, 25459), (97, 25513), (132, 25666), (134, 25672),

Gene: Banquo_56 Start: 37048, Stop: 37422, Start Num: 75

Candidate Starts for Banquo_56:

(Start: 75 @37048 has 13 MA's), (Start: 77 @37051 has 1 MA's), (79, 37060), (86, 37096), (102, 37177), (109, 37204), (134, 37306), (149, 37372),

Gene: Bantam_72 Start: 52490, Stop: 52125, Start Num: 72

Candidate Starts for Bantam_72:

(61, 52520), (Start: 72 @52490 has 9 MA's), (145, 52193), (164, 52145),

Gene: Barnstormer_43 Start: 27456, Stop: 27818, Start Num: 74

Candidate Starts for Barnstormer_43:

(26, 27303), (49, 27375), (Start: 74 @27456 has 79 MA's), (127, 27672), (146, 27747),

Gene: BearBQ_90 Start: 50811, Stop: 51185, Start Num: 72

Candidate Starts for BearBQ_90:

(Start: 72 @50811 has 9 MA's), (79, 50823), (109, 50952), (124, 51009), (128, 51027), (132, 51048), (133, 51051), (134, 51054), (135, 51057), (145, 51102), (146, 51105), (147, 51111), (150, 51120), (156, 51132),

Gene: Beaupre_35 Start: 24213, Stop: 24647, Start Num: 74

Candidate Starts for Beaupre_35:

(44, 24117), (51, 24141), (Start: 74 @24213 has 79 MA's), (145, 24513),

Gene: BelmontSKP_38 Start: 26045, Stop: 26371, Start Num: 81

Candidate Starts for BelmontSKP_38:

(Start: 81 @26045 has 50 MA's), (135, 26276), (144, 26312), (146, 26318),

Gene: Bengal_38 Start: 25673, Stop: 25999, Start Num: 81

Candidate Starts for Bengal_38:

(Start: 81 @25673 has 50 MA's), (135, 25904), (144, 25940), (146, 25946),

Gene: Bernstein_34 Start: 23702, Stop: 24043, Start Num: 80

Candidate Starts for Bernstein_34:

(Start: 80 @23702 has 20 MA's), (102, 23795), (146, 23975),

Gene: Berrie_37 Start: 26747, Stop: 27190, Start Num: 74

Candidate Starts for Berrie_37:

(23, 26564), (29, 26618), (Start: 74 @26747 has 79 MA's), (132, 26999), (135, 27008), (145, 27047), (146, 27050),

Gene: Birdsong_84 Start: 49089, Stop: 49466, Start Num: 72

Candidate Starts for Birdsong_84:

(21, 48849), (Start: 72 @49089 has 9 MA's), (79, 49101), (109, 49230), (115, 49251), (127, 49302), (132, 49326), (135, 49335), (145, 49380), (146, 49383), (150, 49398), (156, 49410), (167, 49443),

Gene: Brahms_34 Start: 23649, Stop: 23990, Start Num: 80
Candidate Starts for Brahms_34:
(Start: 80 @23649 has 20 MA's), (102, 23742), (146, 23922),

Gene: BubbaBear_36 Start: 25617, Stop: 25943, Start Num: 81
Candidate Starts for BubbaBear_36:
(Start: 81 @25617 has 50 MA's), (135, 25848), (144, 25884), (146, 25890),

Gene: Burritobowl_37 Start: 25618, Stop: 25944, Start Num: 81
Candidate Starts for Burritobowl_37:
(Start: 81 @25618 has 50 MA's), (135, 25849), (144, 25885), (146, 25891),

Gene: CallinAllBarbz_37 Start: 25811, Stop: 26263, Start Num: 74
Candidate Starts for CallinAllBarbz_37:
(24, 25643), (36, 25697), (Start: 74 @25811 has 79 MA's), (86, 25856), (91, 25874), (97, 25910), (135, 26072), (146, 26114), (175, 26249),

Gene: Cappuccino_35 Start: 24079, Stop: 24513, Start Num: 74
Candidate Starts for Cappuccino_35:
(44, 23983), (51, 24007), (Start: 74 @24079 has 79 MA's), (95, 24166), (145, 24379),

Gene: Caron_47 Start: 28859, Stop: 29239, Start Num: 74
Candidate Starts for Caron_47:
(Start: 74 @28859 has 79 MA's), (146, 29150),

Gene: Cashington_35 Start: 24964, Stop: 25290, Start Num: 81
Candidate Starts for Cashington_35:
(Start: 81 @24964 has 50 MA's), (105, 25072), (135, 25195), (144, 25231), (146, 25237),

Gene: Cassia_36 Start: 25737, Stop: 26096, Start Num: 74
Candidate Starts for Cassia_36:
(22, 25515), (Start: 74 @25737 has 79 MA's), (146, 26025),

Gene: Celaena_35 Start: 26594, Stop: 26923, Start Num: 80
Candidate Starts for Celaena_35:
(Start: 80 @26594 has 20 MA's), (109, 26714), (110, 26717), (111, 26720), (144, 26861), (146, 26867),

Gene: Cen1621_40 Start: 25799, Stop: 26167, Start Num: 74
Candidate Starts for Cen1621_40:
(Start: 74 @25799 has 79 MA's), (97, 25886), (114, 25958), (126, 26006), (135, 26051), (145, 26090),

Gene: CheeseTouch_97 Start: 48676, Stop: 49053, Start Num: 72
Candidate Starts for CheeseTouch_97:
(21, 48436), (Start: 72 @48676 has 9 MA's), (79, 48688), (109, 48817), (115, 48838), (132, 48913), (145, 48967), (146, 48970), (150, 48985), (156, 48997), (167, 49030),

Gene: ChiliPepper_34 Start: 26048, Stop: 26380, Start Num: 80
Candidate Starts for ChiliPepper_34:
(Start: 80 @26048 has 20 MA's), (105, 26159), (109, 26171), (111, 26177), (121, 26225), (135, 26282), (144, 26318), (146, 26324),

Gene: Clayda5_35 Start: 23636, Stop: 23977, Start Num: 80
Candidate Starts for Clayda5_35:

(Start: 80 @23636 has 20 MA's), (102, 23729), (146, 23909),

Gene: Coltrane_34 Start: 23649, Stop: 23990, Start Num: 80

Candidate Starts for Coltrane_34:

(Start: 80 @23649 has 20 MA's), (102, 23742), (146, 23922),

Gene: Community_38 Start: 27474, Stop: 27917, Start Num: 74

Candidate Starts for Community_38:

(Start: 74 @27474 has 79 MA's), (132, 27726), (135, 27735), (146, 27777), (155, 27804), (165, 27840),

Gene: Crewmate_41 Start: 26389, Stop: 26751, Start Num: 74

Candidate Starts for Crewmate_41:

(Start: 74 @26389 has 79 MA's), (110, 26527), (135, 26635), (146, 26677),

Gene: CroZenni_37 Start: 25508, Stop: 25834, Start Num: 81

Candidate Starts for CroZenni_37:

(Start: 81 @25508 has 50 MA's), (135, 25739), (144, 25775), (146, 25781),

Gene: CupcakePrincess_38 Start: 25806, Stop: 26132, Start Num: 81

Candidate Starts for CupcakePrincess_38:

(Start: 81 @25806 has 50 MA's), (135, 26037), (140, 26058), (144, 26073),

Gene: Cyan_35 Start: 25187, Stop: 25630, Start Num: 74

Candidate Starts for Cyan_35:

(Start: 74 @25187 has 79 MA's), (97, 25286), (132, 25439), (146, 25490),

Gene: Dardanus_52 Start: 35477, Stop: 35866, Start Num: 75

Candidate Starts for Dardanus_52:

(Start: 75 @35477 has 13 MA's), (79, 35489), (84, 35519), (85, 35522), (134, 35735), (146, 35783),

Gene: Daredevil_63 Start: 48481, Stop: 48092, Start Num: 75

Candidate Starts for Daredevil_63:

(Start: 75 @48481 has 13 MA's), (97, 48376), (134, 48208), (141, 48172), (146, 48157), (155, 48133),

Gene: DatBoi_70 Start: 52480, Stop: 52115, Start Num: 72

Candidate Starts for DatBoi_70:

(Start: 72 @52480 has 9 MA's), (87, 52426), (107, 52336), (138, 52213), (145, 52183), (164, 52135),

Gene: Dennebes_64 Start: 31702, Stop: 31352, Start Num: 70

Candidate Starts for Dennebes_64:

(Start: 70 @31702 has 1 MA's), (94, 31621), (135, 31465), (145, 31423), (151, 31402),

Gene: Destructrice_60 Start: 31598, Stop: 31254, Start Num: 73

Candidate Starts for Destructrice_60:

(Start: 73 @31598 has 23 MA's), (129, 31373), (135, 31358), (143, 31322), (146, 31313),

Gene: Diane_36 Start: 27972, Stop: 28412, Start Num: 50

Candidate Starts for Diane_36:

(34, 27930), (Start: 50 @27972 has 1 MA's), (54, 27990), (60, 28017), (63, 28026), (66, 28035), (69, 28047), (110, 28209), (136, 28329), (146, 28368),

Gene: DickRichards_36 Start: 25947, Stop: 26273, Start Num: 81

Candidate Starts for DickRichards_36:

(Start: 81 @25947 has 50 MA's), (135, 26178), (144, 26214), (146, 26220),

Gene: Didgeridoo_39 Start: 26093, Stop: 26419, Start Num: 81

Candidate Starts for Didgeridoo_39:

(Start: 81 @26093 has 50 MA's), (135, 26324), (144, 26360), (146, 26366),

Gene: DirtyBubble_37 Start: 26477, Stop: 26803, Start Num: 81

Candidate Starts for DirtyBubble_37:

(1, 25724), (5, 25964), (6, 25982), (9, 26018), (13, 26087), (Start: 81 @26477 has 50 MA's), (109, 26597), (111, 26603), (135, 26708), (140, 26729), (144, 26744), (146, 26750),

Gene: Dismas_35 Start: 26219, Stop: 26551, Start Num: 80

Candidate Starts for Dismas_35:

(Start: 80 @26219 has 20 MA's), (105, 26330), (109, 26342), (111, 26348), (121, 26396), (135, 26453), (144, 26489), (146, 26495),

Gene: Donkey_35 Start: 24069, Stop: 24503, Start Num: 74

Candidate Starts for Donkey_35:

(44, 23973), (51, 23997), (Start: 74 @24069 has 79 MA's), (95, 24156), (127, 24297), (145, 24369),

Gene: Doobus_36 Start: 25328, Stop: 25654, Start Num: 81

Candidate Starts for Doobus_36:

(Start: 81 @25328 has 50 MA's), (135, 25559), (144, 25595), (146, 25601),

Gene: DrManhattan_35 Start: 24117, Stop: 24467, Start Num: 74

Candidate Starts for DrManhattan_35:

(23, 23940), (25, 23964), (29, 23994), (45, 24036), (Start: 74 @24117 has 79 MA's), (97, 24201), (146, 24405), (147, 24411),

Gene: DrSierra_34 Start: 24046, Stop: 24489, Start Num: 74

Candidate Starts for DrSierra_34:

(19, 23824), (Start: 74 @24046 has 79 MA's), (132, 24298), (135, 24307), (146, 24349), (162, 24406), (174, 24469),

Gene: Dubu_33 Start: 24220, Stop: 24681, Start Num: 55

Candidate Starts for Dubu_33:

(Start: 55 @24220 has 4 MA's), (114, 24400), (127, 24451), (132, 24475), (133, 24478), (165, 24589),

Gene: Elezi_35 Start: 26877, Stop: 27227, Start Num: 74

Candidate Starts for Elezi_35:

(Start: 50 @26808 has 1 MA's), (Start: 74 @26877 has 79 MA's), (86, 26922), (97, 26961), (110, 27015), (132, 27114), (135, 27123), (146, 27165),

Gene: Elfy_36 Start: 25169, Stop: 25540, Start Num: 74

Candidate Starts for Elfy_36:

(Start: 74 @25169 has 79 MA's), (146, 25457), (147, 25463), (153, 25481), (156, 25487),

Gene: Elva_39 Start: 26539, Stop: 26865, Start Num: 81

Candidate Starts for Elva_39:

(Start: 81 @26539 has 50 MA's), (102, 26632), (110, 26662), (140, 26791), (144, 26806), (146, 26812),

Gene: EmiRose_43 Start: 35914, Stop: 36360, Start Num: 75

Candidate Starts for EmiRose_43:

(Start: 75 @35914 has 13 MA's), (85, 35959), (112, 36082), (130, 36166), (145, 36229), (153, 36256), (170, 36313),

Gene: Emotion_40 Start: 26793, Stop: 27239, Start Num: 74
Candidate Starts for Emotion_40:
(Start: 74 @26793 has 79 MA's), (146, 27096),

Gene: Eraser_35 Start: 26868, Stop: 27218, Start Num: 74
Candidate Starts for Eraser_35:
(Start: 74 @26868 has 79 MA's), (86, 26913), (97, 26952), (110, 27006), (132, 27105), (146, 27156),

Gene: Eula_38 Start: 25719, Stop: 26045, Start Num: 81
Candidate Starts for Eula_38:
(Start: 81 @25719 has 50 MA's), (135, 25950), (140, 25971), (144, 25986),

Gene: Exile_33 Start: 27350, Stop: 27793, Start Num: 74
Candidate Starts for Exile_33:
(Start: 74 @27350 has 79 MA's), (135, 27611), (146, 27653), (147, 27659), (153, 27677), (157, 27689),

Gene: Finalfrontier_37 Start: 26331, Stop: 26657, Start Num: 81
Candidate Starts for Finalfrontier_37:
(Start: 81 @26331 has 50 MA's), (135, 26562), (143, 26595), (146, 26604),

Gene: FiveHead_44 Start: 26853, Stop: 27311, Start Num: 62
Candidate Starts for FiveHead_44:
(62, 26853), (67, 26868), (Start: 74 @26880 has 79 MA's), (121, 27084), (132, 27132),

Gene: FlameThrower_35 Start: 26044, Stop: 26373, Start Num: 80
Candidate Starts for FlameThrower_35:
(Start: 80 @26044 has 20 MA's), (109, 26164), (110, 26167), (111, 26170), (144, 26311), (146, 26317),

Gene: Floop_46 Start: 28537, Stop: 28899, Start Num: 74
Candidate Starts for Floop_46:
(Start: 74 @28537 has 79 MA's), (85, 28582), (115, 28705), (146, 28828),

Gene: Flutur_35 Start: 25445, Stop: 25888, Start Num: 74
Candidate Starts for Flutur_35:
(Start: 74 @25445 has 79 MA's), (97, 25544), (132, 25697), (146, 25748),

Gene: Forester_73 Start: 29475, Stop: 29837, Start Num: 74
Candidate Starts for Forester_73:
(Start: 74 @29475 has 79 MA's), (85, 29520), (99, 29577), (146, 29766),

Gene: Franklin22_36 Start: 24418, Stop: 24747, Start Num: 80
Candidate Starts for Franklin22_36:
(Start: 80 @24418 has 20 MA's), (100, 24505), (110, 24541), (111, 24544), (143, 24682), (144, 24685), (146, 24691),

Gene: GMA4_60 Start: 40216, Stop: 40572, Start Num: 72
Candidate Starts for GMA4_60:
(37, 40105), (Start: 72 @40216 has 9 MA's), (146, 40510),

Gene: Gack_34 Start: 24169, Stop: 24498, Start Num: 80

Candidate Starts for Gack_34:

(Start: 80 @24169 has 20 MA's), (110, 24292), (143, 24433), (146, 24442),

Gene: Gambol_36 Start: 24088, Stop: 24522, Start Num: 74

Candidate Starts for Gambol_36:

(44, 23992), (51, 24016), (Start: 74 @24088 has 79 MA's), (95, 24175), (145, 24388),

Gene: GardenState_44 Start: 27681, Stop: 28043, Start Num: 74

Candidate Starts for GardenState_44:

(Start: 74 @27681 has 79 MA's), (115, 27849), (127, 27897), (146, 27972),

Gene: Giorgio_35 Start: 24196, Stop: 24630, Start Num: 74

Candidate Starts for Giorgio_35:

(42, 24088), (44, 24100), (51, 24124), (Start: 74 @24196 has 79 MA's), (145, 24496),

Gene: Gremlin23_59 Start: 31138, Stop: 30782, Start Num: 73

Candidate Starts for Gremlin23_59:

(Start: 73 @31138 has 23 MA's), (103, 31003), (113, 30946), (135, 30898),

Gene: Gretchen_45 Start: 29159, Stop: 29515, Start Num: 74

Candidate Starts for Gretchen_45:

(Start: 74 @29159 has 79 MA's), (85, 29204), (99, 29261), (146, 29450), (158, 29492),

Gene: GrimEater_33 Start: 24325, Stop: 24750, Start Num: 74

Candidate Starts for GrimEater_33:

(Start: 74 @24325 has 79 MA's), (86, 24370), (97, 24424), (145, 24625), (147, 24634),

Gene: Gspu1_48 Start: 35124, Stop: 35474, Start Num: 79

Candidate Starts for Gspu1_48:

(Start: 55 @35067 has 4 MA's), (Start: 74 @35112 has 79 MA's), (79, 35124), (102, 35241), (141, 35403), (145, 35415), (146, 35418),

Gene: Gumpizza_35 Start: 24152, Stop: 24586, Start Num: 74

Candidate Starts for Gumpizza_35:

(42, 24044), (44, 24056), (51, 24080), (Start: 74 @24152 has 79 MA's), (145, 24452),

Gene: Gustav_66 Start: 43170, Stop: 43571, Start Num: 75

Candidate Starts for Gustav_66:

(Start: 75 @43170 has 13 MA's), (124, 43383), (146, 43476), (155, 43503), (157, 43512), (166, 43542), (169, 43557), (171, 43560),

Gene: Halsey_35 Start: 24217, Stop: 24651, Start Num: 74

Candidate Starts for Halsey_35:

(44, 24121), (51, 24145), (Start: 74 @24217 has 79 MA's), (145, 24517),

Gene: HaugeAnator_61 Start: 31665, Stop: 31324, Start Num: 73

Candidate Starts for HaugeAnator_61:

(Start: 73 @31665 has 23 MA's), (129, 31440), (135, 31425), (143, 31389), (146, 31380),

Gene: Honk_41 Start: 24866, Stop: 25207, Start Num: 74

Candidate Starts for Honk_41:

(68, 24857), (Start: 74 @24866 has 79 MA's), (145, 25157),

Gene: IAmGroot_44 Start: 28148, Stop: 28510, Start Num: 74
Candidate Starts for IAmGroot_44:
(Start: 74 @28148 has 79 MA's), (115, 28316), (127, 28364), (146, 28439),

Gene: Icarian_40 Start: 27112, Stop: 27438, Start Num: 81
Candidate Starts for Icarian_40:
(2, 26479), (5, 26599), (6, 26617), (9, 26653), (13, 26722), (Start: 81 @27112 has 50 MA's), (111, 27238), (120, 27280), (135, 27343), (140, 27364), (144, 27379), (146, 27385),

Gene: Immanuel3_60 Start: 31668, Stop: 31327, Start Num: 73
Candidate Starts for Immanuel3_60:
(Start: 73 @31668 has 23 MA's), (129, 31443), (135, 31428), (143, 31392), (146, 31383),

Gene: IndyLu_36 Start: 25645, Stop: 25971, Start Num: 81
Candidate Starts for IndyLu_36:
(Start: 81 @25645 has 50 MA's), (135, 25876), (144, 25912), (146, 25918),

Gene: Iter_37 Start: 25853, Stop: 26296, Start Num: 74
Candidate Starts for Iter_37:
(27, 25724), (Start: 74 @25853 has 79 MA's), (86, 25898), (132, 26105), (135, 26114), (146, 26156), (147, 26162),

Gene: IttyBittyPiggy_36 Start: 25503, Stop: 25862, Start Num: 74
Candidate Starts for IttyBittyPiggy_36:
(Start: 74 @25503 has 79 MA's), (110, 25641), (146, 25791),

Gene: JPandJE_61 Start: 32184, Stop: 31789, Start Num: 73
Candidate Starts for JPandJE_61:
(Start: 73 @32184 has 23 MA's), (122, 31953), (135, 31890), (143, 31854), (146, 31845),

Gene: Jabb_38 Start: 25806, Stop: 26132, Start Num: 81
Candidate Starts for Jabb_38:
(Start: 81 @25806 has 50 MA's), (135, 26037), (140, 26058), (144, 26073),

Gene: Janeemi_38 Start: 27485, Stop: 27928, Start Num: 74
Candidate Starts for Janeemi_38:
(39, 27377), (41, 27380), (43, 27389), (Start: 74 @27485 has 79 MA's), (132, 27737), (135, 27746), (146, 27788), (155, 27815),

Gene: Jankie_35 Start: 24505, Stop: 24930, Start Num: 74
Candidate Starts for Jankie_35:
(Start: 74 @24505 has 79 MA's), (86, 24550), (97, 24604), (145, 24805), (147, 24814),

Gene: JasmineDragon_40 Start: 26737, Stop: 27180, Start Num: 74
Candidate Starts for JasmineDragon_40:
(Start: 74 @26737 has 79 MA's), (97, 26836), (146, 27040), (156, 27070),

Gene: Joemato_35 Start: 25218, Stop: 25661, Start Num: 74
Candidate Starts for Joemato_35:
(Start: 74 @25218 has 79 MA's), (97, 25317), (132, 25470), (146, 25521),

Gene: JohnDoe_35 Start: 25209, Stop: 25652, Start Num: 74
Candidate Starts for JohnDoe_35:

(Start: 74 @25209 has 79 MA's), (132, 25461), (146, 25512),

Gene: JohnThicc_43 Start: 26853, Stop: 27311, Start Num: 62

Candidate Starts for JohnThicc_43:

(62, 26853), (67, 26868), (Start: 74 @26880 has 79 MA's), (121, 27084), (132, 27132),

Gene: Johnathan_36 Start: 25051, Stop: 25377, Start Num: 81

Candidate Starts for Johnathan_36:

(Start: 81 @25051 has 50 MA's), (135, 25282), (144, 25318), (146, 25324),

Gene: Jovita_38 Start: 25821, Stop: 26147, Start Num: 81

Candidate Starts for Jovita_38:

(Start: 81 @25821 has 50 MA's), (135, 26052), (140, 26073), (144, 26088),

Gene: Jstan_37 Start: 26862, Stop: 27212, Start Num: 74

Candidate Starts for Jstan_37:

(Start: 74 @26862 has 79 MA's), (86, 26907), (97, 26946), (110, 27000), (132, 27099), (146, 27150),

Gene: JuneStar_37 Start: 27633, Stop: 27992, Start Num: 73

Candidate Starts for JuneStar_37:

(12, 27243), (Start: 73 @27633 has 23 MA's), (97, 27717), (110, 27771), (127, 27846), (146, 27921),

Gene: Kalimba_35 Start: 24066, Stop: 24500, Start Num: 74

Candidate Starts for Kalimba_35:

(44, 23970), (51, 23994), (Start: 74 @24066 has 79 MA's), (95, 24153), (127, 24294), (145, 24366),

Gene: Kamdara_35 Start: 26224, Stop: 26556, Start Num: 80

Candidate Starts for Kamdara_35:

(Start: 80 @26224 has 20 MA's), (105, 26335), (109, 26347), (111, 26353), (121, 26401), (135, 26458), (144, 26494), (146, 26500),

Gene: Kate33_37 Start: 25417, Stop: 25743, Start Num: 81

Candidate Starts for Kate33_37:

(Start: 81 @25417 has 50 MA's), (135, 25648), (144, 25684), (146, 25690),

Gene: Katzastrophic_36 Start: 26173, Stop: 26502, Start Num: 80

Candidate Starts for Katzastrophic_36:

(Start: 80 @26173 has 20 MA's), (109, 26293), (110, 26296), (111, 26299), (144, 26440), (146, 26446),

Gene: Kaylissa_35 Start: 25154, Stop: 25597, Start Num: 74

Candidate Starts for Kaylissa_35:

(Start: 74 @25154 has 79 MA's), (132, 25406), (146, 25457),

Gene: KeAlii_36 Start: 25807, Stop: 26250, Start Num: 74

Candidate Starts for KeAlii_36:

(23, 25615), (25, 25639), (29, 25669), (45, 25711), (48, 25723), (Start: 74 @25807 has 79 MA's), (97, 25906), (132, 26059), (146, 26110), (147, 26116), (153, 26134), (162, 26167),

Gene: Kenzers_37 Start: 25644, Stop: 25970, Start Num: 81

Candidate Starts for Kenzers_37:

(Start: 81 @25644 has 50 MA's), (110, 25767), (140, 25896), (144, 25911),

Gene: Kieran_35 Start: 26228, Stop: 26560, Start Num: 80

Candidate Starts for Kieran_35:

(3, 25631), (7, 25739), (Start: 80 @26228 has 20 MA's), (105, 26339), (109, 26351), (111, 26357), (118, 26393), (121, 26405), (144, 26498), (146, 26504),

Gene: Kumquat_59 Start: 31123, Stop: 30773, Start Num: 73

Candidate Starts for Kumquat_59:

(53, 31189), (59, 31165), (Start: 73 @31123 has 23 MA's), (113, 30931), (135, 30883),

Gene: LadyAstra_43 Start: 26980, Stop: 27411, Start Num: 74

Candidate Starts for LadyAstra_43:

(Start: 74 @26980 has 79 MA's), (132, 27232),

Gene: Lahqtemish_36 Start: 25690, Stop: 26016, Start Num: 81

Candidate Starts for Lahqtemish_36:

(Start: 81 @25690 has 50 MA's), (135, 25921), (146, 25963),

Gene: Lego_35 Start: 25100, Stop: 25543, Start Num: 74

Candidate Starts for Lego_35:

(38, 25007), (Start: 74 @25100 has 79 MA's), (132, 25352), (146, 25403),

Gene: Lilo27_38 Start: 25629, Stop: 25955, Start Num: 81

Candidate Starts for Lilo27_38:

(Start: 81 @25629 has 50 MA's), (140, 25881), (144, 25896),

Gene: LimaBean_36 Start: 25100, Stop: 25426, Start Num: 81

Candidate Starts for LimaBean_36:

(Start: 81 @25100 has 50 MA's), (135, 25331), (144, 25367), (146, 25373),

Gene: LitninMcQueen_97 Start: 51856, Stop: 52233, Start Num: 72

Candidate Starts for LitninMcQueen_97:

(47, 51772), (Start: 72 @51856 has 9 MA's), (79, 51868), (102, 51985), (109, 51997), (115, 52018), (127, 52069), (132, 52093), (145, 52147), (146, 52150), (150, 52165), (156, 52177), (167, 52210),

Gene: Lizalica_34 Start: 25001, Stop: 25444, Start Num: 74

Candidate Starts for Lizalica_34:

(19, 24788), (Start: 74 @25001 has 79 MA's), (97, 25100), (132, 25253), (135, 25262), (146, 25304), (147, 25310), (174, 25424),

Gene: London_35 Start: 26877, Stop: 27227, Start Num: 74

Candidate Starts for London_35:

(Start: 50 @26808 has 1 MA's), (Start: 74 @26877 has 79 MA's), (86, 26922), (97, 26961), (110, 27015), (132, 27114), (135, 27123), (146, 27165),

Gene: Loviatar_38 Start: 27664, Stop: 27990, Start Num: 81

Candidate Starts for Loviatar_38:

(2, 27031), (5, 27151), (6, 27169), (9, 27205), (13, 27274), (Start: 81 @27664 has 50 MA's), (111, 27790), (120, 27832), (135, 27895), (140, 27916), (144, 27931), (146, 27937),

Gene: Lynlen_37 Start: 25644, Stop: 25970, Start Num: 81

Candidate Starts for Lynlen_37:

(Start: 81 @25644 has 50 MA's), (110, 25767), (140, 25896), (144, 25911),

Gene: Mabodamaca_44 Start: 28805, Stop: 29152, Start Num: 74

Candidate Starts for Mabodamaca_44:
(Start: 74 @28805 has 79 MA's), (129, 29027), (135, 29054), (146, 29096),

Gene: Mahdia_59 Start: 41385, Stop: 41786, Start Num: 75
Candidate Starts for Mahdia_59:
(Start: 75 @41385 has 13 MA's), (89, 41445), (101, 41508), (115, 41562), (124, 41598), (144, 41685),
(146, 41691), (155, 41718), (166, 41757), (171, 41775),

Gene: Manuel_58 Start: 31424, Stop: 31080, Start Num: 73
Candidate Starts for Manuel_58:
(53, 31490), (59, 31466), (Start: 73 @31424 has 23 MA's), (113, 31232), (135, 31184), (146, 31139),
(147, 31133),

Gene: Milomuff_37 Start: 25521, Stop: 25847, Start Num: 81
Candidate Starts for Milomuff_37:
(Start: 81 @25521 has 50 MA's), (135, 25752), (144, 25788), (146, 25794),

Gene: MiniMommy_39 Start: 26738, Stop: 27181, Start Num: 74
Candidate Starts for MiniMommy_39:
(Start: 74 @26738 has 79 MA's), (97, 26837), (146, 27041), (156, 27071),

Gene: MissSwiss_35 Start: 24190, Stop: 24540, Start Num: 74
Candidate Starts for MissSwiss_35:
(23, 23998), (25, 24022), (29, 24052), (45, 24094), (Start: 74 @24190 has 79 MA's), (97, 24274), (135,
24436), (146, 24478), (147, 24484),

Gene: Mollymur_72 Start: 52998, Stop: 52633, Start Num: 72
Candidate Starts for Mollymur_72:
(52, 53064), (61, 53028), (Start: 72 @52998 has 9 MA's), (145, 52701), (146, 52698),

Gene: Morrissey_62 Start: 43281, Stop: 43685, Start Num: 75
Candidate Starts for Morrissey_62:
(33, 43155), (Start: 75 @43281 has 13 MA's), (88, 43338), (124, 43494), (131, 43524), (144, 43581),
(145, 43584), (146, 43587), (155, 43614), (157, 43623), (166, 43653),

Gene: Moss_35 Start: 24158, Stop: 24592, Start Num: 74
Candidate Starts for Moss_35:
(42, 24050), (44, 24062), (51, 24086), (Start: 74 @24158 has 79 MA's), (145, 24458),

Gene: MsUbiquitous_38 Start: 25806, Stop: 26132, Start Num: 81
Candidate Starts for MsUbiquitous_38:
(Start: 81 @25806 has 50 MA's), (135, 26037), (140, 26058), (144, 26073),

Gene: Mudpuppy_34 Start: 24965, Stop: 25408, Start Num: 74
Candidate Starts for Mudpuppy_34:
(19, 24752), (Start: 74 @24965 has 79 MA's), (97, 25064), (132, 25217), (146, 25268),

Gene: Mysterium_35 Start: 24178, Stop: 24612, Start Num: 74
Candidate Starts for Mysterium_35:
(Start: 74 @24178 has 79 MA's), (145, 24478),

Gene: Nesbitt_39 Start: 26358, Stop: 26897, Start Num: 55
Candidate Starts for Nesbitt_39:

(31, 26283), (Start: 55 @26358 has 4 MA's), (79, 26427), (94, 26493), (102, 26541), (116, 26601), (121, 26613), (132, 26661), (134, 26667), (139, 26691), (142, 26712), (148, 26736), (160, 26769), (173, 26841), (176, 26877),

Gene: Nicky22_38 Start: 26183, Stop: 26509, Start Num: 81

Candidate Starts for Nicky22_38:

(Start: 81 @26183 has 50 MA's), (140, 26435), (144, 26450),

Gene: Niobe_35 Start: 26862, Stop: 27212, Start Num: 74

Candidate Starts for Niobe_35:

(Start: 74 @26862 has 79 MA's), (86, 26907), (97, 26946), (110, 27000), (132, 27099), (146, 27150),

Gene: Nitro_36 Start: 26582, Stop: 26929, Start Num: 74

Candidate Starts for Nitro_36:

(Start: 74 @26582 has 79 MA's), (86, 26627), (97, 26666), (110, 26720), (135, 26828), (146, 26870),

Gene: ObiToo_40 Start: 26129, Stop: 26491, Start Num: 74

Candidate Starts for ObiToo_40:

(Start: 74 @26129 has 79 MA's), (110, 26267), (135, 26375), (146, 26417),

Gene: Olicious_61 Start: 31665, Stop: 31324, Start Num: 73

Candidate Starts for Olicious_61:

(Start: 73 @31665 has 23 MA's), (129, 31440), (135, 31425), (143, 31389), (146, 31380),

Gene: Origami_42 Start: 26772, Stop: 27203, Start Num: 74

Candidate Starts for Origami_42:

(Start: 74 @26772 has 79 MA's), (132, 27024),

Gene: PastaFagioli_36 Start: 25674, Stop: 26000, Start Num: 81

Candidate Starts for PastaFagioli_36:

(Start: 81 @25674 has 50 MA's), (135, 25905), (146, 25947),

Gene: Pecas_37 Start: 25718, Stop: 26044, Start Num: 81

Candidate Starts for Pecas_37:

(Start: 81 @25718 has 50 MA's), (140, 25970), (144, 25985),

Gene: Percastrophe_61 Start: 31599, Stop: 31258, Start Num: 73

Candidate Starts for Percastrophe_61:

(Start: 73 @31599 has 23 MA's), (129, 31374), (135, 31359), (143, 31323), (146, 31314),

Gene: Percival_46 Start: 28994, Stop: 29350, Start Num: 74

Candidate Starts for Percival_46:

(Start: 74 @28994 has 79 MA's), (85, 29039), (99, 29096), (146, 29285), (158, 29327),

Gene: PhigPhack_38 Start: 25544, Stop: 25870, Start Num: 81

Candidate Starts for PhigPhack_38:

(Start: 81 @25544 has 50 MA's), (105, 25652), (135, 25775), (144, 25811), (146, 25817),

Gene: Phisb_38 Start: 25777, Stop: 26103, Start Num: 81

Candidate Starts for Phisb_38:

(Start: 81 @25777 has 50 MA's), (105, 25885), (135, 26008), (144, 26044), (146, 26050),

Gene: Phives_38 Start: 27302, Stop: 27745, Start Num: 74

Candidate Starts for Phives_38:

(39, 27194), (41, 27197), (43, 27206), (Start: 74 @27302 has 79 MA's), (132, 27554), (135, 27563), (146, 27605), (155, 27632), (165, 27668),

Gene: Pixelle_35 Start: 26837, Stop: 27184, Start Num: 74

Candidate Starts for Pixelle_35:

(Start: 74 @26837 has 79 MA's), (97, 26921), (135, 27083), (146, 27125),

Gene: PondAmelia_48 Start: 26644, Stop: 26970, Start Num: 81

Candidate Starts for PondAmelia_48:

(Start: 81 @26644 has 50 MA's), (109, 26764), (111, 26770), (120, 26812), (135, 26875), (140, 26896), (144, 26911), (146, 26917),

Gene: Powerpuff_37 Start: 26303, Stop: 26746, Start Num: 74

Candidate Starts for Powerpuff_37:

(Start: 74 @26303 has 79 MA's), (132, 26555), (146, 26606),

Gene: Pumpkins_36 Start: 26180, Stop: 26539, Start Num: 73

Candidate Starts for Pumpkins_36:

(32, 26060), (Start: 73 @26180 has 23 MA's), (110, 26318), (146, 26468),

Gene: Puppies_60 Start: 41273, Stop: 41683, Start Num: 75

Candidate Starts for Puppies_60:

(Start: 75 @41273 has 13 MA's), (82, 41294), (108, 41426), (119, 41468), (121, 41477), (144, 41582), (146, 41588),

Gene: QMacho_39 Start: 26201, Stop: 26527, Start Num: 81

Candidate Starts for QMacho_39:

(Start: 81 @26201 has 50 MA's), (140, 26453), (144, 26468),

Gene: Quenya_36 Start: 25890, Stop: 26219, Start Num: 80

Candidate Starts for Quenya_36:

(8, 25413), (14, 25524), (17, 25566), (Start: 80 @25890 has 20 MA's), (100, 25977), (110, 26013), (111, 26016), (140, 26142), (144, 26157), (146, 26163),

Gene: REQ3_19 Start: 8920, Stop: 9282, Start Num: 72

Candidate Starts for REQ3_19:

(Start: 72 @8920 has 9 MA's), (85, 8965), (109, 9061), (111, 9067), (112, 9073), (132, 9157), (146, 9211), (167, 9262), (171, 9274),

Gene: Reedo_35 Start: 24148, Stop: 24591, Start Num: 74

Candidate Starts for Reedo_35:

(Start: 74 @24148 has 79 MA's), (86, 24193), (97, 24247), (132, 24400), (135, 24409), (146, 24451), (147, 24457), (155, 24478),

Gene: Rideau_63 Start: 31621, Stop: 31352, Start Num: 94

Candidate Starts for Rideau_63:

(53, 31768), (58, 31744), (59, 31741), (71, 31702), (94, 31621), (135, 31465), (145, 31423), (151, 31402),

Gene: RockScotty_35 Start: 24176, Stop: 24610, Start Num: 74

Candidate Starts for RockScotty_35:

(42, 24068), (44, 24080), (51, 24104), (Start: 74 @24176 has 79 MA's), (145, 24476),

Gene: Rollins_34 Start: 23702, Stop: 24043, Start Num: 80
Candidate Starts for Rollins_34:
(Start: 80 @23702 has 20 MA's), (102, 23795), (146, 23975),

Gene: Romero_61 Start: 31658, Stop: 31317, Start Num: 73
Candidate Starts for Romero_61:
(Start: 73 @31658 has 23 MA's), (129, 31433), (135, 31418), (143, 31382), (146, 31373),

Gene: Rona_35 Start: 26210, Stop: 26542, Start Num: 80
Candidate Starts for Rona_35:
(3, 25613), (7, 25721), (Start: 80 @26210 has 20 MA's), (105, 26321), (109, 26333), (111, 26339),
(121, 26387), (135, 26444), (144, 26480), (146, 26486),

Gene: RosePharie_61 Start: 31485, Stop: 31126, Start Num: 73
Candidate Starts for RosePharie_61:
(53, 31551), (Start: 73 @31485 has 23 MA's), (113, 31293), (135, 31245),

Gene: Sabourin_35 Start: 24066, Stop: 24500, Start Num: 74
Candidate Starts for Sabourin_35:
(44, 23970), (51, 23994), (Start: 74 @24066 has 79 MA's), (95, 24153), (145, 24366),

Gene: Samy_60 Start: 37282, Stop: 37698, Start Num: 65
Candidate Starts for Samy_60:
(Start: 65 @37282 has 1 MA's), (98, 37390), (104, 37414), (134, 37534), (135, 37537), (137, 37549),
(145, 37576), (147, 37585), (155, 37606), (159, 37624),

Gene: SanaSana_40 Start: 27314, Stop: 27640, Start Num: 81
Candidate Starts for SanaSana_40:
(Start: 81 @27314 has 50 MA's), (111, 27440), (135, 27545), (140, 27566), (144, 27581), (146, 27587),

Gene: SansAfet_38 Start: 25631, Stop: 25957, Start Num: 81
Candidate Starts for SansAfet_38:
(Start: 81 @25631 has 50 MA's), (135, 25862), (144, 25898), (146, 25904),

Gene: SarBear_37 Start: 25498, Stop: 25824, Start Num: 81
Candidate Starts for SarBear_37:
(Start: 81 @25498 has 50 MA's), (140, 25750), (144, 25765),

Gene: Schaffner_36 Start: 26410, Stop: 26769, Start Num: 73
Candidate Starts for Schaffner_36:
(Start: 73 @26410 has 23 MA's), (97, 26494), (110, 26548), (127, 26623), (146, 26698),

Gene: Schmidt_51 Start: 34772, Stop: 35146, Start Num: 75
Candidate Starts for Schmidt_51:
(Start: 75 @34772 has 13 MA's), (79, 34784), (102, 34901), (109, 34928), (111, 34934), (134, 35030),
(143, 35072), (149, 35096),

Gene: ShakeltOph_40 Start: 26737, Stop: 27180, Start Num: 74
Candidate Starts for ShakeltOph_40:
(Start: 74 @26737 has 79 MA's), (97, 26836), (146, 27040), (156, 27070),

Gene: Sharkboy_36 Start: 26309, Stop: 26641, Start Num: 80

Candidate Starts for Sharkboy_36:

(Start: 80 @26309 has 20 MA's), (105, 26420), (109, 26432), (111, 26438), (121, 26486), (135, 26543), (146, 26585),

Gene: Simpson_37 Start: 25218, Stop: 25661, Start Num: 74

Candidate Starts for Simpson_37:

(Start: 74 @25218 has 79 MA's), (97, 25317), (132, 25470), (146, 25521),

Gene: SirBeanington_37 Start: 25819, Stop: 26145, Start Num: 81

Candidate Starts for SirBeanington_37:

(Start: 81 @25819 has 50 MA's), (110, 25942), (140, 26071), (144, 26086),

Gene: Skelbel_36 Start: 26862, Stop: 27212, Start Num: 74

Candidate Starts for Skelbel_36:

(Start: 74 @26862 has 79 MA's), (86, 26907), (97, 26946), (110, 27000), (132, 27099), (146, 27150),

Gene: Skylord_34 Start: 23633, Stop: 23974, Start Num: 80

Candidate Starts for Skylord_34:

(Start: 80 @23633 has 20 MA's), (102, 23726), (146, 23906),

Gene: Slay_38 Start: 26179, Stop: 26505, Start Num: 81

Candidate Starts for Slay_38:

(Start: 81 @26179 has 50 MA's), (140, 26431), (144, 26446),

Gene: Snek_35 Start: 24475, Stop: 24915, Start Num: 74

Candidate Starts for Snek_35:

(23, 24304), (25, 24328), (29, 24358), (45, 24400), (Start: 74 @24475 has 79 MA's), (86, 24520), (132, 24727), (146, 24778), (163, 24835),

Gene: Softsoap_37 Start: 25542, Stop: 25868, Start Num: 81

Candidate Starts for Softsoap_37:

(Start: 81 @25542 has 50 MA's), (135, 25773), (146, 25815),

Gene: Solea_38 Start: 25521, Stop: 25847, Start Num: 81

Candidate Starts for Solea_38:

(Start: 81 @25521 has 50 MA's), (135, 25752), (144, 25788), (146, 25794),

Gene: Soondubu_33 Start: 27354, Stop: 27797, Start Num: 74

Candidate Starts for Soondubu_33:

(10, 26925), (24, 27192), (36, 27246), (Start: 74 @27354 has 79 MA's), (135, 27615), (146, 27657), (147, 27663), (153, 27681), (157, 27693),

Gene: Sooty_35 Start: 24081, Stop: 24515, Start Num: 74

Candidate Starts for Sooty_35:

(44, 23985), (51, 24009), (Start: 74 @24081 has 79 MA's), (95, 24168), (145, 24381),

Gene: SpecialK_35 Start: 24066, Stop: 24500, Start Num: 74

Candidate Starts for SpecialK_35:

(Start: 74 @24066 has 79 MA's), (145, 24366),

Gene: SpeedDemon_740 Start: 54721, Stop: 54356, Start Num: 72

Candidate Starts for SpeedDemon_740:

(61, 54751), (Start: 72 @54721 has 9 MA's), (145, 54424), (164, 54376),

Gene: Stella_63 Start: 32170, Stop: 31820, Start Num: 73
Candidate Starts for Stella_63:
(63, 32194), (Start: 73 @32170 has 23 MA's), (126, 31954), (129, 31948), (143, 31897), (146, 31888),
(151, 31870),

Gene: Stoor_38 Start: 26983, Stop: 27309, Start Num: 81
Candidate Starts for Stoor_38:
(5, 26470), (6, 26488), (9, 26524), (13, 26593), (Start: 81 @26983 has 50 MA's), (109, 27103), (111,
27109), (120, 27151), (135, 27214), (140, 27235), (144, 27250), (146, 27256),

Gene: Stromboli_38 Start: 26847, Stop: 27173, Start Num: 81
Candidate Starts for Stromboli_38:
(1, 26094), (5, 26334), (6, 26352), (9, 26388), (13, 26457), (Start: 81 @26847 has 50 MA's), (109,
26967), (111, 26973), (135, 27078), (140, 27099), (144, 27114), (146, 27120),

Gene: Stuu_35 Start: 24178, Stop: 24612, Start Num: 74
Candidate Starts for Stuu_35:
(Start: 74 @24178 has 79 MA's), (145, 24478),

Gene: SuMoo_46 Start: 28468, Stop: 28815, Start Num: 74
Candidate Starts for SuMoo_46:
(46, 28372), (67, 28456), (Start: 74 @28468 has 79 MA's), (129, 28690), (135, 28717), (146, 28759),

Gene: Subaru_36 Start: 26877, Stop: 27227, Start Num: 74
Candidate Starts for Subaru_36:
(Start: 50 @26808 has 1 MA's), (Start: 74 @26877 has 79 MA's), (86, 26922), (97, 26961), (110,
27015), (132, 27114), (135, 27123), (146, 27165),

Gene: Sue2_36 Start: 26239, Stop: 26682, Start Num: 74
Candidate Starts for Sue2_36:
(Start: 74 @26239 has 79 MA's), (110, 26392), (140, 26521), (146, 26542), (147, 26548),

Gene: SuperHands_45 Start: 29494, Stop: 29850, Start Num: 74
Candidate Starts for SuperHands_45:
(Start: 74 @29494 has 79 MA's), (85, 29539), (99, 29596), (146, 29785), (158, 29827),

Gene: Swervy_38 Start: 25698, Stop: 26024, Start Num: 81
Candidate Starts for Swervy_38:
(Start: 81 @25698 has 50 MA's), (140, 25950), (144, 25965),

Gene: Tallboi_36 Start: 27029, Stop: 27379, Start Num: 74
Candidate Starts for Tallboi_36:
(31, 26903), (Start: 74 @27029 has 79 MA's), (86, 27074), (135, 27275), (146, 27317),

Gene: Tbone_34 Start: 25013, Stop: 25456, Start Num: 74
Candidate Starts for Tbone_34:
(19, 24791), (Start: 74 @25013 has 79 MA's), (97, 25112), (132, 25265), (146, 25316),

Gene: Teagster_38 Start: 25820, Stop: 26179, Start Num: 78
Candidate Starts for Teagster_38:
(Start: 78 @25820 has 1 MA's), (90, 25874), (109, 25949), (140, 26081), (144, 26096), (146, 26102),

Gene: TforTroy_37 Start: 26052, Stop: 26408, Start Num: 73

Candidate Starts for TforTroy_37:

(32, 25932), (Start: 73 @26052 has 23 MA's), (146, 26340),

Gene: ThursdayNight_39 Start: 26870, Stop: 27295, Start Num: 74

Candidate Starts for ThursdayNight_39:

(35, 26753), (Start: 74 @26870 has 79 MA's), (97, 26969), (132, 27122), (146, 27173), (156, 27203),

Gene: Tian_35 Start: 26817, Stop: 27164, Start Num: 74

Candidate Starts for Tian_35:

(Start: 74 @26817 has 79 MA's), (97, 26901), (135, 27063), (146, 27105),

Gene: TinaLin_56 Start: 36975, Stop: 37346, Start Num: 77

Candidate Starts for TinaLin_56:

(Start: 75 @36972 has 13 MA's), (Start: 77 @36975 has 1 MA's), (79, 36984), (102, 37101), (134, 37230), (149, 37296),

Gene: TinyDot_60 Start: 38014, Stop: 38394, Start Num: 75

Candidate Starts for TinyDot_60:

(11, 37603), (18, 37699), (Start: 75 @38014 has 13 MA's), (79, 38026), (90, 38077), (97, 38119), (152, 38338), (154, 38341), (164, 38374),

Gene: ToriToki_61 Start: 31661, Stop: 31320, Start Num: 73

Candidate Starts for ToriToki_61:

(Start: 73 @31661 has 23 MA's), (129, 31436), (135, 31421), (143, 31385), (146, 31376),

Gene: Towmatter_63 Start: 48560, Stop: 48171, Start Num: 75

Candidate Starts for Towmatter_63:

(Start: 75 @48560 has 13 MA's), (97, 48455), (134, 48287), (141, 48251), (146, 48236), (155, 48212),

Gene: Treat_61 Start: 31602, Stop: 31261, Start Num: 73

Candidate Starts for Treat_61:

(Start: 73 @31602 has 23 MA's), (129, 31377), (135, 31362), (143, 31326), (146, 31317),

Gene: Trine_64 Start: 42629, Stop: 43021, Start Num: 76

Candidate Starts for Trine_64:

(15, 42272), (16, 42302), (20, 42380), (Start: 76 @42629 has 1 MA's), (112, 42797), (117, 42815), (131, 42872), (144, 42929), (145, 42932), (146, 42935), (155, 42962),

Gene: Tuck_39 Start: 27855, Stop: 28298, Start Num: 74

Candidate Starts for Tuck_39:

(Start: 74 @27855 has 79 MA's), (132, 28107), (135, 28116), (146, 28158), (155, 28185), (165, 28221),

Gene: TukTuk_38 Start: 25769, Stop: 26095, Start Num: 81

Candidate Starts for TukTuk_38:

(Start: 81 @25769 has 50 MA's), (105, 25877), (135, 26000), (144, 26036), (146, 26042),

Gene: Turab_34 Start: 25291, Stop: 25641, Start Num: 74

Candidate Starts for Turab_34:

(23, 25111), (29, 25165), (Start: 74 @25291 has 79 MA's), (86, 25336), (97, 25375), (135, 25537), (146, 25579),

Gene: Tutumahutu_35 Start: 25185, Stop: 25628, Start Num: 74

Candidate Starts for Tutumahutu_35:
(Start: 74 @25185 has 79 MA's), (97, 25284), (132, 25437), (146, 25488),

Gene: Tweety19_35 Start: 24474, Stop: 24914, Start Num: 74
Candidate Starts for Tweety19_35:
(23, 24303), (25, 24327), (29, 24357), (45, 24399), (Start: 74 @24474 has 79 MA's), (86, 24519), (132, 24726), (146, 24777), (163, 24834),

Gene: Upyo_68 Start: 44581, Stop: 44982, Start Num: 75
Candidate Starts for Upyo_68:
(28, 44440), (Start: 75 @44581 has 13 MA's), (115, 44758), (124, 44794), (125, 44797), (144, 44881), (146, 44887), (155, 44914), (157, 44923), (168, 44959), (169, 44968),

Gene: UtzChips_43 Start: 27442, Stop: 27804, Start Num: 74
Candidate Starts for UtzChips_43:
(49, 27361), (Start: 74 @27442 has 79 MA's), (127, 27658), (146, 27733),

Gene: VResidence_36 Start: 25348, Stop: 25791, Start Num: 74
Candidate Starts for VResidence_36:
(Start: 74 @25348 has 79 MA's), (132, 25600), (135, 25609), (146, 25651), (147, 25657), (156, 25681), (173, 25768),

Gene: Vitas_34 Start: 23642, Stop: 23983, Start Num: 80
Candidate Starts for Vitas_34:
(Start: 80 @23642 has 20 MA's), (102, 23735), (146, 23915),

Gene: Vorvolakos_59 Start: 31137, Stop: 30781, Start Num: 73
Candidate Starts for Vorvolakos_59:
(Start: 73 @31137 has 23 MA's), (103, 31002), (113, 30945), (135, 30897),

Gene: VroomVroom_40 Start: 26879, Stop: 27325, Start Num: 74
Candidate Starts for VroomVroom_40:
(40, 26771), (67, 26867), (Start: 74 @26879 has 79 MA's), (97, 26978), (146, 27182), (172, 27275),

Gene: WRightOn_63 Start: 31279, Stop: 30929, Start Num: 73
Candidate Starts for WRightOn_63:
(53, 31345), (59, 31321), (Start: 73 @31279 has 23 MA's), (113, 31087), (135, 31039),

Gene: WalkingDead_39 Start: 27238, Stop: 27564, Start Num: 81
Candidate Starts for WalkingDead_39:
(Start: 81 @27238 has 50 MA's), (111, 27364), (120, 27406), (132, 27460), (135, 27469), (140, 27490), (144, 27505), (146, 27511),

Gene: Warda_35 Start: 25189, Stop: 25632, Start Num: 74
Candidate Starts for Warda_35:
(19, 24967), (Start: 74 @25189 has 79 MA's), (97, 25288), (132, 25441), (146, 25492),

Gene: Widow_60 Start: 41819, Stop: 42229, Start Num: 75
Candidate Starts for Widow_60:
(Start: 75 @41819 has 13 MA's), (108, 41972), (119, 42014), (121, 42023), (144, 42128), (146, 42134),

Gene: Wildwest_35 Start: 25377, Stop: 25820, Start Num: 74
Candidate Starts for Wildwest_35:

(23, 25194), (25, 25218), (29, 25248), (Start: 74 @25377 has 79 MA's), (132, 25629), (135, 25638), (146, 25680), (147, 25686), (165, 25743), (174, 25800),

Gene: Yang_36 Start: 25545, Stop: 25904, Start Num: 73

Candidate Starts for Yang_36:

(Start: 73 @25545 has 23 MA's), (110, 25683), (127, 25758), (146, 25833),

Gene: YesChef_35 Start: 25162, Stop: 25605, Start Num: 74

Candidate Starts for YesChef_35:

(Start: 74 @25162 has 79 MA's), (132, 25414), (146, 25465),

Gene: Zeigle_59 Start: 31123, Stop: 30773, Start Num: 73

Candidate Starts for Zeigle_59:

(53, 31189), (59, 31165), (Start: 73 @31123 has 23 MA's), (113, 30931), (135, 30883),

Gene: ZooBear_61 Start: 31665, Stop: 31324, Start Num: 73

Candidate Starts for ZooBear_61:

(Start: 73 @31665 has 23 MA's), (129, 31440), (135, 31425), (143, 31389), (146, 31380),

Gene: phiSASD1_10 Start: 25051, Stop: 25515, Start Num: 55

Candidate Starts for phiSASD1_10:

(Start: 55 @25051 has 4 MA's), (116, 25246), (121, 25258), (132, 25306), (133, 25309), (142, 25351), (152, 25384),