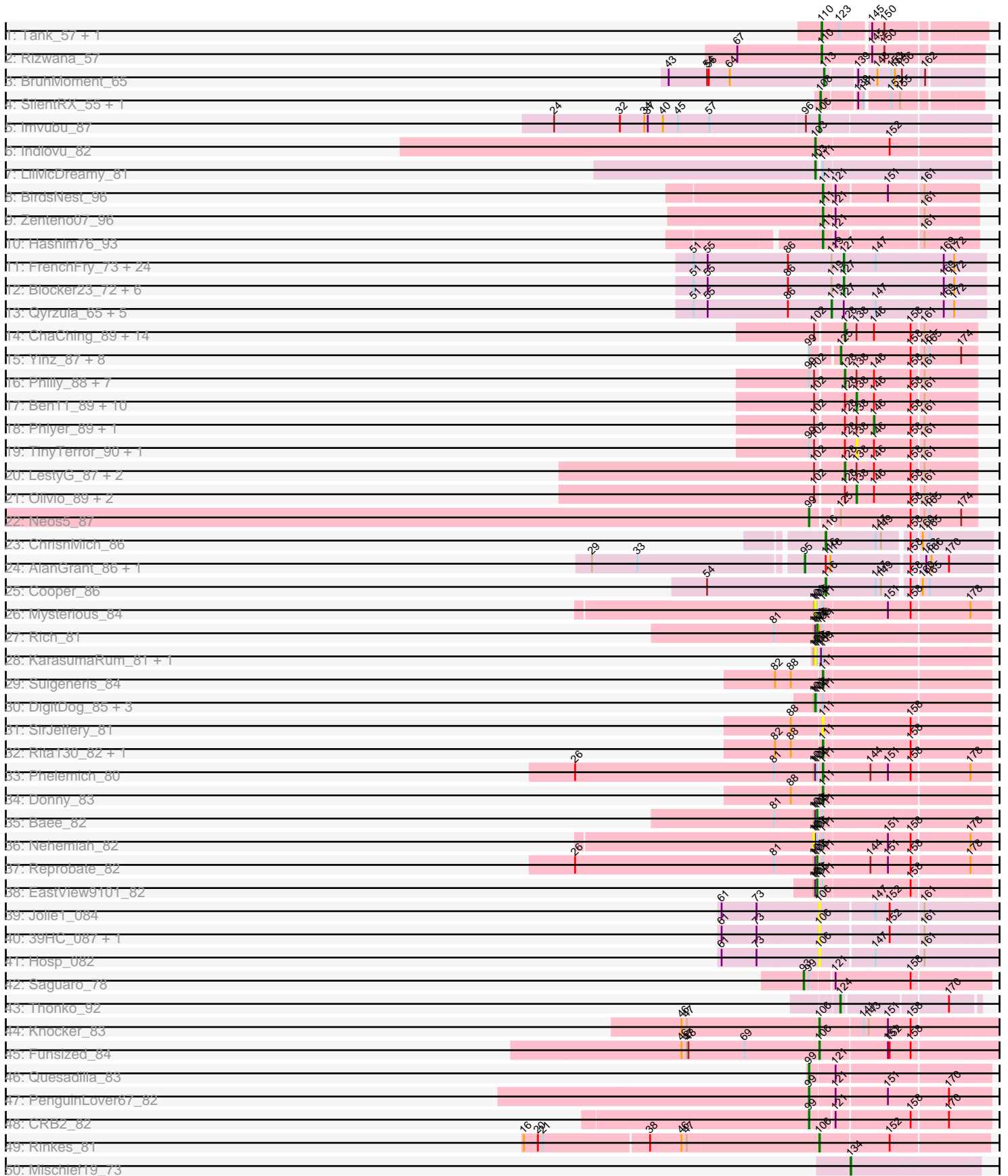
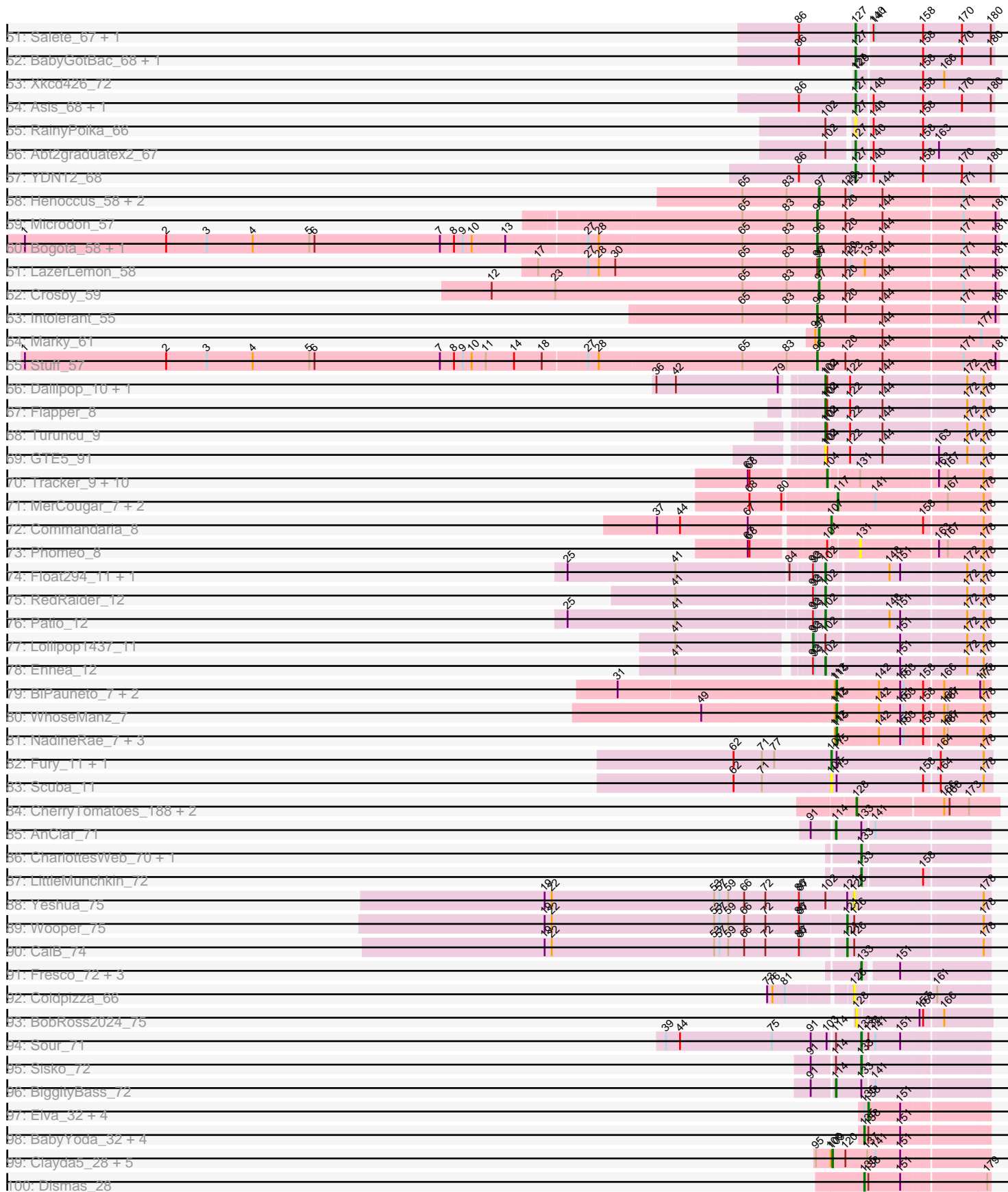


Pham 224258



Pham 224258



Pham 224258



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 224258 Report

This analysis was run 03/28/25 on database version 593.

Pham number 224258 has 250 members, 39 are drafts.

Phages represented in each track:

- Track 1 : Tank_57, Wilde_59
- Track 2 : Rizwana_57
- Track 3 : BruhMoment_65
- Track 4 : SilentRX_55, AWGoat_53
- Track 5 : Imvubu_87
- Track 6 : Indlovu_82
- Track 7 : LilMcDreamy_81
- Track 8 : BirdsNest_96
- Track 9 : Zenteno07_96
- Track 10 : Hashim76_93
- Track 11 : FrenchFry_73, Rhinoforte_72, Ares_72, Tinciduntolum_73, Lars_73, Allegro_72, Sabella_72, Kheth_72, Kolhan_73, Faze9_71, Lephleur_72, Godines_73, Glass_74, Eaglehorse_72, Brownie5_72, Boyle_72, Calamitous_73, LizLemon_72, Rosebush_70, Kaleb_73, MasterPo_73, Coffee_72, Laurie_73, LilSmirk_72, Phantasmagoria_71
- Track 12 : Blocker23_72, Bananafish_73, ItsyBitsy1_70, Holeinone_72, PrinceCharming_73, Tres_72, West99_72
- Track 13 : Qyrzula_65, TA17A_75, Hedgerow_72, Opia_73, Arbiter_69, Vic9_00072
- Track 14 : ChaChing_89, Gervas_90, RagingRooster_88, Corofin_89, SynergyX_89, GlenHope_90, Audrey_89, Briakila_89, Baloo_88, Devonte_87, Deenasa_89, Yahalom_87, OrangeOswald_88, MmasiCarm_90, RomaT_89
- Track 15 : Yinz_87, HarveySr_86, Marley1013_88, Gadget_87, Glubnar_88, Morty007_86, Bernardo_87, SwainyDoc_89, Phayeta_92
- Track 16 : Philly_88, Compostia_88, Kronus_89, Casbah_89, Rita1961_90, Halfpint_88, Nozo_89, Jackstina_83
- Track 17 : Ben11_89, Heathcliff_89, Akoma_89, SlippinJimmy_92, Chandler_89, Chentzyk_91, Daisy_88, Phaedrus_84, Chalmers_88, Kamiyu_89, Shenandoah_88
- Track 18 : Phlyer_89, Athena_91
- Track 19 : TinyTerror_90, Marlia_90
- Track 20 : LestyG_87, Obutu_91, Abinghost_89
- Track 21 : Olivio_89, Mortcellus_89, Tydolla_85
- Track 22 : Neos5_87
- Track 23 : ChrisnMich_86
- Track 24 : AlanGrant_86, Vincenzo_85
- Track 25 : Cooper_86
- Track 26 : Mysterious_84
- Track 27 : Rich_81

- Track 28 : KarasumaRum_81, StinkyVeggy_81
- Track 29 : Suigeneris_84
- Track 30 : DigitDog_85, Serendipitous_83, Nangang_84, Shenyu_84
- Track 31 : SirJeffery_81
- Track 32 : Rita130_82, Acadian_83
- Track 33 : Phelemich_80
- Track 34 : Donny_83
- Track 35 : Bae_82
- Track 36 : Nehemiah_82
- Track 37 : Reprobate_82
- Track 38 : EastView9101_82
- Track 39 : Jolie1_084
- Track 40 : 39HC_087, 40BC_087
- Track 41 : Hosp_082
- Track 42 : Saguaro_78
- Track 43 : Thonko_92
- Track 44 : Knocker_83
- Track 45 : Funsized_84
- Track 46 : Quesadilla_83
- Track 47 : PenguinLover67_82
- Track 48 : CRB2_82
- Track 49 : Rinkes_81
- Track 50 : Mischief19_73
- Track 51 : Salete_67, BayC_67
- Track 52 : BabyGotBac_68, TP1604_67
- Track 53 : Xkcd426_72
- Track 54 : Asis_68, Maih_66
- Track 55 : RainyPolka_66
- Track 56 : Abt2graduatex2_67
- Track 57 : YDN12_68
- Track 58 : Henoccus_58, JackieB_58, Araceli_57
- Track 59 : Microdon_57
- Track 60 : Bogota_58, UNTPL_59
- Track 61 : LazerLemon_58
- Track 62 : Crosby_59
- Track 63 : Intolerant_55
- Track 64 : Marky_61
- Track 65 : Stuff_57
- Track 66 : Dalilpop_10, GRU1_92
- Track 67 : Flapper_8
- Track 68 : Turuncu_9
- Track 69 : GTE5_91
- Track 70 : Tracker_9, KidneyBean_9, GrootJr_11, NovumRegina_9, Arti_9, Wheezy_9, Kurt_9, NatB6_9, Foxboro_9, Emianna_9, Jifall16_8
- Track 71 : MerCougar_7, StarStruck_7, Outis_7
- Track 72 : Commandaria_8
- Track 73 : Phomeo_8
- Track 74 : Float294_11, Skysand_11
- Track 75 : RedRaider_12
- Track 76 : Patio_12
- Track 77 : Lollipop1437_11
- Track 78 : Ennea_12
- Track 79 : BiPauneto_7, Yndexa_7, Sukkupi_7

- Track 80 : WhoseManz_7
- Track 81 : NadineRae_7, HubbaBubba_7, IDyn_8, Marietta_7
- Track 82 : Fury_11, Pleakley_11
- Track 83 : Scuba_11
- Track 84 : CherryTomatoes_188, SCentae_185, Pupper_186
- Track 85 : AnClar_71
- Track 86 : CharlottesWeb_70, Mariokart_70
- Track 87 : LittleMunchkin_72
- Track 88 : Yeshua_75
- Track 89 : Wooper_75
- Track 90 : CaiB_74
- Track 91 : Fresco_72, Ligma_72, Axumite_72, Shatter_72
- Track 92 : Coldpizza_66
- Track 93 : BobRoss2024_75
- Track 94 : Sour_71
- Track 95 : Sisko_72
- Track 96 : BiggityBass_72
- Track 97 : Elva_32, Icarian_34, Stoor_32, WalkingDead_32, Stromboli_32
- Track 98 : BabyYoda_32, Loviatar_56, SanaSana_34, DirtyBubble_31, Akino08_58
- Track 99 : Clayda5_28, Coltrane_27, Rollins_27, Bernstein_27, Brahms_27, Armstrong_27
- Track 100 : Dismas_28
- Track 101 : Eden_27
- Track 102 : AvGardian_33
- Track 103 : Rona_28, Kieran_28
- Track 104 : BAjuniper_29
- Track 105 : Sharkboy_29
- Track 106 : FlameThrower_28, Katzastrophic_28, Celaena_28, Bachaco_28
- Track 107 : Franklin22_28
- Track 108 : Gack_27
- Track 109 : Quenya_29
- Track 110 : Vitas_27
- Track 111 : Skylord_27
- Track 112 : Magritte_85

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

The start number called the most often in the published annotations is 127, it was called in 37 of the 211 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abt2graduatex2_67, Allegro_72, Ares_72, Asis_68, BabyGotBac_68, Bananafish_73, BayC_67, Blocker23_72, Boyle_72, Brownie5_72, Calamitous_73, Coffee_72, Eaglehorse_72, Faze9_71, FrenchFry_73, Glass_74, Godines_73, Holeinone_72, ItsyBitsy1_70, Kaleb_73, Kheth_72, Kolhan_73, Lars_73, Laurie_73, Lephleur_72, LilSmirk_72, LizLemon_72, Maih_66, MasterPo_73, Phantasmagoria_71, PrinceCharming_73, RainyPolka_66, Rhinoforte_72, Rosebush_70, Sabella_72, Salete_67, TP1604_67, Tinciduntolum_73, Tres_72, West99_72, Xkcd426_72, YDN12_68,

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

- Arbiter_69, Hedgerow_72, Opia_73, Qyrzula_65, TA17A_75, Vic9_00072,

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

- 39HC_087, 40BC_087, AWGoat_53, Abinghost_89, Acadian_83, Akino08_58, Akoma_89, AlanGrant_86, AnClar_71, Araceli_57, Armstrong_27, Arti_9, Athena_91, Audrey_89, AvGardian_33, Axumite_72, BAjuniper_29, BabyYoda_32, Bachaco_28, Bae_82, Baloo_88, Ben11_89, Bernardo_87, Bernstein_27, BiPauneto_7, BiggityBass_72, BirdsNest_96, BobRoss2024_75, Bogota_58, Brahms_27, Briakila_89, BruhMoment_65, CRB2_82, CaiB_74, Casbah_89, Celaena_28, ChaChing_89, Chalmers_88, Chandler_89, CharlottesWeb_70, Chentzyk_91, CherryTomatoes_188, ChrisnMich_86, Clayda5_28, Coldpizza_66, Coltrane_27, Commandaria_8, Compostia_88, Cooper_86, Corofin_89, Crosby_59, Daisy_88, Dalilpop_10, Deenasa_89, Devonte_87, DigitDog_85, DirtyBubble_31, Dismas_28, Donny_83, EastView9101_82, Eden_27, Elva_32, Emianna_9, Ennea_12, FlameThrower_28, Flapper_8, Float294_11, Foxboro_9, Franklin22_28, Fresco_72, Funsized_84, Fury_11, GRU1_92, GTE5_91, Gack_27, Gadget_87, Gervas_90, GlenHope_90, Glubnar_88, GrootJr_11, Halfpint_88, HarveySr_86, Hashim76_93, Heathcliff_89, Henoccus_58, Hosp_082, HubbaBubba_7, IDyn_8, Icarian_34, Imvubu_87, Indlovu_82, Intolerant_55, JackieB_58, Jackstina_83, Jifall16_8, Jolie1_084, Kamiyu_89, KarasumaRum_81, Katzastrophic_28, KidneyBean_9, Kieran_28, Knocker_83, Kronus_89, Kurt_9, LazerLemon_58, LestyG_87, Ligma_72, LilMcDreamy_81, LittleMunchkin_72, Lollipop1437_11, Loviatar_56, Magritte_85, Marietta_7, Mariokart_70, Marky_61, Marley1013_88, Marlia_90, MerCougar_7, Microdon_57, Mischief19_73, MmasiCarm_90, Mortcellus_89, Morty007_86, Mysterious_84, NadineRae_7, Nangang_84, NatB6_9, Nehemiah_82, Neos5_87, NovumRegina_9, Nozo_89, Obutu_91, Olivio_89, OrangeOswald_88, Outis_7, Patio_12, PenguinLover67_82, Phaedrus_84, Phayeta_92, Phelemich_80, Philly_88, Phlyer_89, Phomeo_8, Pleakley_11, Pupper_186, Quenya_29, Quesadilla_83, RagingRooster_88, RedRaider_12, Reprobate_82, Rich_81, Rinkes_81, Rita130_82, Rita1961_90, Rizwana_57, Rollins_27, RomaT_89, Rona_28, SCentae_185, Saguaro_78, SanaSana_34, Scuba_11, Serendipitous_83, Sharkboy_29, Shatter_72, Shenandoah_88, Shenyu_84, SilentRX_55, SirJeffery_81, Sisko_72, Skylord_27, Skysand_11, SlippinJimmy_92, Sour_71, StarStruck_7, StinkyVeggy_81, Stoor_32, Stromboli_32, Stuff_57, Suigeneris_84, Sukkupi_7, SwainyDoc_89, SynergyX_89, Tank_57, Thonko_92, TinyTerror_90, Tracker_9, Turuncu_9, Tydolla_85, UNTPL_59, Vincenzo_85, Vitas_27, WalkingDead_32, Wheezy_9, WhoseManz_7, Wilde_59, Wooper_75, Yahalom_87, Yeshua_75, Yinz_87, Yndexa_7, Zenteno07_96,

Summary by start number:

Start 92:

- Found in 6 of 250 (2.4%) of genes in pham
- Manual Annotations of this start: 1 of 211
- Called 16.7% of time when present
- Phage (with cluster) where this start called: Lollipop1437_11 (CR3),

Start 93:

- Found in 7 of 250 (2.8%) of genes in pham
- Manual Annotations of this start: 1 of 211
- Called 14.3% of time when present
- Phage (with cluster) where this start called: Saguaro_78 (B7),

Start 95:

- Found in 10 of 250 (4.0%) of genes in pham
- Manual Annotations of this start: 3 of 211
- Called 30.0% of time when present
- Phage (with cluster) where this start called: AlanGrant_86 (B4), Vincenzo_85 (B4), Vitas_27 (EB),

Start 96:

- Found in 7 of 250 (2.8%) of genes in pham
- Manual Annotations of this start: 5 of 211
- Called 71.4% of time when present
- Phage (with cluster) where this start called: Bogota_58 (BH), Intolerant_55 (BH), Microdon_57 (BH), Stuff_57 (BH), UNTPL_59 (BH),

Start 97:

- Found in 6 of 250 (2.4%) of genes in pham
- Manual Annotations of this start: 6 of 211
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Araceli_57 (BH), Crosby_59 (BH), Henoccus_58 (BH), JackieB_58 (BH), LazerLemon_58 (BH), Marky_61 (BH),

Start 99:

- Found in 24 of 250 (9.6%) of genes in pham
- Manual Annotations of this start: 4 of 211
- Called 16.7% of time when present
- Phage (with cluster) where this start called: CRB2_82 (B9), Neos5_87 (B3), PenguinLover67_82 (B9), Quesadilla_83 (B9),

Start 101:

- Found in 13 of 250 (5.2%) of genes in pham
- No Manual Annotations of this start.
- Called 7.7% of time when present
- Phage (with cluster) where this start called: Nehemiah_82 (B5),

Start 102:

- Found in 58 of 250 (23.2%) of genes in pham
- Manual Annotations of this start: 8 of 211
- Called 17.2% of time when present
- Phage (with cluster) where this start called: Dalilpop_10 (CR1), Ennea_12 (CR3), Flapper_8 (CR1), Float294_11 (CR3), GRU1_92 (CR1), GTE5_91 (CR1), Patio_12 (CR3), RedRaider_12 (CR3), Skysand_11 (CR3), Turuncu_9 (CR1),

Start 103:

- Found in 16 of 250 (6.4%) of genes in pham
- Manual Annotations of this start: 3 of 211
- Called 56.2% of time when present
- Phage (with cluster) where this start called: DigitDog_85 (B5), Indlovu_82 (B11), KarasumaRum_81 (B5), LilMcDreamy_81 (B12), Mysterious_84 (B5), Nangang_84 (B5), Serendipitous_83 (B5), Shenyu_84 (B5), StinkyVeggy_81 (B5),

Start 104:

- Found in 17 of 250 (6.8%) of genes in pham
- Manual Annotations of this start: 11 of 211

- Called 64.7% of time when present
- Phage (with cluster) where this start called: Arti_9 (CR2), Emianna_9 (CR2), Foxboro_9 (CR2), GrootJr_11 (CR2), Jifall16_8 (CR2), KidneyBean_9 (CR2), Kurt_9 (CR2), NatB6_9 (CR2), NovumRegina_9 (CR2), Tracker_9 (CR2), Wheezy_9 (CR2),

Start 105:

- Found in 13 of 250 (5.2%) of genes in pham
- Manual Annotations of this start: 4 of 211
- Called 30.8% of time when present
- Phage (with cluster) where this start called: Bae_82 (B5), EastView9101_82 (B5), Reprobate_82 (B5), Rich_81 (B5),

Start 106:

- Found in 17 of 250 (6.8%) of genes in pham
- Manual Annotations of this start: 4 of 211
- Called 47.1% of time when present
- Phage (with cluster) where this start called: 39HC_087 (B6), 40BC_087 (B6), Funsized_84 (B9), Hosp_082 (B6), Imvubu_87 (B10), Jolie1_084 (B6), Knocker_83 (B9), Rinkes_81 (B9),

Start 107:

- Found in 4 of 250 (1.6%) of genes in pham
- Manual Annotations of this start: 3 of 211
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Commandaria_8 (CR2), Fury_11 (CR5), Pleakley_11 (CR5), Scuba_11 (CR5),

Start 108:

- Found in 2 of 250 (0.8%) of genes in pham
- Manual Annotations of this start: 2 of 211
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AWGoat_53 (AP4), SilentRX_55 (AP4),

Start 109:

- Found in 10 of 250 (4.0%) of genes in pham
- Manual Annotations of this start: 6 of 211
- Called 60.0% of time when present
- Phage (with cluster) where this start called: Armstrong_27 (EB), Bernstein_27 (EB), Brahms_27 (EB), Clayda5_28 (EB), Coltrane_27 (EB), Rollins_27 (EB),

Start 110:

- Found in 3 of 250 (1.2%) of genes in pham
- Manual Annotations of this start: 3 of 211
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Rizwana_57 (AP1), Tank_57 (AP1), Wilde_59 (AP1),

Start 111:

- Found in 22 of 250 (8.8%) of genes in pham
- Manual Annotations of this start: 7 of 211
- Called 40.9% of time when present
- Phage (with cluster) where this start called: Acadian_83 (B5), BirdsNest_96 (B13), Donny_83 (B5), Hashim76_93 (B13), Phelemich_80 (B5), Rita130_82 (B5),

SirJeffery_81 (B5), Suigeneris_84 (B5), Zenteno07_96 (B13),

Start 113:

- Found in 1 of 250 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 211
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BruhMoment_65 (AP3),

Start 114:

- Found in 4 of 250 (1.6%) of genes in pham
- Manual Annotations of this start: 2 of 211
- Called 50.0% of time when present
- Phage (with cluster) where this start called: AnClar_71 (DR), BiggityBass_72 (DR),

Start 115:

- Found in 11 of 250 (4.4%) of genes in pham
- Manual Annotations of this start: 8 of 211
- Called 72.7% of time when present
- Phage (with cluster) where this start called: BiPauneto_7 (CR4), HubbaBubba_7 (CR4), IDyn_8 (CR4), Marietta_7 (CR4), NadineRae_7 (CR4), Sukkupi_7 (CR4), WhoseManz_7 (CR4), Yndexa_7 (CR4),

Start 116:

- Found in 4 of 250 (1.6%) of genes in pham
- Manual Annotations of this start: 2 of 211
- Called 50.0% of time when present
- Phage (with cluster) where this start called: ChrisnMich_86 (B4), Cooper_86 (B4),

Start 117:

- Found in 3 of 250 (1.2%) of genes in pham
- Manual Annotations of this start: 3 of 211
- Called 100.0% of time when present
- Phage (with cluster) where this start called: MerCougar_7 (CR2), Outis_7 (CR2), StarStruck_7 (CR2),

Start 119:

- Found in 39 of 250 (15.6%) of genes in pham
- Manual Annotations of this start: 6 of 211
- Called 15.4% of time when present
- Phage (with cluster) where this start called: Arbitr_69 (B2), Hedgerow_72 (B2), Opia_73 (B2), Qyrzula_65 (B2), TA17A_75 (B2), Vic9_00072 (B2),

Start 121:

- Found in 10 of 250 (4.0%) of genes in pham
- Manual Annotations of this start: 2 of 211
- Called 20.0% of time when present
- Phage (with cluster) where this start called: CaiB_74 (DR), Wooper_75 (DR),

Start 124:

- Found in 1 of 250 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 211
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Thonko_92 (B8),

Start 125:

- Found in 10 of 250 (4.0%) of genes in pham
- Manual Annotations of this start: 7 of 211
- Called 90.0% of time when present
- Phage (with cluster) where this start called: Bernardo_87 (B3), Gadget_87 (B3), Glubnar_88 (B3), HarveySr_86 (B3), Marley1013_88 (B3), Morty007_86 (B3), Phayeta_92 (B3), SwainyDoc_89 (B3), Yinz_87 (B3),

Start 126:

- Found in 4 of 250 (1.6%) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Coldpizza_66 (DR), Yeshua_75 (DR),

Start 127:

- Found in 48 of 250 (19.2%) of genes in pham
- Manual Annotations of this start: 37 of 211
- Called 87.5% of time when present
- Phage (with cluster) where this start called: Abt2graduatex2_67 (BG), Allegro_72 (B2), Ares_72 (B2), Asis_68 (BG), BabyGotBac_68 (BG), Bananafish_73 (B2), BayC_67 (BG), Blocker23_72 (B2), Boyle_72 (B2), Brownie5_72 (B2), Calamitous_73 (B2), Coffee_72 (B2), Eaglehorse_72 (B2), Faze9_71 (B2), FrenchFry_73 (B2), Glass_74 (B2), Godines_73 (B2), Holeinone_72 (B2), ItsyBitsy1_70 (B2), Kaleb_73 (B2), Kheth_72 (B2), Kolhan_73 (B2), Lars_73 (B2), Laurie_73 (B2), Lephleur_72 (B2), LilSmirk_72 (B2), LizLemon_72 (B2), Maih_66 (BG), MasterPo_73 (B2), Phantasmagoria_71 (B2), PrinceCharming_73 (B2), RainyPolka_66 (BG), Rhinoforte_72 (B2), Rosebush_70 (B2), Sabella_72 (B2), Salete_67 (BG), TP1604_67 (BG), Tinciduntolum_73 (B2), Tres_72 (B2), West99_72 (B2), Xkcd426_72 (BG), YDN12_68 (BG),

Start 128:

- Found in 48 of 250 (19.2%) of genes in pham
- Manual Annotations of this start: 29 of 211
- Called 62.5% of time when present
- Phage (with cluster) where this start called: Abinghost_89 (B3), Audrey_89 (B3), Baloo_88 (B3), BobRoss2024_75 (DR), Briakila_89 (B3), Casbah_89 (B3), ChaChing_89 (B3), CherryTomatoes_188 (DO), Compostia_88 (B3), Corofin_89 (B3), Deenasa_89 (B3), Devonte_87 (B3), Gervas_90 (B3), GlenHope_90 (B3), Halfpint_88 (B3), Jackstina_83 (B3), Kronus_89 (B3), LestyG_87 (B3), MmasiCarm_90 (B3), Nozo_89 (B3), Obutu_91 (B3), OrangeOswald_88 (B3), Philly_88 (B3), Pupper_186 (DO), RagingRooster_88 (B3), Rita1961_90 (B3), RomaT_89 (B3), SCentae_185 (DO), SynergyX_89 (B3), Yahalom_87 (B3),

Start 130:

- Found in 1 of 250 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 211
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Magritte_85 (singleton),

Start 131:

- Found in 12 of 250 (4.8%) of genes in pham
- No Manual Annotations of this start.

- Called 8.3% of time when present
- Phage (with cluster) where this start called: Phomeo_8 (CR2),

Start 133:

- Found in 11 of 250 (4.4%) of genes in pham
- Manual Annotations of this start: 8 of 211
- Called 81.8% of time when present
- Phage (with cluster) where this start called: Axumite_72 (DR), CharlottesWeb_70 (DR), Fresco_72 (DR), Ligma_72 (DR), LittleMunchkin_72 (DR), Mariokart_70 (DR), Shatter_72 (DR), Sisko_72 (DR), Sour_71 (DR),

Start 134:

- Found in 1 of 250 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 211
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Mischief19_73 (BG),

Start 135:

- Found in 21 of 250 (8.4%) of genes in pham
- Manual Annotations of this start: 11 of 211
- Called 61.9% of time when present
- Phage (with cluster) where this start called: Akino08_58 (EB), AvGardian_33 (EB), BabyYoda_32 (EB), Bachaco_28 (EB), Celaena_28 (EB), DirtyBubble_31 (EB), Dismas_28 (EB), FlameThrower_28 (EB), Katzastrophic_28 (EB), Loviatar_56 (EB), Quenya_29 (EB), SanaSana_34 (EB), Sharkboy_29 (EB),

Start 137:

- Found in 8 of 250 (3.2%) of genes in pham
- Manual Annotations of this start: 1 of 211
- Called 12.5% of time when present
- Phage (with cluster) where this start called: Skylord_27 (EB),

Start 138:

- Found in 65 of 250 (26.0%) of genes in pham
- Manual Annotations of this start: 18 of 211
- Called 41.5% of time when present
- Phage (with cluster) where this start called: Akoma_89 (B3), BAjuniper_29 (EB), Ben11_89 (B3), Chalmers_88 (B3), Chandler_89 (B3), Chentzyk_91 (B3), Daisy_88 (B3), Eden_27 (EB), Elva_32 (EB), Franklin22_28 (EB), Gack_27 (EB), Heathcliff_89 (B3), Icarian_34 (EB), Kamiyu_89 (B3), Kieran_28 (EB), Marlia_90 (B3), Mortcellus_89 (B3), Olivio_89 (B3), Phaedrus_84 (B3), Rona_28 (EB), Shenandoah_88 (B3), SlippinJimmy_92 (B3), Stoor_32 (EB), Stromboli_32 (EB), TinyTerror_90 (B3), Tydolla_85 (B3), WalkingDead_32 (EB),

Start 146:

- Found in 44 of 250 (17.6%) of genes in pham
- Manual Annotations of this start: 2 of 211
- Called 4.5% of time when present
- Phage (with cluster) where this start called: Athena_91 (B3), Phlyer_89 (B3),

Summary by clusters:

There are 26 clusters represented in this pham: DO, singleton, BG, AP3, AP1, BH, AP4, B12, B13, B10, B11, DR, EB, CR2, CR3, CR1, CR4, CR5, B4, B5, B6, B7, B2, B3, B8, B9,

Info for manual annotations of cluster AP1:

- Start number 110 was manually annotated 3 times for cluster AP1.

Info for manual annotations of cluster AP3:

- Start number 113 was manually annotated 1 time for cluster AP3.

Info for manual annotations of cluster AP4:

- Start number 108 was manually annotated 2 times for cluster AP4.

Info for manual annotations of cluster B10:

- Start number 106 was manually annotated 1 time for cluster B10.

Info for manual annotations of cluster B11:

- Start number 103 was manually annotated 1 time for cluster B11.

Info for manual annotations of cluster B12:

- Start number 103 was manually annotated 1 time for cluster B12.

Info for manual annotations of cluster B13:

- Start number 111 was manually annotated 3 times for cluster B13.

Info for manual annotations of cluster B2:

- Start number 119 was manually annotated 6 times for cluster B2.
- Start number 127 was manually annotated 28 times for cluster B2.

Info for manual annotations of cluster B3:

- Start number 99 was manually annotated 1 time for cluster B3.
- Start number 125 was manually annotated 7 times for cluster B3.
- Start number 128 was manually annotated 26 times for cluster B3.
- Start number 138 was manually annotated 8 times for cluster B3.
- Start number 146 was manually annotated 2 times for cluster B3.

Info for manual annotations of cluster B4:

- Start number 95 was manually annotated 2 times for cluster B4.
- Start number 116 was manually annotated 2 times for cluster B4.

Info for manual annotations of cluster B5:

- Start number 103 was manually annotated 1 time for cluster B5.
- Start number 105 was manually annotated 4 times for cluster B5.
- Start number 111 was manually annotated 4 times for cluster B5.

Info for manual annotations of cluster B7:

- Start number 93 was manually annotated 1 time for cluster B7.

Info for manual annotations of cluster B8:

- Start number 124 was manually annotated 1 time for cluster B8.

Info for manual annotations of cluster B9:

- Start number 99 was manually annotated 3 times for cluster B9.
- Start number 106 was manually annotated 3 times for cluster B9.

Info for manual annotations of cluster BG:

- Start number 127 was manually annotated 9 times for cluster BG.
- Start number 134 was manually annotated 1 time for cluster BG.

Info for manual annotations of cluster BH:

- Start number 96 was manually annotated 5 times for cluster BH.
- Start number 97 was manually annotated 6 times for cluster BH.

Info for manual annotations of cluster CR1:

- Start number 102 was manually annotated 3 times for cluster CR1.

Info for manual annotations of cluster CR2:

- Start number 104 was manually annotated 11 times for cluster CR2.
- Start number 107 was manually annotated 1 time for cluster CR2.
- Start number 117 was manually annotated 3 times for cluster CR2.

Info for manual annotations of cluster CR3:

- Start number 92 was manually annotated 1 time for cluster CR3.
- Start number 102 was manually annotated 5 times for cluster CR3.

Info for manual annotations of cluster CR4:

- Start number 115 was manually annotated 8 times for cluster CR4.

Info for manual annotations of cluster CR5:

- Start number 107 was manually annotated 2 times for cluster CR5.

Info for manual annotations of cluster DO:

- Start number 128 was manually annotated 3 times for cluster DO.

Info for manual annotations of cluster DR:

- Start number 114 was manually annotated 2 times for cluster DR.
- Start number 121 was manually annotated 2 times for cluster DR.
- Start number 133 was manually annotated 8 times for cluster DR.

Info for manual annotations of cluster EB:

- Start number 95 was manually annotated 1 time for cluster EB.
- Start number 109 was manually annotated 6 times for cluster EB.
- Start number 135 was manually annotated 11 times for cluster EB.
- Start number 137 was manually annotated 1 time for cluster EB.
- Start number 138 was manually annotated 10 times for cluster EB.

Gene Information:

Gene: 39HC_087 Start: 65341, Stop: 65051, Start Num: 106

Candidate Starts for 39HC_087:

(61, 65503), (73, 65443), (Start: 106 @65341 has 4 MA's), (152, 65233), (161, 65179),

Gene: 40BC_087 Start: 65341, Stop: 65051, Start Num: 106

Candidate Starts for 40BC_087:
(61, 65503), (73, 65443), (Start: 106 @65341 has 4 MA's), (152, 65233), (161, 65179),

Gene: AWGoat_53 Start: 40310, Stop: 40074, Start Num: 108
Candidate Starts for AWGoat_53:
(Start: 108 @40310 has 2 MA's), (139, 40259), (141, 40250), (153, 40211), (155, 40196),

Gene: Abinghost_89 Start: 63262, Stop: 63050, Start Num: 128
Candidate Starts for Abinghost_89:
(Start: 102 @63307 has 8 MA's), (Start: 128 @63262 has 29 MA's), (Start: 138 @63244 has 18 MA's),
(Start: 146 @63214 has 2 MA's), (158, 63157), (161, 63139),

Gene: Abt2graduatex2_67 Start: 52651, Stop: 52863, Start Num: 127
Candidate Starts for Abt2graduatex2_67:
(Start: 102 @52615 has 8 MA's), (Start: 127 @52651 has 37 MA's), (140, 52675), (158, 52753), (163,
52774),

Gene: Acadian_83 Start: 63798, Stop: 63526, Start Num: 111
Candidate Starts for Acadian_83:
(82, 63873), (88, 63846), (Start: 111 @63798 has 7 MA's), (158, 63657),

Gene: Akino08_58 Start: 24821, Stop: 24624, Start Num: 135
Candidate Starts for Akino08_58:
(Start: 135 @24821 has 11 MA's), (Start: 138 @24815 has 18 MA's), (151, 24761),

Gene: Akoma_89 Start: 63284, Stop: 63090, Start Num: 138
Candidate Starts for Akoma_89:
(Start: 102 @63347 has 8 MA's), (Start: 128 @63302 has 29 MA's), (Start: 138 @63284 has 18 MA's),
(Start: 146 @63254 has 2 MA's), (158, 63197), (161, 63179),

Gene: AlanGrant_86 Start: 66429, Stop: 66130, Start Num: 95
Candidate Starts for AlanGrant_86:
(29, 66777), (33, 66699), (Start: 95 @66429 has 3 MA's), (Start: 116 @66393 has 2 MA's), (118,
66387), (158, 66264), (163, 66243), (166, 66234), (170, 66204),

Gene: Allegro_72 Start: 59331, Stop: 59107, Start Num: 127
Candidate Starts for Allegro_72:
(51, 59589), (55, 59565), (86, 59427), (Start: 119 @59352 has 6 MA's), (Start: 127 @59331 has 37
MA's), (147, 59277), (169, 59172), (172, 59157),

Gene: AnClar_71 Start: 57138, Stop: 56902, Start Num: 114
Candidate Starts for AnClar_71:
(91, 57174), (Start: 114 @57138 has 2 MA's), (Start: 133 @57102 has 8 MA's), (141, 57084),

Gene: Araceli_57 Start: 42438, Stop: 42737, Start Num: 97
Candidate Starts for Araceli_57:
(65, 42309), (83, 42384), (Start: 97 @42438 has 6 MA's), (120, 42483), (123, 42492), (144, 42546),
(171, 42678),

Gene: Arbiter_69 Start: 59393, Stop: 59148, Start Num: 119
Candidate Starts for Arbiter_69:
(51, 59630), (55, 59606), (86, 59468), (Start: 119 @59393 has 6 MA's), (Start: 127 @59372 has 37
MA's), (147, 59318), (169, 59213), (172, 59198),

Gene: Ares_72 Start: 59337, Stop: 59113, Start Num: 127

Candidate Starts for Ares_72:

(51, 59595), (55, 59571), (86, 59433), (Start: 119 @59358 has 6 MA's), (Start: 127 @59337 has 37 MA's), (147, 59283), (169, 59178), (172, 59163),

Gene: Armstrong_27 Start: 20896, Stop: 20648, Start Num: 109

Candidate Starts for Armstrong_27:

(Start: 95 @20923 has 3 MA's), (Start: 106 @20899 has 4 MA's), (Start: 109 @20896 has 6 MA's), (120, 20875), (Start: 137 @20839 has 1 MA's), (141, 20827), (151, 20785),

Gene: Arti_9 Start: 5743, Stop: 5994, Start Num: 104

Candidate Starts for Arti_9:

(67, 5623), (68, 5626), (Start: 104 @5743 has 11 MA's), (131, 5791), (163, 5905), (167, 5920), (178, 5980),

Gene: Asis_68 Start: 52546, Stop: 52758, Start Num: 127

Candidate Starts for Asis_68:

(86, 52453), (Start: 127 @52546 has 37 MA's), (140, 52570), (158, 52648), (170, 52708), (180, 52753),

Gene: Athena_91 Start: 63989, Stop: 63825, Start Num: 146

Candidate Starts for Athena_91:

(Start: 102 @64082 has 8 MA's), (Start: 128 @64037 has 29 MA's), (Start: 138 @64019 has 18 MA's), (Start: 146 @63989 has 2 MA's), (158, 63932), (161, 63914),

Gene: Audrey_89 Start: 63291, Stop: 63079, Start Num: 128

Candidate Starts for Audrey_89:

(Start: 102 @63336 has 8 MA's), (Start: 128 @63291 has 29 MA's), (Start: 138 @63273 has 18 MA's), (Start: 146 @63243 has 2 MA's), (158, 63186), (161, 63168),

Gene: AvGardian_33 Start: 23504, Stop: 23307, Start Num: 135

Candidate Starts for AvGardian_33:

(Start: 135 @23504 has 11 MA's), (Start: 138 @23498 has 18 MA's), (151, 23444), (157, 23420),

Gene: Axumite_72 Start: 54547, Stop: 54353, Start Num: 133

Candidate Starts for Axumite_72:

(Start: 133 @54547 has 8 MA's), (151, 54493),

Gene: BAjuniper_29 Start: 23728, Stop: 23537, Start Num: 138

Candidate Starts for BAjuniper_29:

(Start: 135 @23734 has 11 MA's), (Start: 138 @23728 has 18 MA's), (151, 23674), (157, 23650), (165, 23617),

Gene: BabyGotBac_68 Start: 52472, Stop: 52684, Start Num: 127

Candidate Starts for BabyGotBac_68:

(86, 52379), (Start: 127 @52472 has 37 MA's), (158, 52574), (170, 52634), (180, 52679),

Gene: BabyYoda_32 Start: 24023, Stop: 23826, Start Num: 135

Candidate Starts for BabyYoda_32:

(Start: 135 @24023 has 11 MA's), (Start: 138 @24017 has 18 MA's), (151, 23963),

Gene: Bachaco_28 Start: 23946, Stop: 23749, Start Num: 135

Candidate Starts for Bachaco_28:

(Start: 135 @23946 has 11 MA's), (151, 23886), (165, 23829), (174, 23775),

Gene: Bae_82 Start: 64440, Stop: 64162, Start Num: 105

Candidate Starts for Bae_82:

(81, 64512), (101, 64446), (Start: 103 @64443 has 3 MA's), (Start: 105 @64440 has 4 MA's), (Start: 111 @64434 has 7 MA's),

Gene: Baloo_88 Start: 63143, Stop: 62931, Start Num: 128

Candidate Starts for Baloo_88:

(Start: 102 @63188 has 8 MA's), (Start: 128 @63143 has 29 MA's), (Start: 138 @63125 has 18 MA's), (Start: 146 @63095 has 2 MA's), (158, 63038), (161, 63020),

Gene: Bananafish_73 Start: 59267, Stop: 59043, Start Num: 127

Candidate Starts for Bananafish_73:

(51, 59525), (55, 59501), (86, 59363), (Start: 119 @59288 has 6 MA's), (Start: 127 @59267 has 37 MA's), (169, 59108), (172, 59093),

Gene: BayC_67 Start: 52550, Stop: 52762, Start Num: 127

Candidate Starts for BayC_67:

(86, 52457), (Start: 127 @52550 has 37 MA's), (140, 52574), (141, 52577), (158, 52652), (170, 52712), (180, 52757),

Gene: Ben11_89 Start: 63500, Stop: 63306, Start Num: 138

Candidate Starts for Ben11_89:

(Start: 102 @63563 has 8 MA's), (Start: 128 @63518 has 29 MA's), (Start: 138 @63500 has 18 MA's), (Start: 146 @63470 has 2 MA's), (158, 63413), (161, 63395),

Gene: Bernardo_87 Start: 62697, Stop: 62485, Start Num: 125

Candidate Starts for Bernardo_87:

(Start: 99 @62736 has 4 MA's), (Start: 125 @62697 has 7 MA's), (158, 62592), (161, 62574), (165, 62565), (174, 62511),

Gene: Bernstein_27 Start: 20951, Stop: 20703, Start Num: 109

Candidate Starts for Bernstein_27:

(Start: 95 @20978 has 3 MA's), (Start: 106 @20954 has 4 MA's), (Start: 109 @20951 has 6 MA's), (120, 20930), (Start: 137 @20894 has 1 MA's), (141, 20882), (151, 20840),

Gene: BiPauneto_7 Start: 3671, Stop: 3916, Start Num: 115

Candidate Starts for BiPauneto_7:

(31, 3311), (112, 3668), (Start: 115 @3671 has 8 MA's), (142, 3737), (151, 3773), (153, 3779), (158, 3809), (166, 3839), (175, 3899), (178, 3905),

Gene: BiggityBass_72 Start: 56910, Stop: 56674, Start Num: 114

Candidate Starts for BiggityBass_72:

(91, 56946), (Start: 114 @56910 has 2 MA's), (Start: 133 @56874 has 8 MA's), (141, 56856),

Gene: BirdsNest_96 Start: 67441, Stop: 67193, Start Num: 111

Candidate Starts for BirdsNest_96:

(Start: 111 @67441 has 7 MA's), (Start: 121 @67423 has 2 MA's), (151, 67339), (161, 67285),

Gene: Blocker23_72 Start: 59332, Stop: 59108, Start Num: 127

Candidate Starts for Blocker23_72:

(51, 59590), (55, 59566), (86, 59428), (Start: 119 @59353 has 6 MA's), (Start: 127 @59332 has 37 MA's), (169, 59173), (172, 59158),

Gene: BobRoss2024_75 Start: 55799, Stop: 55587, Start Num: 128

Candidate Starts for BobRoss2024_75:

(Start: 128 @55799 has 29 MA's), (157, 55703), (158, 55697), (166, 55667),

Gene: Bogota_58 Start: 42749, Stop: 43051, Start Num: 96

Candidate Starts for Bogota_58:

(1, 41420), (2, 41660), (3, 41729), (4, 41807), (5, 41903), (6, 41912), (7, 42125), (8, 42149), (9, 42164), (10, 42179), (13, 42236), (27, 42365), (28, 42383), (65, 42623), (83, 42698), (Start: 96 @42749 has 5 MA's), (120, 42797), (144, 42860), (171, 42992), (181, 43046),

Gene: Boyle_72 Start: 59376, Stop: 59152, Start Num: 127

Candidate Starts for Boyle_72:

(51, 59634), (55, 59610), (86, 59472), (Start: 119 @59397 has 6 MA's), (Start: 127 @59376 has 37 MA's), (147, 59322), (169, 59217), (172, 59202),

Gene: Brahms_27 Start: 20898, Stop: 20650, Start Num: 109

Candidate Starts for Brahms_27:

(Start: 95 @20925 has 3 MA's), (Start: 106 @20901 has 4 MA's), (Start: 109 @20898 has 6 MA's), (120, 20877), (Start: 137 @20841 has 1 MA's), (141, 20829), (151, 20787),

Gene: Briakila_89 Start: 63489, Stop: 63277, Start Num: 128

Candidate Starts for Briakila_89:

(Start: 102 @63534 has 8 MA's), (Start: 128 @63489 has 29 MA's), (Start: 138 @63471 has 18 MA's), (Start: 146 @63441 has 2 MA's), (158, 63384), (161, 63366),

Gene: Brownie5_72 Start: 59377, Stop: 59153, Start Num: 127

Candidate Starts for Brownie5_72:

(51, 59635), (55, 59611), (86, 59473), (Start: 119 @59398 has 6 MA's), (Start: 127 @59377 has 37 MA's), (147, 59323), (169, 59218), (172, 59203),

Gene: BruhMoment_65 Start: 44738, Stop: 44514, Start Num: 113

Candidate Starts for BruhMoment_65:

(43, 45002), (54, 44936), (56, 44933), (64, 44897), (Start: 113 @44738 has 1 MA's), (139, 44693), (148, 44669), (153, 44648), (154, 44642), (156, 44630), (162, 44600),

Gene: CRB2_82 Start: 65913, Stop: 65626, Start Num: 99

Candidate Starts for CRB2_82:

(Start: 99 @65913 has 4 MA's), (Start: 121 @65877 has 2 MA's), (158, 65757), (170, 65697),

Gene: CaiB_74 Start: 56451, Stop: 56221, Start Num: 121

Candidate Starts for CaiB_74:

(19, 56955), (22, 56943), (53, 56667), (57, 56658), (59, 56643), (66, 56616), (72, 56580), (86, 56523), (87, 56520), (Start: 121 @56451 has 2 MA's), (126, 56439), (178, 56232),

Gene: Calamitous_73 Start: 59266, Stop: 59042, Start Num: 127

Candidate Starts for Calamitous_73:

(51, 59524), (55, 59500), (86, 59362), (Start: 119 @59287 has 6 MA's), (Start: 127 @59266 has 37 MA's), (147, 59212), (169, 59107), (172, 59092),

Gene: Casbah_89 Start: 63602, Stop: 63390, Start Num: 128

Candidate Starts for Casbah_89:

(Start: 99 @63656 has 4 MA's), (Start: 102 @63647 has 8 MA's), (Start: 128 @63602 has 29 MA's),
(Start: 138 @63584 has 18 MA's), (Start: 146 @63554 has 2 MA's), (158, 63497), (161, 63479),

Gene: Celaena_28 Start: 23631, Stop: 23434, Start Num: 135

Candidate Starts for Celaena_28:

(Start: 135 @23631 has 11 MA's), (151, 23571), (165, 23514), (174, 23460),

Gene: ChaChing_89 Start: 63304, Stop: 63092, Start Num: 128

Candidate Starts for ChaChing_89:

(Start: 102 @63349 has 8 MA's), (Start: 128 @63304 has 29 MA's), (Start: 138 @63286 has 18 MA's),
(Start: 146 @63256 has 2 MA's), (158, 63199), (161, 63181),

Gene: Chalmers_88 Start: 63719, Stop: 63525, Start Num: 138

Candidate Starts for Chalmers_88:

(Start: 102 @63782 has 8 MA's), (Start: 128 @63737 has 29 MA's), (Start: 138 @63719 has 18 MA's),
(Start: 146 @63689 has 2 MA's), (158, 63632), (161, 63614),

Gene: Chandler_89 Start: 64060, Stop: 63866, Start Num: 138

Candidate Starts for Chandler_89:

(Start: 102 @64123 has 8 MA's), (Start: 128 @64078 has 29 MA's), (Start: 138 @64060 has 18 MA's),
(Start: 146 @64030 has 2 MA's), (158, 63973), (161, 63955),

Gene: CharlottesWeb_70 Start: 53821, Stop: 53621, Start Num: 133

Candidate Starts for CharlottesWeb_70:

(Start: 133 @53821 has 8 MA's),

Gene: Chentzyk_91 Start: 64218, Stop: 64024, Start Num: 138

Candidate Starts for Chentzyk_91:

(Start: 102 @64281 has 8 MA's), (Start: 128 @64236 has 29 MA's), (Start: 138 @64218 has 18 MA's),
(Start: 146 @64188 has 2 MA's), (158, 64131), (161, 64113),

Gene: CherryTomatoes_188 Start: 133666, Stop: 133899, Start Num: 128

Candidate Starts for CherryTomatoes_188:

(Start: 128 @133666 has 29 MA's), (166, 133807), (168, 133816), (173, 133849),

Gene: ChrisnMich_86 Start: 64491, Stop: 64228, Start Num: 116

Candidate Starts for ChrisnMich_86:

(Start: 116 @64491 has 2 MA's), (147, 64410), (149, 64401), (158, 64362), (160, 64347), (165, 64335),

Gene: Clayda5_28 Start: 20885, Stop: 20637, Start Num: 109

Candidate Starts for Clayda5_28:

(Start: 95 @20912 has 3 MA's), (Start: 106 @20888 has 4 MA's), (Start: 109 @20885 has 6 MA's),
(120, 20864), (Start: 137 @20828 has 1 MA's), (141, 20816), (151, 20774),

Gene: Coffee_72 Start: 59370, Stop: 59146, Start Num: 127

Candidate Starts for Coffee_72:

(51, 59628), (55, 59604), (86, 59466), (Start: 119 @59391 has 6 MA's), (Start: 127 @59370 has 37
MA's), (147, 59316), (169, 59211), (172, 59196),

Gene: Coldpizza_66 Start: 54844, Stop: 54632, Start Num: 126

Candidate Starts for Coldpizza_66:

(73, 54964), (76, 54955), (81, 54934), (126, 54844), (161, 54721),

Gene: Coltrane_27 Start: 20898, Stop: 20650, Start Num: 109

Candidate Starts for Coltrane_27:

(Start: 95 @20925 has 3 MA's), (Start: 106 @20901 has 4 MA's), (Start: 109 @20898 has 6 MA's), (120, 20877), (Start: 137 @20841 has 1 MA's), (141, 20829), (151, 20787),

Gene: Commandaria_8 Start: 4772, Stop: 5020, Start Num: 107

Candidate Starts for Commandaria_8:

(37, 4496), (44, 4535), (67, 4649), (Start: 107 @4772 has 3 MA's), (158, 4913), (178, 5009),

Gene: Compostia_88 Start: 63744, Stop: 63532, Start Num: 128

Candidate Starts for Compostia_88:

(Start: 99 @63798 has 4 MA's), (Start: 102 @63789 has 8 MA's), (Start: 128 @63744 has 29 MA's), (Start: 138 @63726 has 18 MA's), (Start: 146 @63696 has 2 MA's), (158, 63639), (161, 63621),

Gene: Cooper_86 Start: 64991, Stop: 64728, Start Num: 116

Candidate Starts for Cooper_86:

(54, 65192), (Start: 116 @64991 has 2 MA's), (147, 64910), (149, 64901), (158, 64862), (160, 64847), (165, 64835),

Gene: Corofin_89 Start: 63313, Stop: 63101, Start Num: 128

Candidate Starts for Corofin_89:

(Start: 102 @63358 has 8 MA's), (Start: 128 @63313 has 29 MA's), (Start: 138 @63295 has 18 MA's), (Start: 146 @63265 has 2 MA's), (158, 63208), (161, 63190),

Gene: Crosby_59 Start: 42804, Stop: 43103, Start Num: 97

Candidate Starts for Crosby_59:

(12, 42252), (23, 42360), (65, 42675), (83, 42750), (Start: 97 @42804 has 6 MA's), (120, 42849), (144, 42912), (171, 43044), (181, 43098),

Gene: Daisy_88 Start: 62846, Stop: 62652, Start Num: 138

Candidate Starts for Daisy_88:

(Start: 102 @62909 has 8 MA's), (Start: 128 @62864 has 29 MA's), (Start: 138 @62846 has 18 MA's), (Start: 146 @62816 has 2 MA's), (158, 62759), (161, 62741),

Gene: Dalilpop_10 Start: 5833, Stop: 6087, Start Num: 102

Candidate Starts for Dalilpop_10:

(36, 5575), (42, 5608), (79, 5776), (Start: 102 @5833 has 8 MA's), (Start: 104 @5836 has 11 MA's), (122, 5869), (144, 5917), (172, 6049), (178, 6076),

Gene: Deenasa_89 Start: 64213, Stop: 64001, Start Num: 128

Candidate Starts for Deenasa_89:

(Start: 102 @64258 has 8 MA's), (Start: 128 @64213 has 29 MA's), (Start: 138 @64195 has 18 MA's), (Start: 146 @64165 has 2 MA's), (158, 64108), (161, 64090),

Gene: Devonte_87 Start: 62930, Stop: 62718, Start Num: 128

Candidate Starts for Devonte_87:

(Start: 102 @62975 has 8 MA's), (Start: 128 @62930 has 29 MA's), (Start: 138 @62912 has 18 MA's), (Start: 146 @62882 has 2 MA's), (158, 62825), (161, 62807),

Gene: DigitDog_85 Start: 64306, Stop: 64025, Start Num: 103

Candidate Starts for DigitDog_85:

(101, 64309), (Start: 103 @64306 has 3 MA's), (Start: 105 @64303 has 4 MA's), (Start: 111 @64297 has 7 MA's),

Gene: DirtyBubble_31 Start: 23650, Stop: 23453, Start Num: 135
Candidate Starts for DirtyBubble_31:
(Start: 135 @23650 has 11 MA's), (Start: 138 @23644 has 18 MA's), (151, 23590),

Gene: Dismas_28 Start: 23310, Stop: 23113, Start Num: 135
Candidate Starts for Dismas_28:
(Start: 135 @23310 has 11 MA's), (Start: 138 @23304 has 18 MA's), (151, 23250), (179, 23118),

Gene: Donny_83 Start: 63632, Stop: 63360, Start Num: 111
Candidate Starts for Donny_83:
(88, 63680), (Start: 111 @63632 has 7 MA's),

Gene: Eaglehorse_72 Start: 59256, Stop: 59032, Start Num: 127
Candidate Starts for Eaglehorse_72:
(51, 59514), (55, 59490), (86, 59352), (Start: 119 @59277 has 6 MA's), (Start: 127 @59256 has 37 MA's), (147, 59202), (169, 59097), (172, 59082),

Gene: EastView9101_82 Start: 63548, Stop: 63270, Start Num: 105
Candidate Starts for EastView9101_82:
(101, 63554), (Start: 103 @63551 has 3 MA's), (Start: 105 @63548 has 4 MA's), (Start: 111 @63542 has 7 MA's), (158, 63401),

Gene: Eden_27 Start: 21061, Stop: 20870, Start Num: 138
Candidate Starts for Eden_27:
(15, 21646), (23, 21586), (35, 21415), (52, 21322), (60, 21289), (Start: 138 @21061 has 18 MA's), (141, 21049), (161, 20959), (163, 20956), (179, 20875),

Gene: Elva_32 Start: 23679, Stop: 23488, Start Num: 138
Candidate Starts for Elva_32:
(Start: 135 @23685 has 11 MA's), (Start: 138 @23679 has 18 MA's), (151, 23625),

Gene: Emianna_9 Start: 5711, Stop: 5956, Start Num: 104
Candidate Starts for Emianna_9:
(67, 5591), (68, 5594), (Start: 104 @5711 has 11 MA's), (131, 5753), (163, 5867), (167, 5882), (178, 5942),

Gene: Ennea_12 Start: 6510, Stop: 6764, Start Num: 102
Candidate Starts for Ennea_12:
(41, 6291), (Start: 92 @6489 has 1 MA's), (Start: 93 @6492 has 1 MA's), (Start: 102 @6510 has 8 MA's), (151, 6624), (172, 6726), (178, 6753),

Gene: Faze9_71 Start: 59394, Stop: 59170, Start Num: 127
Candidate Starts for Faze9_71:
(51, 59652), (55, 59628), (86, 59490), (Start: 119 @59415 has 6 MA's), (Start: 127 @59394 has 37 MA's), (147, 59340), (169, 59235), (172, 59220),

Gene: FlameThrower_28 Start: 23117, Stop: 22920, Start Num: 135
Candidate Starts for FlameThrower_28:
(Start: 135 @23117 has 11 MA's), (151, 23057), (165, 23000), (174, 22946),

Gene: Flapper_8 Start: 4720, Stop: 4974, Start Num: 102

Candidate Starts for Flapper_8:

(Start: 102 @4720 has 8 MA's), (Start: 104 @4723 has 11 MA's), (122, 4756), (144, 4804), (172, 4936), (178, 4963),

Gene: Float294_11 Start: 6342, Stop: 6596, Start Num: 102

Candidate Starts for Float294_11:

(25, 5922), (41, 6105), (84, 6291), (Start: 92 @6321 has 1 MA's), (Start: 93 @6324 has 1 MA's), (Start: 102 @6342 has 8 MA's), (148, 6438), (151, 6456), (172, 6558), (178, 6585),

Gene: Foxboro_9 Start: 5722, Stop: 5967, Start Num: 104

Candidate Starts for Foxboro_9:

(67, 5602), (68, 5605), (Start: 104 @5722 has 11 MA's), (131, 5764), (163, 5878), (167, 5893), (178, 5953),

Gene: Franklin22_28 Start: 21221, Stop: 21030, Start Num: 138

Candidate Starts for Franklin22_28:

(100, 21296), (Start: 138 @21221 has 18 MA's), (141, 21209), (161, 21119), (163, 21116),

Gene: FrenchFry_73 Start: 59381, Stop: 59157, Start Num: 127

Candidate Starts for FrenchFry_73:

(51, 59639), (55, 59615), (86, 59477), (Start: 119 @59402 has 6 MA's), (Start: 127 @59381 has 37 MA's), (147, 59327), (169, 59222), (172, 59207),

Gene: Fresco_72 Start: 54553, Stop: 54359, Start Num: 133

Candidate Starts for Fresco_72:

(Start: 133 @54553 has 8 MA's), (151, 54499),

Gene: Funsized_84 Start: 66820, Stop: 66524, Start Num: 106

Candidate Starts for Funsized_84:

(46, 67057), (47, 67048), (48, 67045), (69, 66949), (Start: 106 @66820 has 4 MA's), (151, 66712), (152, 66709), (158, 66676),

Gene: Fury_11 Start: 5184, Stop: 5441, Start Num: 107

Candidate Starts for Fury_11:

(62, 5022), (71, 5070), (77, 5091), (Start: 107 @5184 has 3 MA's), (Start: 115 @5193 has 8 MA's), (164, 5355), (178, 5427),

Gene: GRU1_92 Start: 64016, Stop: 64270, Start Num: 102

Candidate Starts for GRU1_92:

(36, 63758), (42, 63791), (79, 63959), (Start: 102 @64016 has 8 MA's), (Start: 104 @64019 has 11 MA's), (122, 64052), (144, 64100), (172, 64232), (178, 64259),

Gene: GTE5_91 Start: 64905, Stop: 65159, Start Num: 102

Candidate Starts for GTE5_91:

(Start: 102 @64905 has 8 MA's), (Start: 104 @64908 has 11 MA's), (122, 64941), (144, 64989), (163, 65073), (172, 65121), (178, 65148),

Gene: Gack_27 Start: 21104, Stop: 20913, Start Num: 138

Candidate Starts for Gack_27:

(89, 21206), (90, 21203), (132, 21116), (Start: 138 @21104 has 18 MA's), (141, 21092), (163, 20999), (165, 20993),

Gene: Gadget_87 Start: 62880, Stop: 62668, Start Num: 125

Candidate Starts for Gadget_87:

(Start: 99 @62919 has 4 MA's), (Start: 125 @62880 has 7 MA's), (158, 62775), (161, 62757), (165, 62748), (174, 62694),

Gene: Gervas_90 Start: 63758, Stop: 63546, Start Num: 128

Candidate Starts for Gervas_90:

(Start: 102 @63803 has 8 MA's), (Start: 128 @63758 has 29 MA's), (Start: 138 @63740 has 18 MA's), (Start: 146 @63710 has 2 MA's), (158, 63653), (161, 63635),

Gene: Glass_74 Start: 59382, Stop: 59158, Start Num: 127

Candidate Starts for Glass_74:

(51, 59640), (55, 59616), (86, 59478), (Start: 119 @59403 has 6 MA's), (Start: 127 @59382 has 37 MA's), (147, 59328), (169, 59223), (172, 59208),

Gene: GlenHope_90 Start: 63334, Stop: 63122, Start Num: 128

Candidate Starts for GlenHope_90:

(Start: 102 @63379 has 8 MA's), (Start: 128 @63334 has 29 MA's), (Start: 138 @63316 has 18 MA's), (Start: 146 @63286 has 2 MA's), (158, 63229), (161, 63211),

Gene: Glubnar_88 Start: 63012, Stop: 62800, Start Num: 125

Candidate Starts for Glubnar_88:

(Start: 99 @63051 has 4 MA's), (Start: 125 @63012 has 7 MA's), (158, 62907), (161, 62889), (165, 62880), (174, 62826),

Gene: Godines_73 Start: 59635, Stop: 59411, Start Num: 127

Candidate Starts for Godines_73:

(51, 59893), (55, 59869), (86, 59731), (Start: 119 @59656 has 6 MA's), (Start: 127 @59635 has 37 MA's), (147, 59581), (169, 59476), (172, 59461),

Gene: GrootJr_11 Start: 6138, Stop: 6389, Start Num: 104

Candidate Starts for GrootJr_11:

(67, 6018), (68, 6021), (Start: 104 @6138 has 11 MA's), (131, 6186), (163, 6300), (167, 6315), (178, 6375),

Gene: Halfpint_88 Start: 63076, Stop: 62864, Start Num: 128

Candidate Starts for Halfpint_88:

(Start: 99 @63130 has 4 MA's), (Start: 102 @63121 has 8 MA's), (Start: 128 @63076 has 29 MA's), (Start: 138 @63058 has 18 MA's), (Start: 146 @63028 has 2 MA's), (158, 62971), (161, 62953),

Gene: HarveySr_86 Start: 62323, Stop: 62111, Start Num: 125

Candidate Starts for HarveySr_86:

(Start: 99 @62362 has 4 MA's), (Start: 125 @62323 has 7 MA's), (158, 62218), (161, 62200), (165, 62191), (174, 62137),

Gene: Hashim76_93 Start: 66930, Stop: 66682, Start Num: 111

Candidate Starts for Hashim76_93:

(Start: 111 @66930 has 7 MA's), (Start: 121 @66912 has 2 MA's), (161, 66774),

Gene: Heathcliff_89 Start: 63240, Stop: 63046, Start Num: 138

Candidate Starts for Heathcliff_89:

(Start: 102 @63303 has 8 MA's), (Start: 128 @63258 has 29 MA's), (Start: 138 @63240 has 18 MA's), (Start: 146 @63210 has 2 MA's), (158, 63153), (161, 63135),

Gene: Hedgerow_72 Start: 59353, Stop: 59108, Start Num: 119

Candidate Starts for Hedgerow_72:

(51, 59590), (55, 59566), (86, 59428), (Start: 119 @59353 has 6 MA's), (Start: 127 @59332 has 37 MA's), (147, 59278), (169, 59173), (172, 59158),

Gene: Henococcus_58 Start: 42450, Stop: 42749, Start Num: 97

Candidate Starts for Henococcus_58:

(65, 42321), (83, 42396), (Start: 97 @42450 has 6 MA's), (120, 42495), (123, 42504), (144, 42558), (171, 42690),

Gene: Holeinone_72 Start: 59237, Stop: 59013, Start Num: 127

Candidate Starts for Holeinone_72:

(51, 59495), (55, 59471), (86, 59333), (Start: 119 @59258 has 6 MA's), (Start: 127 @59237 has 37 MA's), (169, 59078), (172, 59063),

Gene: Hosp_082 Start: 62629, Stop: 62333, Start Num: 106

Candidate Starts for Hosp_082:

(61, 62791), (73, 62731), (Start: 106 @62629 has 4 MA's), (147, 62545), (161, 62467),

Gene: HubbaBubba_7 Start: 3528, Stop: 3773, Start Num: 115

Candidate Starts for HubbaBubba_7:

(112, 3525), (Start: 115 @3528 has 8 MA's), (142, 3594), (151, 3630), (153, 3636), (158, 3666), (166, 3696), (167, 3702), (178, 3762),

Gene: IDyn_8 Start: 4449, Stop: 4694, Start Num: 115

Candidate Starts for IDyn_8:

(112, 4446), (Start: 115 @4449 has 8 MA's), (142, 4515), (151, 4551), (153, 4557), (158, 4587), (166, 4617), (167, 4623), (178, 4683),

Gene: Icarian_34 Start: 24278, Stop: 24087, Start Num: 138

Candidate Starts for Icarian_34:

(Start: 135 @24284 has 11 MA's), (Start: 138 @24278 has 18 MA's), (151, 24224),

Gene: Imvubu_87 Start: 64765, Stop: 64490, Start Num: 106

Candidate Starts for Imvubu_87:

(24, 65203), (32, 65092), (34, 65053), (37, 65047), (40, 65023), (45, 64999), (57, 64945), (Start: 96 @64783 has 5 MA's), (Start: 106 @64765 has 4 MA's),

Gene: Indlovu_82 Start: 65227, Stop: 64946, Start Num: 103

Candidate Starts for Indlovu_82:

(Start: 103 @65227 has 3 MA's), (152, 65110),

Gene: Intolerant_55 Start: 42453, Stop: 42755, Start Num: 96

Candidate Starts for Intolerant_55:

(65, 42327), (83, 42402), (Start: 96 @42453 has 5 MA's), (120, 42501), (144, 42564), (171, 42696), (181, 42750),

Gene: ItsyBitsy1_70 Start: 59473, Stop: 59249, Start Num: 127

Candidate Starts for ItsyBitsy1_70:

(51, 59731), (55, 59707), (86, 59569), (Start: 119 @59494 has 6 MA's), (Start: 127 @59473 has 37 MA's), (169, 59314), (172, 59299),

Gene: JackieB_58 Start: 42282, Stop: 42581, Start Num: 97

Candidate Starts for JackieB_58:

(65, 42153), (83, 42228), (Start: 97 @42282 has 6 MA's), (120, 42327), (123, 42336), (144, 42390), (171, 42522),

Gene: Jackstina_83 Start: 63172, Stop: 62960, Start Num: 128

Candidate Starts for Jackstina_83:

(Start: 99 @63226 has 4 MA's), (Start: 102 @63217 has 8 MA's), (Start: 128 @63172 has 29 MA's), (Start: 138 @63154 has 18 MA's), (Start: 146 @63124 has 2 MA's), (158, 63067), (161, 63049),

Gene: Jifall16_8 Start: 5183, Stop: 5428, Start Num: 104

Candidate Starts for Jifall16_8:

(67, 5063), (68, 5066), (Start: 104 @5183 has 11 MA's), (131, 5225), (163, 5339), (167, 5354), (178, 5414),

Gene: Jolie1_084 Start: 64656, Stop: 64360, Start Num: 106

Candidate Starts for Jolie1_084:

(61, 64818), (73, 64758), (Start: 106 @64656 has 4 MA's), (147, 64572), (152, 64548), (161, 64494),

Gene: Kaleb_73 Start: 59388, Stop: 59164, Start Num: 127

Candidate Starts for Kaleb_73:

(51, 59646), (55, 59622), (86, 59484), (Start: 119 @59409 has 6 MA's), (Start: 127 @59388 has 37 MA's), (147, 59334), (169, 59229), (172, 59214),

Gene: Kamiyu_89 Start: 63243, Stop: 63049, Start Num: 138

Candidate Starts for Kamiyu_89:

(Start: 102 @63306 has 8 MA's), (Start: 128 @63261 has 29 MA's), (Start: 138 @63243 has 18 MA's), (Start: 146 @63213 has 2 MA's), (158, 63156), (161, 63138),

Gene: KarasumaRum_81 Start: 63704, Stop: 63423, Start Num: 103

Candidate Starts for KarasumaRum_81:

(101, 63707), (Start: 103 @63704 has 3 MA's), (Start: 105 @63701 has 4 MA's), (Start: 109 @63698 has 6 MA's), (Start: 111 @63695 has 7 MA's),

Gene: Katzastrophic_28 Start: 23235, Stop: 23038, Start Num: 135

Candidate Starts for Katzastrophic_28:

(Start: 135 @23235 has 11 MA's), (151, 23175), (165, 23118), (174, 23064),

Gene: Kheth_72 Start: 59299, Stop: 59075, Start Num: 127

Candidate Starts for Kheth_72:

(51, 59557), (55, 59533), (86, 59395), (Start: 119 @59320 has 6 MA's), (Start: 127 @59299 has 37 MA's), (147, 59245), (169, 59140), (172, 59125),

Gene: KidneyBean_9 Start: 5528, Stop: 5773, Start Num: 104

Candidate Starts for KidneyBean_9:

(67, 5408), (68, 5411), (Start: 104 @5528 has 11 MA's), (131, 5570), (163, 5684), (167, 5699), (178, 5759),

Gene: Kieran_28 Start: 23307, Stop: 23116, Start Num: 138

Candidate Starts for Kieran_28:

(Start: 135 @23313 has 11 MA's), (Start: 138 @23307 has 18 MA's), (151, 23253), (179, 23121),

Gene: Knocker_83 Start: 65702, Stop: 65406, Start Num: 106

Candidate Starts for Knocker_83:

(46, 65939), (47, 65930), (Start: 106 @65702 has 4 MA's), (141, 65636), (143, 65627), (151, 65594), (158, 65558),

Gene: Kolhan_73 Start: 59276, Stop: 59052, Start Num: 127

Candidate Starts for Kolhan_73:

(51, 59534), (55, 59510), (86, 59372), (Start: 119 @59297 has 6 MA's), (Start: 127 @59276 has 37 MA's), (147, 59222), (169, 59117), (172, 59102),

Gene: Kronus_89 Start: 64345, Stop: 64133, Start Num: 128

Candidate Starts for Kronus_89:

(Start: 99 @64399 has 4 MA's), (Start: 102 @64390 has 8 MA's), (Start: 128 @64345 has 29 MA's), (Start: 138 @64327 has 18 MA's), (Start: 146 @64297 has 2 MA's), (158, 64240), (161, 64222),

Gene: Kurt_9 Start: 5711, Stop: 5956, Start Num: 104

Candidate Starts for Kurt_9:

(67, 5591), (68, 5594), (Start: 104 @5711 has 11 MA's), (131, 5753), (163, 5867), (167, 5882), (178, 5942),

Gene: Lars_73 Start: 59360, Stop: 59136, Start Num: 127

Candidate Starts for Lars_73:

(51, 59618), (55, 59594), (86, 59456), (Start: 119 @59381 has 6 MA's), (Start: 127 @59360 has 37 MA's), (147, 59306), (169, 59201), (172, 59186),

Gene: Laurie_73 Start: 59044, Stop: 58820, Start Num: 127

Candidate Starts for Laurie_73:

(51, 59302), (55, 59278), (86, 59140), (Start: 119 @59065 has 6 MA's), (Start: 127 @59044 has 37 MA's), (147, 58990), (169, 58885), (172, 58870),

Gene: LazerLemon_58 Start: 42972, Stop: 43271, Start Num: 97

Candidate Starts for LazerLemon_58:

(17, 42498), (27, 42582), (28, 42600), (30, 42627), (65, 42843), (83, 42918), (Start: 96 @42969 has 5 MA's), (Start: 97 @42972 has 6 MA's), (120, 43017), (123, 43026), (136, 43050), (144, 43080), (171, 43212), (181, 43266),

Gene: Lephleur_72 Start: 59222, Stop: 58998, Start Num: 127

Candidate Starts for Lephleur_72:

(51, 59480), (55, 59456), (86, 59318), (Start: 119 @59243 has 6 MA's), (Start: 127 @59222 has 37 MA's), (147, 59168), (169, 59063), (172, 59048),

Gene: LestyG_87 Start: 62831, Stop: 62619, Start Num: 128

Candidate Starts for LestyG_87:

(Start: 102 @62876 has 8 MA's), (Start: 128 @62831 has 29 MA's), (Start: 138 @62813 has 18 MA's), (Start: 146 @62783 has 2 MA's), (158, 62726), (161, 62708),

Gene: Ligma_72 Start: 54547, Stop: 54353, Start Num: 133

Candidate Starts for Ligma_72:

(Start: 133 @54547 has 8 MA's), (151, 54493),

Gene: LilMcDreamy_81 Start: 63946, Stop: 63668, Start Num: 103

Candidate Starts for LilMcDreamy_81:

(Start: 103 @63946 has 3 MA's), (Start: 111 @63940 has 7 MA's),

Gene: LilSmirk_72 Start: 59259, Stop: 59035, Start Num: 127
Candidate Starts for LilSmirk_72:
(51, 59517), (55, 59493), (86, 59355), (Start: 119 @59280 has 6 MA's), (Start: 127 @59259 has 37 MA's), (147, 59205), (169, 59100), (172, 59085),

Gene: LittleMunchkin_72 Start: 57116, Stop: 56916, Start Num: 133
Candidate Starts for LittleMunchkin_72:
(Start: 133 @57116 has 8 MA's), (158, 57023),

Gene: LizLemon_72 Start: 59387, Stop: 59163, Start Num: 127
Candidate Starts for LizLemon_72:
(51, 59645), (55, 59621), (86, 59483), (Start: 119 @59408 has 6 MA's), (Start: 127 @59387 has 37 MA's), (147, 59333), (169, 59228), (172, 59213),

Gene: Lollipop1437_11 Start: 6477, Stop: 6752, Start Num: 92
Candidate Starts for Lollipop1437_11:
(41, 6279), (Start: 92 @6477 has 1 MA's), (Start: 93 @6480 has 1 MA's), (Start: 102 @6498 has 8 MA's), (151, 6612), (172, 6714), (178, 6741),

Gene: Loviatar_56 Start: 24836, Stop: 24639, Start Num: 135
Candidate Starts for Loviatar_56:
(Start: 135 @24836 has 11 MA's), (Start: 138 @24830 has 18 MA's), (151, 24776),

Gene: Magritte_85 Start: 68142, Stop: 68354, Start Num: 130
Candidate Starts for Magritte_85:
(Start: 130 @68142 has 1 MA's), (159, 68256), (176, 68328),

Gene: Maih_66 Start: 52563, Stop: 52775, Start Num: 127
Candidate Starts for Maih_66:
(86, 52470), (Start: 127 @52563 has 37 MA's), (140, 52587), (158, 52665), (170, 52725), (180, 52770),

Gene: Marietta_7 Start: 3861, Stop: 4106, Start Num: 115
Candidate Starts for Marietta_7:
(112, 3858), (Start: 115 @3861 has 8 MA's), (142, 3927), (151, 3963), (153, 3969), (158, 3999), (166, 4029), (167, 4035), (178, 4095),

Gene: Mariokart_70 Start: 54105, Stop: 53905, Start Num: 133
Candidate Starts for Mariokart_70:
(Start: 133 @54105 has 8 MA's),

Gene: Marky_61 Start: 43378, Stop: 43677, Start Num: 97
Candidate Starts for Marky_61:
(94, 43372), (Start: 97 @43378 has 6 MA's), (144, 43486), (177, 43648),

Gene: Marley1013_88 Start: 63672, Stop: 63460, Start Num: 125
Candidate Starts for Marley1013_88:
(Start: 99 @63711 has 4 MA's), (Start: 125 @63672 has 7 MA's), (158, 63567), (161, 63549), (165, 63540), (174, 63486),

Gene: Marlia_90 Start: 63709, Stop: 63515, Start Num: 138
Candidate Starts for Marlia_90:
(Start: 99 @63781 has 4 MA's), (Start: 102 @63772 has 8 MA's), (Start: 128 @63727 has 29 MA's), (Start: 138 @63709 has 18 MA's), (Start: 146 @63679 has 2 MA's), (158, 63622), (161, 63604),

Gene: MasterPo_73 Start: 59254, Stop: 59030, Start Num: 127

Candidate Starts for MasterPo_73:

(51, 59512), (55, 59488), (86, 59350), (Start: 119 @59275 has 6 MA's), (Start: 127 @59254 has 37 MA's), (147, 59200), (169, 59095), (172, 59080),

Gene: MerCougar_7 Start: 4830, Stop: 5069, Start Num: 117

Candidate Starts for MerCougar_7:

(68, 4692), (80, 4746), (Start: 117 @4830 has 3 MA's), (141, 4887), (167, 4998), (178, 5058),

Gene: Microdon_57 Start: 42516, Stop: 42818, Start Num: 96

Candidate Starts for Microdon_57:

(65, 42390), (83, 42465), (Start: 96 @42516 has 5 MA's), (120, 42564), (144, 42627), (171, 42759), (181, 42813),

Gene: Mischief19_73 Start: 61963, Stop: 62172, Start Num: 134

Candidate Starts for Mischief19_73:

(Start: 134 @61963 has 1 MA's),

Gene: MmasiCarm_90 Start: 63688, Stop: 63476, Start Num: 128

Candidate Starts for MmasiCarm_90:

(Start: 102 @63733 has 8 MA's), (Start: 128 @63688 has 29 MA's), (Start: 138 @63670 has 18 MA's), (Start: 146 @63640 has 2 MA's), (158, 63583), (161, 63565),

Gene: Mortcellus_89 Start: 64408, Stop: 64214, Start Num: 138

Candidate Starts for Mortcellus_89:

(Start: 102 @64471 has 8 MA's), (Start: 128 @64426 has 29 MA's), (Start: 138 @64408 has 18 MA's), (Start: 146 @64378 has 2 MA's), (158, 64321), (161, 64303),

Gene: Morty007_86 Start: 63672, Stop: 63460, Start Num: 125

Candidate Starts for Morty007_86:

(Start: 99 @63711 has 4 MA's), (Start: 125 @63672 has 7 MA's), (158, 63567), (161, 63549), (165, 63540), (174, 63486),

Gene: Mysterious_84 Start: 63891, Stop: 63610, Start Num: 103

Candidate Starts for Mysterious_84:

(101, 63894), (Start: 103 @63891 has 3 MA's), (Start: 105 @63888 has 4 MA's), (Start: 111 @63882 has 7 MA's), (151, 63777), (158, 63741), (178, 63645),

Gene: NadineRae_7 Start: 3565, Stop: 3810, Start Num: 115

Candidate Starts for NadineRae_7:

(112, 3562), (Start: 115 @3565 has 8 MA's), (142, 3631), (151, 3667), (153, 3673), (158, 3703), (166, 3733), (167, 3739), (178, 3799),

Gene: Nangang_84 Start: 64289, Stop: 64008, Start Num: 103

Candidate Starts for Nangang_84:

(101, 64292), (Start: 103 @64289 has 3 MA's), (Start: 105 @64286 has 4 MA's), (Start: 111 @64280 has 7 MA's),

Gene: NatB6_9 Start: 5790, Stop: 6035, Start Num: 104

Candidate Starts for NatB6_9:

(67, 5670), (68, 5673), (Start: 104 @5790 has 11 MA's), (131, 5832), (163, 5946), (167, 5961), (178, 6021),

Gene: Nehemiah_82 Start: 63774, Stop: 63490, Start Num: 101

Candidate Starts for Nehemiah_82:

(101, 63774), (Start: 103 @63771 has 3 MA's), (Start: 105 @63768 has 4 MA's), (Start: 111 @63762 has 7 MA's), (151, 63657), (158, 63621), (178, 63525),

Gene: Neos5_87 Start: 63173, Stop: 62922, Start Num: 99

Candidate Starts for Neos5_87:

(Start: 99 @63173 has 4 MA's), (Start: 125 @63134 has 7 MA's), (158, 63029), (161, 63011), (165, 63002), (174, 62948),

Gene: NovumRegina_9 Start: 6137, Stop: 6388, Start Num: 104

Candidate Starts for NovumRegina_9:

(67, 6017), (68, 6020), (Start: 104 @6137 has 11 MA's), (131, 6185), (163, 6299), (167, 6314), (178, 6374),

Gene: Nozo_89 Start: 64068, Stop: 63856, Start Num: 128

Candidate Starts for Nozo_89:

(Start: 99 @64122 has 4 MA's), (Start: 102 @64113 has 8 MA's), (Start: 128 @64068 has 29 MA's), (Start: 138 @64050 has 18 MA's), (Start: 146 @64020 has 2 MA's), (158, 63963), (161, 63945),

Gene: Obutu_91 Start: 63871, Stop: 63659, Start Num: 128

Candidate Starts for Obutu_91:

(Start: 102 @63916 has 8 MA's), (Start: 128 @63871 has 29 MA's), (Start: 138 @63853 has 18 MA's), (Start: 146 @63823 has 2 MA's), (158, 63766), (161, 63748),

Gene: Olivio_89 Start: 63491, Stop: 63297, Start Num: 138

Candidate Starts for Olivio_89:

(Start: 102 @63554 has 8 MA's), (Start: 128 @63509 has 29 MA's), (Start: 138 @63491 has 18 MA's), (Start: 146 @63461 has 2 MA's), (158, 63404), (161, 63386),

Gene: Opia_73 Start: 59301, Stop: 59056, Start Num: 119

Candidate Starts for Opia_73:

(51, 59538), (55, 59514), (86, 59376), (Start: 119 @59301 has 6 MA's), (Start: 127 @59280 has 37 MA's), (147, 59226), (169, 59121), (172, 59106),

Gene: OrangeOswald_88 Start: 63303, Stop: 63091, Start Num: 128

Candidate Starts for OrangeOswald_88:

(Start: 102 @63348 has 8 MA's), (Start: 128 @63303 has 29 MA's), (Start: 138 @63285 has 18 MA's), (Start: 146 @63255 has 2 MA's), (158, 63198), (161, 63180),

Gene: Outis_7 Start: 4521, Stop: 4760, Start Num: 117

Candidate Starts for Outis_7:

(68, 4383), (80, 4437), (Start: 117 @4521 has 3 MA's), (141, 4578), (167, 4689), (178, 4749),

Gene: Patio_12 Start: 7018, Stop: 7272, Start Num: 102

Candidate Starts for Patio_12:

(25, 6598), (41, 6781), (Start: 92 @6997 has 1 MA's), (Start: 93 @7000 has 1 MA's), (Start: 102 @7018 has 8 MA's), (148, 7114), (151, 7132), (172, 7234), (178, 7261),

Gene: PenguinLover67_82 Start: 63644, Stop: 63351, Start Num: 99

Candidate Starts for PenguinLover67_82:

(Start: 99 @63644 has 4 MA's), (Start: 121 @63602 has 2 MA's), (151, 63518), (170, 63422),

Gene: Phaedrus_84 Start: 62701, Stop: 62507, Start Num: 138

Candidate Starts for Phaedrus_84:

(Start: 102 @62764 has 8 MA's), (Start: 128 @62719 has 29 MA's), (Start: 138 @62701 has 18 MA's),
(Start: 146 @62671 has 2 MA's), (158, 62614), (161, 62596),

Gene: Phantasmagoria_71 Start: 59269, Stop: 59045, Start Num: 127

Candidate Starts for Phantasmagoria_71:

(51, 59527), (55, 59503), (86, 59365), (Start: 119 @59290 has 6 MA's), (Start: 127 @59269 has 37
MA's), (147, 59215), (169, 59110), (172, 59095),

Gene: Phayeta_92 Start: 63775, Stop: 63563, Start Num: 125

Candidate Starts for Phayeta_92:

(Start: 99 @63814 has 4 MA's), (Start: 125 @63775 has 7 MA's), (158, 63670), (161, 63652), (165,
63643), (174, 63589),

Gene: Phelemich_80 Start: 63840, Stop: 63568, Start Num: 111

Candidate Starts for Phelemich_80:

(26, 64257), (81, 63918), (101, 63852), (Start: 103 @63849 has 3 MA's), (Start: 105 @63846 has 4
MA's), (Start: 111 @63840 has 7 MA's), (144, 63765), (151, 63735), (158, 63699), (178, 63603),

Gene: Philly_88 Start: 63149, Stop: 62937, Start Num: 128

Candidate Starts for Philly_88:

(Start: 99 @63203 has 4 MA's), (Start: 102 @63194 has 8 MA's), (Start: 128 @63149 has 29 MA's),
(Start: 138 @63131 has 18 MA's), (Start: 146 @63101 has 2 MA's), (158, 63044), (161, 63026),

Gene: Phlyer_89 Start: 63966, Stop: 63802, Start Num: 146

Candidate Starts for Phlyer_89:

(Start: 102 @64059 has 8 MA's), (Start: 128 @64014 has 29 MA's), (Start: 138 @63996 has 18 MA's),
(Start: 146 @63966 has 2 MA's), (158, 63909), (161, 63891),

Gene: Phomeo_8 Start: 5406, Stop: 5609, Start Num: 131

Candidate Starts for Phomeo_8:

(67, 5244), (68, 5247), (Start: 104 @5364 has 11 MA's), (131, 5406), (163, 5520), (167, 5535), (178,
5595),

Gene: Pleakley_11 Start: 5184, Stop: 5441, Start Num: 107

Candidate Starts for Pleakley_11:

(62, 5022), (71, 5070), (77, 5091), (Start: 107 @5184 has 3 MA's), (Start: 115 @5193 has 8 MA's),
(164, 5355), (178, 5427),

Gene: PrinceCharming_73 Start: 59309, Stop: 59085, Start Num: 127

Candidate Starts for PrinceCharming_73:

(51, 59567), (55, 59543), (86, 59405), (Start: 119 @59330 has 6 MA's), (Start: 127 @59309 has 37
MA's), (169, 59150), (172, 59135),

Gene: Pupper_186 Start: 133528, Stop: 133761, Start Num: 128

Candidate Starts for Pupper_186:

(Start: 128 @133528 has 29 MA's), (166, 133669), (168, 133678), (173, 133711),

Gene: Quenya_29 Start: 23125, Stop: 22928, Start Num: 135

Candidate Starts for Quenya_29:

(50, 23398), (58, 23365), (63, 23341), (70, 23308), (74, 23287), (78, 23275), (85, 23245), (98, 23200), (Start: 119 @23161 has 6 MA's), (Start: 135 @23125 has 11 MA's), (Start: 138 @23119 has 18 MA's), (151, 23065), (165, 23008), (179, 22933),

Gene: Quesadilla_83 Start: 64272, Stop: 63979, Start Num: 99

Candidate Starts for Quesadilla_83:

(Start: 99 @64272 has 4 MA's), (Start: 121 @64230 has 2 MA's),

Gene: Qyrzula_65 Start: 59423, Stop: 59178, Start Num: 119

Candidate Starts for Qyrzula_65:

(51, 59660), (55, 59636), (86, 59498), (Start: 119 @59423 has 6 MA's), (Start: 127 @59402 has 37 MA's), (147, 59348), (169, 59243), (172, 59228),

Gene: RagingRooster_88 Start: 62994, Stop: 62782, Start Num: 128

Candidate Starts for RagingRooster_88:

(Start: 102 @63039 has 8 MA's), (Start: 128 @62994 has 29 MA's), (Start: 138 @62976 has 18 MA's), (Start: 146 @62946 has 2 MA's), (158, 62889), (161, 62871),

Gene: RainyPolka_66 Start: 52034, Stop: 52246, Start Num: 127

Candidate Starts for RainyPolka_66:

(Start: 102 @51998 has 8 MA's), (Start: 127 @52034 has 37 MA's), (140, 52058), (158, 52136),

Gene: RedRaider_12 Start: 6444, Stop: 6698, Start Num: 102

Candidate Starts for RedRaider_12:

(41, 6201), (Start: 92 @6423 has 1 MA's), (Start: 93 @6426 has 1 MA's), (Start: 102 @6444 has 8 MA's), (172, 6660), (178, 6687),

Gene: Reprobate_82 Start: 63851, Stop: 63573, Start Num: 105

Candidate Starts for Reprobate_82:

(26, 64262), (81, 63923), (101, 63857), (Start: 103 @63854 has 3 MA's), (Start: 105 @63851 has 4 MA's), (Start: 111 @63845 has 7 MA's), (144, 63770), (151, 63740), (158, 63704), (178, 63608),

Gene: Rhinoforte_72 Start: 59307, Stop: 59083, Start Num: 127

Candidate Starts for Rhinoforte_72:

(51, 59565), (55, 59541), (86, 59403), (Start: 119 @59328 has 6 MA's), (Start: 127 @59307 has 37 MA's), (147, 59253), (169, 59148), (172, 59133),

Gene: Rich_81 Start: 64507, Stop: 64226, Start Num: 105

Candidate Starts for Rich_81:

(81, 64579), (101, 64513), (Start: 103 @64510 has 3 MA's), (Start: 105 @64507 has 4 MA's), (Start: 106 @64504 has 4 MA's), (Start: 111 @64498 has 7 MA's),

Gene: Rinkes_81 Start: 64713, Stop: 64441, Start Num: 106

Candidate Starts for Rinkes_81:

(16, 65202), (20, 65178), (21, 65169), (38, 64995), (46, 64944), (47, 64935), (Start: 106 @64713 has 4 MA's), (152, 64602),

Gene: Rita130_82 Start: 63772, Stop: 63500, Start Num: 111

Candidate Starts for Rita130_82:

(82, 63847), (88, 63820), (Start: 111 @63772 has 7 MA's), (158, 63631),

Gene: Rita1961_90 Start: 63645, Stop: 63433, Start Num: 128

Candidate Starts for Rita1961_90:

(Start: 99 @63699 has 4 MA's), (Start: 102 @63690 has 8 MA's), (Start: 128 @63645 has 29 MA's),
(Start: 138 @63627 has 18 MA's), (Start: 146 @63597 has 2 MA's), (158, 63540), (161, 63522),

Gene: Rizwana_57 Start: 42532, Stop: 42281, Start Num: 110

Candidate Starts for Rizwana_57:

(67, 42676), (Start: 110 @42532 has 3 MA's), (145, 42454), (150, 42433),

Gene: Rollins_27 Start: 20951, Stop: 20703, Start Num: 109

Candidate Starts for Rollins_27:

(Start: 95 @20978 has 3 MA's), (Start: 106 @20954 has 4 MA's), (Start: 109 @20951 has 6 MA's),
(120, 20930), (Start: 137 @20894 has 1 MA's), (141, 20882), (151, 20840),

Gene: RomaT_89 Start: 63868, Stop: 63656, Start Num: 128

Candidate Starts for RomaT_89:

(Start: 102 @63913 has 8 MA's), (Start: 128 @63868 has 29 MA's), (Start: 138 @63850 has 18 MA's),
(Start: 146 @63820 has 2 MA's), (158, 63763), (161, 63745),

Gene: Rona_28 Start: 23304, Stop: 23113, Start Num: 138

Candidate Starts for Rona_28:

(Start: 135 @23310 has 11 MA's), (Start: 138 @23304 has 18 MA's), (151, 23250), (179, 23118),

Gene: Rosebush_70 Start: 59374, Stop: 59150, Start Num: 127

Candidate Starts for Rosebush_70:

(51, 59632), (55, 59608), (86, 59470), (Start: 119 @59395 has 6 MA's), (Start: 127 @59374 has 37
MA's), (147, 59320), (169, 59215), (172, 59200),

Gene: SCentae_185 Start: 133720, Stop: 133953, Start Num: 128

Candidate Starts for SCentae_185:

(Start: 128 @133720 has 29 MA's), (166, 133861), (168, 133870), (173, 133903),

Gene: Sabella_72 Start: 59209, Stop: 58985, Start Num: 127

Candidate Starts for Sabella_72:

(51, 59467), (55, 59443), (86, 59305), (Start: 119 @59230 has 6 MA's), (Start: 127 @59209 has 37
MA's), (147, 59155), (169, 59050), (172, 59035),

Gene: Saguaro_78 Start: 62799, Stop: 62497, Start Num: 93

Candidate Starts for Saguaro_78:

(Start: 93 @62799 has 1 MA's), (Start: 99 @62790 has 4 MA's), (Start: 121 @62754 has 2 MA's), (158,
62628),

Gene: Salete_67 Start: 52550, Stop: 52762, Start Num: 127

Candidate Starts for Salete_67:

(86, 52457), (Start: 127 @52550 has 37 MA's), (140, 52574), (141, 52577), (158, 52652), (170, 52712),
(180, 52757),

Gene: SanaSana_34 Start: 24486, Stop: 24289, Start Num: 135

Candidate Starts for SanaSana_34:

(Start: 135 @24486 has 11 MA's), (Start: 138 @24480 has 18 MA's), (151, 24426),

Gene: Scuba_11 Start: 5282, Stop: 5539, Start Num: 107

Candidate Starts for Scuba_11:

(62, 5120), (71, 5168), (Start: 107 @5282 has 3 MA's), (Start: 115 @5291 has 8 MA's), (158, 5429),
(164, 5453), (178, 5525),

Gene: Serendipitous_83 Start: 63637, Stop: 63356, Start Num: 103
Candidate Starts for Serendipitous_83:
(101, 63640), (Start: 103 @63637 has 3 MA's), (Start: 105 @63634 has 4 MA's), (Start: 111 @63628 has 7 MA's),

Gene: Sharkboy_29 Start: 23394, Stop: 23197, Start Num: 135
Candidate Starts for Sharkboy_29:
(Start: 135 @23394 has 11 MA's), (Start: 138 @23388 has 18 MA's), (151, 23334), (165, 23277), (179, 23202),

Gene: Shatter_72 Start: 54547, Stop: 54353, Start Num: 133
Candidate Starts for Shatter_72:
(Start: 133 @54547 has 8 MA's), (151, 54493),

Gene: Shenandoah_88 Start: 62896, Stop: 62702, Start Num: 138
Candidate Starts for Shenandoah_88:
(Start: 102 @62959 has 8 MA's), (Start: 128 @62914 has 29 MA's), (Start: 138 @62896 has 18 MA's), (Start: 146 @62866 has 2 MA's), (158, 62809), (161, 62791),

Gene: Shenyu_84 Start: 64305, Stop: 64024, Start Num: 103
Candidate Starts for Shenyu_84:
(101, 64308), (Start: 103 @64305 has 3 MA's), (Start: 105 @64302 has 4 MA's), (Start: 111 @64296 has 7 MA's),

Gene: SilentRX_55 Start: 41558, Stop: 41322, Start Num: 108
Candidate Starts for SilentRX_55:
(Start: 108 @41558 has 2 MA's), (139, 41507), (141, 41498), (153, 41459), (155, 41444),

Gene: SirJeffery_81 Start: 63582, Stop: 63310, Start Num: 111
Candidate Starts for SirJeffery_81:
(88, 63630), (Start: 111 @63582 has 7 MA's), (158, 63441),

Gene: Sisko_72 Start: 55626, Stop: 55426, Start Num: 133
Candidate Starts for Sisko_72:
(91, 55698), (Start: 114 @55662 has 2 MA's), (Start: 133 @55626 has 8 MA's),

Gene: Skylord_27 Start: 20825, Stop: 20634, Start Num: 137
Candidate Starts for Skylord_27:
(Start: 95 @20909 has 3 MA's), (Start: 106 @20885 has 4 MA's), (Start: 109 @20882 has 6 MA's), (120, 20861), (Start: 137 @20825 has 1 MA's), (141, 20813), (151, 20771),

Gene: Skysand_11 Start: 6344, Stop: 6598, Start Num: 102
Candidate Starts for Skysand_11:
(25, 5924), (41, 6107), (84, 6293), (Start: 92 @6323 has 1 MA's), (Start: 93 @6326 has 1 MA's), (Start: 102 @6344 has 8 MA's), (148, 6440), (151, 6458), (172, 6560), (178, 6587),

Gene: SlippinJimmy_92 Start: 64660, Stop: 64466, Start Num: 138
Candidate Starts for SlippinJimmy_92:
(Start: 102 @64723 has 8 MA's), (Start: 128 @64678 has 29 MA's), (Start: 138 @64660 has 18 MA's), (Start: 146 @64630 has 2 MA's), (158, 64573), (161, 64555),

Gene: Sour_71 Start: 56576, Stop: 56373, Start Num: 133

Candidate Starts for Sour_71:

(39, 56897), (44, 56873), (75, 56717), (91, 56651), (Start: 103 @56624 has 3 MA's), (Start: 114 @56615 has 2 MA's), (Start: 133 @56576 has 8 MA's), (Start: 138 @56564 has 18 MA's), (141, 56552), (151, 56510),

Gene: StarStruck_7 Start: 4521, Stop: 4760, Start Num: 117

Candidate Starts for StarStruck_7:

(68, 4383), (80, 4437), (Start: 117 @4521 has 3 MA's), (141, 4578), (167, 4689), (178, 4749),

Gene: StinkyVeggy_81 Start: 63704, Stop: 63423, Start Num: 103

Candidate Starts for StinkyVeggy_81:

(101, 63707), (Start: 103 @63704 has 3 MA's), (Start: 105 @63701 has 4 MA's), (Start: 109 @63698 has 6 MA's), (Start: 111 @63695 has 7 MA's),

Gene: Stoor_32 Start: 24148, Stop: 23957, Start Num: 138

Candidate Starts for Stoor_32:

(Start: 135 @24154 has 11 MA's), (Start: 138 @24148 has 18 MA's), (151, 24094),

Gene: Stromboli_32 Start: 24014, Stop: 23823, Start Num: 138

Candidate Starts for Stromboli_32:

(Start: 135 @24020 has 11 MA's), (Start: 138 @24014 has 18 MA's), (151, 23960),

Gene: Stuff_57 Start: 42753, Stop: 43055, Start Num: 96

Candidate Starts for Stuff_57:

(1, 41424), (2, 41664), (3, 41733), (4, 41811), (5, 41907), (6, 41916), (7, 42129), (8, 42153), (9, 42168), (10, 42183), (11, 42207), (14, 42255), (18, 42300), (27, 42369), (28, 42387), (65, 42627), (83, 42702), (Start: 96 @42753 has 5 MA's), (120, 42801), (144, 42864), (171, 42996), (181, 43050),

Gene: Suigeneris_84 Start: 64020, Stop: 63748, Start Num: 111

Candidate Starts for Suigeneris_84:

(82, 64095), (88, 64068), (Start: 111 @64020 has 7 MA's),

Gene: Sukkupi_7 Start: 3562, Stop: 3807, Start Num: 115

Candidate Starts for Sukkupi_7:

(31, 3202), (112, 3559), (Start: 115 @3562 has 8 MA's), (142, 3628), (151, 3664), (153, 3670), (158, 3700), (166, 3730), (175, 3790), (178, 3796),

Gene: SwainyDoc_89 Start: 63493, Stop: 63281, Start Num: 125

Candidate Starts for SwainyDoc_89:

(Start: 99 @63532 has 4 MA's), (Start: 125 @63493 has 7 MA's), (158, 63388), (161, 63370), (165, 63361), (174, 63307),

Gene: SynergyX_89 Start: 63305, Stop: 63093, Start Num: 128

Candidate Starts for SynergyX_89:

(Start: 102 @63350 has 8 MA's), (Start: 128 @63305 has 29 MA's), (Start: 138 @63287 has 18 MA's), (Start: 146 @63257 has 2 MA's), (158, 63200), (161, 63182),

Gene: TA17A_75 Start: 59238, Stop: 58993, Start Num: 119

Candidate Starts for TA17A_75:

(51, 59475), (55, 59451), (86, 59313), (Start: 119 @59238 has 6 MA's), (Start: 127 @59217 has 37 MA's), (147, 59163), (169, 59058), (172, 59043),

Gene: TP1604_67 Start: 52475, Stop: 52687, Start Num: 127

Candidate Starts for TP1604_67:
(86, 52382), (Start: 127 @52475 has 37 MA's), (158, 52577), (170, 52637), (180, 52682),

Gene: Tank_57 Start: 42579, Stop: 42322, Start Num: 110
Candidate Starts for Tank_57:
(Start: 110 @42579 has 3 MA's), (123, 42549), (145, 42501), (150, 42480),

Gene: Thonko_92 Start: 64640, Stop: 64431, Start Num: 124
Candidate Starts for Thonko_92:
(Start: 124 @64640 has 1 MA's), (170, 64478),

Gene: Tinciduntolum_73 Start: 59376, Stop: 59152, Start Num: 127
Candidate Starts for Tinciduntolum_73:
(51, 59634), (55, 59610), (86, 59472), (Start: 119 @59397 has 6 MA's), (Start: 127 @59376 has 37 MA's), (147, 59322), (169, 59217), (172, 59202),

Gene: TinyTerror_90 Start: 63710, Stop: 63516, Start Num: 138
Candidate Starts for TinyTerror_90:
(Start: 99 @63782 has 4 MA's), (Start: 102 @63773 has 8 MA's), (Start: 128 @63728 has 29 MA's), (Start: 138 @63710 has 18 MA's), (Start: 146 @63680 has 2 MA's), (158, 63623), (161, 63605),

Gene: Tracker_9 Start: 5503, Stop: 5748, Start Num: 104
Candidate Starts for Tracker_9:
(67, 5383), (68, 5386), (Start: 104 @5503 has 11 MA's), (131, 5545), (163, 5659), (167, 5674), (178, 5734),

Gene: Tres_72 Start: 59230, Stop: 59006, Start Num: 127
Candidate Starts for Tres_72:
(51, 59488), (55, 59464), (86, 59326), (Start: 119 @59251 has 6 MA's), (Start: 127 @59230 has 37 MA's), (169, 59071), (172, 59056),

Gene: Turuncu_9 Start: 4891, Stop: 5145, Start Num: 102
Candidate Starts for Turuncu_9:
(Start: 102 @4891 has 8 MA's), (Start: 104 @4894 has 11 MA's), (122, 4927), (144, 4975), (172, 5107), (178, 5134),

Gene: Tydolla_85 Start: 63266, Stop: 63072, Start Num: 138
Candidate Starts for Tydolla_85:
(Start: 102 @63329 has 8 MA's), (Start: 128 @63284 has 29 MA's), (Start: 138 @63266 has 18 MA's), (Start: 146 @63236 has 2 MA's), (158, 63179), (161, 63161),

Gene: UNTPL_59 Start: 42784, Stop: 43086, Start Num: 96
Candidate Starts for UNTPL_59:
(1, 41455), (2, 41695), (3, 41764), (4, 41842), (5, 41938), (6, 41947), (7, 42160), (8, 42184), (9, 42199), (10, 42214), (13, 42271), (27, 42400), (28, 42418), (65, 42658), (83, 42733), (Start: 96 @42784 has 5 MA's), (120, 42832), (144, 42895), (171, 43027), (181, 43081),

Gene: Vic9_00072 Start: 60094, Stop: 59849, Start Num: 119
Candidate Starts for Vic9_00072:
(51, 60331), (55, 60307), (86, 60169), (Start: 119 @60094 has 6 MA's), (Start: 127 @60073 has 37 MA's), (147, 60019), (169, 59914), (172, 59899),

Gene: Vincenzo_85 Start: 66459, Stop: 66160, Start Num: 95

Candidate Starts for Vincenzo_85:

(29, 66807), (33, 66729), (Start: 95 @66459 has 3 MA's), (Start: 116 @66423 has 2 MA's), (118, 66417), (158, 66294), (163, 66273), (166, 66264), (170, 66234),

Gene: Vitas_27 Start: 20918, Stop: 20643, Start Num: 95

Candidate Starts for Vitas_27:

(Start: 95 @20918 has 3 MA's), (Start: 106 @20894 has 4 MA's), (Start: 109 @20891 has 6 MA's), (120, 20870), (Start: 137 @20834 has 1 MA's), (141, 20822), (151, 20780),

Gene: WalkingDead_32 Start: 24254, Stop: 24063, Start Num: 138

Candidate Starts for WalkingDead_32:

(Start: 135 @24260 has 11 MA's), (Start: 138 @24254 has 18 MA's), (151, 24200),

Gene: West99_72 Start: 59407, Stop: 59183, Start Num: 127

Candidate Starts for West99_72:

(51, 59665), (55, 59641), (86, 59503), (Start: 119 @59428 has 6 MA's), (Start: 127 @59407 has 37 MA's), (169, 59248), (172, 59233),

Gene: Wheezy_9 Start: 5755, Stop: 6006, Start Num: 104

Candidate Starts for Wheezy_9:

(67, 5635), (68, 5638), (Start: 104 @5755 has 11 MA's), (131, 5803), (163, 5917), (167, 5932), (178, 5992),

Gene: WhoseManz_7 Start: 3472, Stop: 3717, Start Num: 115

Candidate Starts for WhoseManz_7:

(49, 3247), (112, 3469), (Start: 115 @3472 has 8 MA's), (142, 3538), (151, 3574), (153, 3580), (158, 3610), (166, 3640), (167, 3646), (178, 3706),

Gene: Wilde_59 Start: 42878, Stop: 42621, Start Num: 110

Candidate Starts for Wilde_59:

(Start: 110 @42878 has 3 MA's), (123, 42848), (145, 42800), (150, 42779),

Gene: Wooper_75 Start: 55974, Stop: 55744, Start Num: 121

Candidate Starts for Wooper_75:

(19, 56484), (22, 56472), (53, 56196), (57, 56187), (59, 56172), (66, 56145), (72, 56109), (86, 56052), (87, 56049), (Start: 121 @55974 has 2 MA's), (126, 55962), (178, 55755),

Gene: Xkcd426_72 Start: 59054, Stop: 59275, Start Num: 127

Candidate Starts for Xkcd426_72:

(Start: 127 @59054 has 37 MA's), (129, 59057), (158, 59153), (166, 59183),

Gene: YDN12_68 Start: 52246, Stop: 52458, Start Num: 127

Candidate Starts for YDN12_68:

(86, 52153), (Start: 127 @52246 has 37 MA's), (140, 52270), (158, 52348), (170, 52408), (180, 52453),

Gene: Yahalom_87 Start: 63111, Stop: 62899, Start Num: 128

Candidate Starts for Yahalom_87:

(Start: 102 @63156 has 8 MA's), (Start: 128 @63111 has 29 MA's), (Start: 138 @63093 has 18 MA's), (Start: 146 @63063 has 2 MA's), (158, 63006), (161, 62988),

Gene: Yeshua_75 Start: 55939, Stop: 55721, Start Num: 126

Candidate Starts for Yeshua_75:

(19, 56464), (22, 56452), (53, 56176), (57, 56167), (59, 56152), (66, 56125), (72, 56089), (86, 56032), (87, 56029), (Start: 102 @55987 has 8 MA's), (Start: 121 @55951 has 2 MA's), (126, 55939), (178, 55732),

Gene: Yinz_87 Start: 62651, Stop: 62439, Start Num: 125

Candidate Starts for Yinz_87:

(Start: 99 @62690 has 4 MA's), (Start: 125 @62651 has 7 MA's), (158, 62546), (161, 62528), (165, 62519), (174, 62465),

Gene: Yndexa_7 Start: 3562, Stop: 3807, Start Num: 115

Candidate Starts for Yndexa_7:

(31, 3202), (112, 3559), (Start: 115 @3562 has 8 MA's), (142, 3628), (151, 3664), (153, 3670), (158, 3700), (166, 3730), (175, 3790), (178, 3796),

Gene: Zenteno07_96 Start: 67053, Stop: 66802, Start Num: 111

Candidate Starts for Zenteno07_96:

(Start: 111 @67053 has 7 MA's), (Start: 121 @67035 has 2 MA's), (161, 66894),