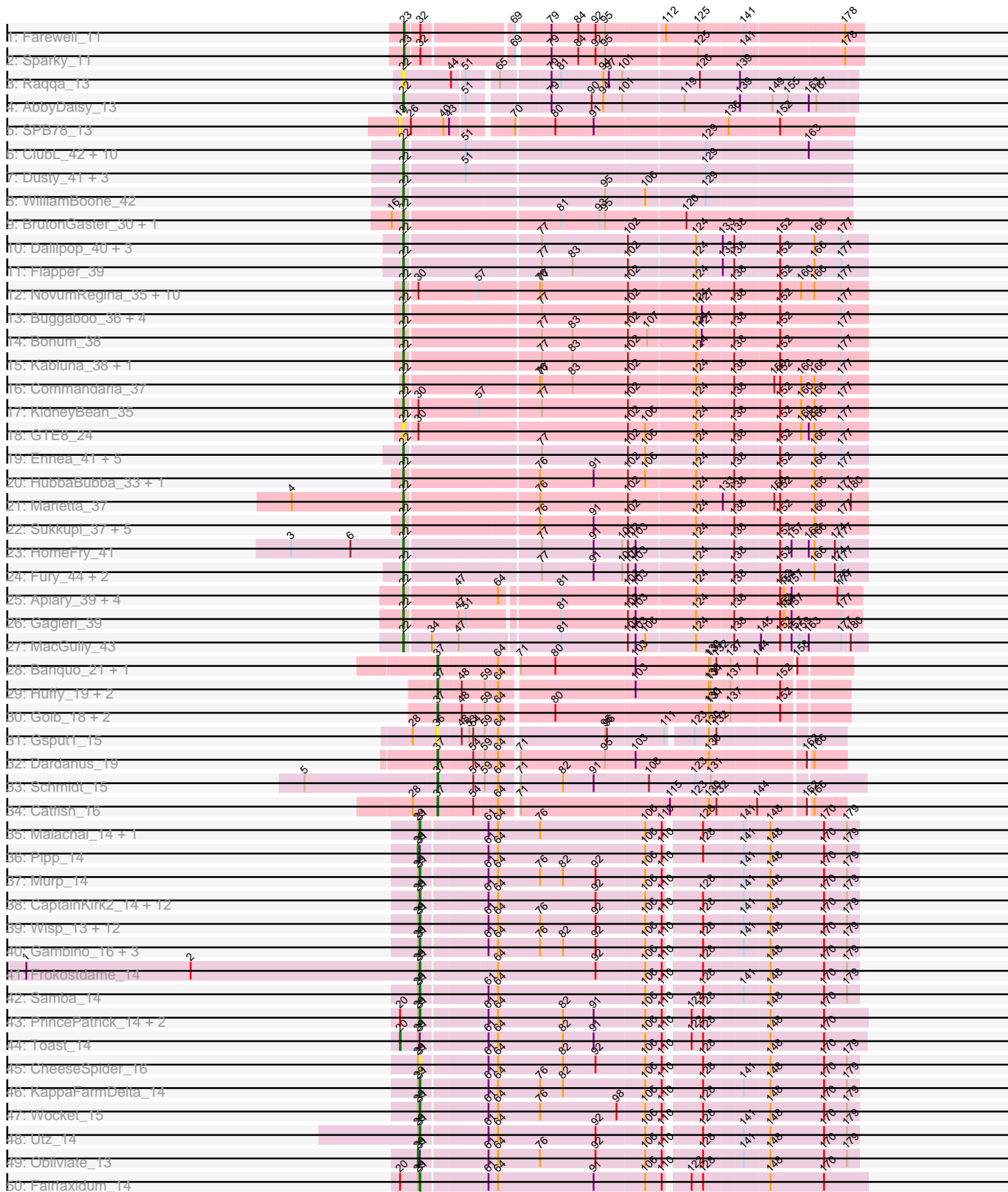
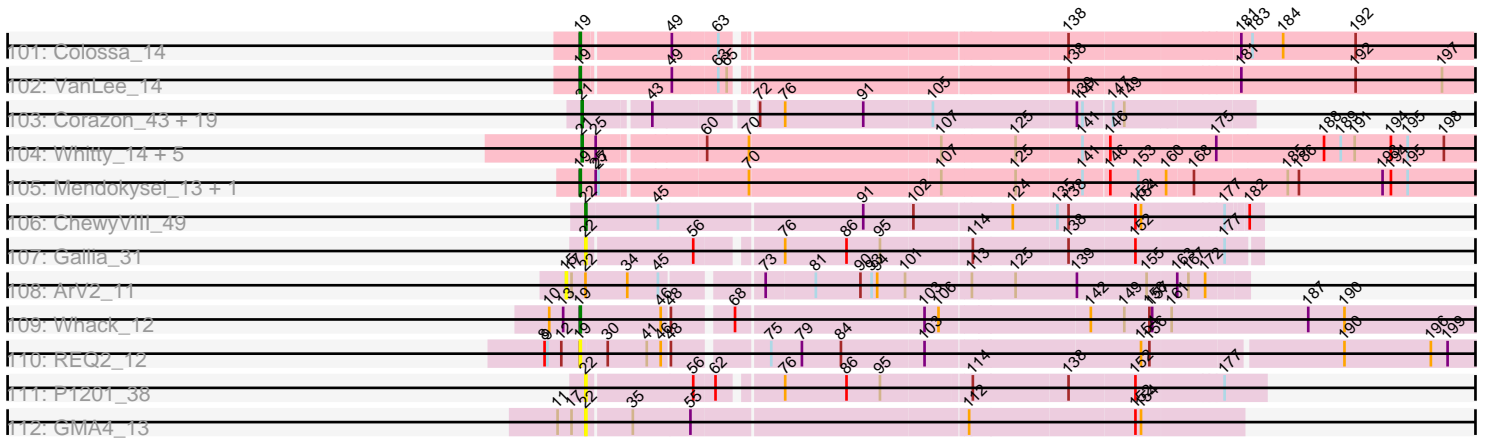


Pham 311179



Pham 311179



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 311179 Report

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

WARNING: Pham size does not match number of genes in report. Either unphamerated genes have been added (by you) or starterator has removed genes due to invalid start codon.

Pham number 311179 has 266 members, 33 are drafts.

Phages represented in each track:

- Track 1 : Farewell_11
- Track 2 : Sparky_11
- Track 3 : Raqqa_13
- Track 4 : AbbyDaisy_13
- Track 5 : SPB78_13
- Track 6 : ClubL_42, Geeche_41, Lozinak_42, Engineer_43, Toniann_42, Bachita_44, Norvs_43, Smoothie_43, Cucurbita_44, PhinkBoden_42, Aphelion_42
- Track 7 : Dusty_41, Miskis_40, Abscondus_41, Culver_42
- Track 8 : WilliamBoone_42
- Track 9 : BrutonGaster_30, OneUp_36
- Track 10 : Dalilpop_40, Turuncu_39, GRU1_25, GTE5_26
- Track 11 : Flapper_39
- Track 12 : NovumRegina_35, GrootJr_37, Jifall16_34, Foxboro_36, Wheezy_35, Tracker_35, Arti_35, NatB6_35, Kurt_35, Phomeo_34, Emianna_35
- Track 13 : Buggaboo_36, StarStruck_36, SuperSulley_36, MerCougar_36, Outis_36
- Track 14 : Bonum_38
- Track 15 : Kabluna_38, NosilaM_38
- Track 16 : Commandaria_37
- Track 17 : KidneyBean_35
- Track 18 : GTE8_24
- Track 19 : Ennea_41, Patio_38, Lollipop1437_40, RedRaider_42, Float294_37, Skysand_37
- Track 20 : HubbaBubba_33, WhoseManz_37
- Track 21 : Marietta_37
- Track 22 : Sukkupi_37, Pemberton_38, BiPauneto_38, NadineRae_35, Yndexa_37, IDyn_36
- Track 23 : HomeFry_41
- Track 24 : Fury_44, Pleakley_44, Scuba_44
- Track 25 : Apiary_39, Polyuyuki_39, Maselop_39, CoffeeBean_39, Braxoaddie_39
- Track 26 : Gagieri_39
- Track 27 : MacGully_43
- Track 28 : Banquo_21, TinaLin_20
- Track 29 : Huffy_19, DinoDaryn_19, TZGordon_19

- Track 30 : Goib_18, Vendetta_17, Splinter_17
- Track 31 : Gspu1_15
- Track 32 : Dardanus_19
- Track 33 : Schmidt_15
- Track 34 : Catfish_16
- Track 35 : Malachai_14, Begonia_14
- Track 36 : Pipp_14
- Track 37 : Murp_14
- Track 38 : CaptainKirk2_14, MintFen_14, Delian_14, Melba_14, Guacamole_14, Archis_15, BlingBling_14, Barco_14, JasperJr_14, Fenry_13, JuJu_14, Zarbodnamra_14, UmaThurman_14
- Track 39 : Wisp_13, Mellie_13, PhrostedPhlake_15, Petra_16, CarolAnn_14, Blino_14, Walrus_15, Zilla_14, Hitter_14, Soilmate_14, Jalammah_15, ZiggyZoo_13, Lysidious_14
- Track 40 : Gambino_16, Azula_16, Blueberry_16, MissRona_16
- Track 41 : Frokostdame_14
- Track 42 : Samba_14
- Track 43 : PrincePatrick_14, William_14, PCoral7_14
- Track 44 : Toast_14
- Track 45 : CheeseSpider_16
- Track 46 : KappaFarmDelta_14
- Track 47 : Wocket_15
- Track 48 : Utz_14
- Track 49 : Obliviate_13
- Track 50 : Fairfaxidum_14
- Track 51 : JonJames_41, Cardigan_41, Yvonnetastic_39
- Track 52 : PhorbessPhlower_12, Morkie_12, InLimbo_13
- Track 53 : Lucky10_12
- Track 54 : Daredevil_23, Towmatter_22
- Track 55 : Bantam_24
- Track 56 : Mollymur_25
- Track 57 : SpeedDemon_250
- Track 58 : DatBoi_25
- Track 59 : Ecliptus_13
- Track 60 : BearBQ_13, MortyNRick_13, Birdsong_13
- Track 61 : ODay_13
- Track 62 : Crater_13, Kuwabara_13, Apricot_13
- Track 63 : Syleon_22
- Track 64 : Sephiroth_22, Kudrefre_21
- Track 65 : Octobien14_22
- Track 66 : Neville_21
- Track 67 : LilJank_21
- Track 68 : Rabbitrun_23
- Track 69 : Trax_21
- Track 70 : Morgana_13, ModicumRichard_13, ObLaDi_13, Cafasso_13, Aleemily_13
- Track 71 : C3PO_23, Cruella_23, Darwin_26, PotatoChip_23, Kimchi1738_23, Stickynote_25, Zion_23, PeteyPab_22
- Track 72 : Rooter_12, Sarge_12, Shoya_11, JeanClaude_12
- Track 73 : Pigu_12
- Track 74 : BrayBeast_12
- Track 75 : Kumotta_13
- Track 76 : MargaretKali_13

- Track 77 : Alatato_11
- Track 78 : BigSherm_16, Cole_14, QuinnAvery_16, ToastyOats_18, Kihatsu_17
- Track 79 : Lenoxika_16, Schism_16, Saintcarr_15, Guinevere_16, Nandita_16, Donatella_15
- Track 80 : MillySue_16
- Track 81 : Halloweekend_14, Yonex_16, Ryan_16
- Track 82 : Julie_16
- Track 83 : GoodLuckBabe_16
- Track 84 : Popper_14
- Track 85 : Toodles_16
- Track 86 : Ichiang_14, Zaheer_16
- Track 87 : AllBusiness_15, IsHungry_16, Dirtdigger_16, Gusanita_14
- Track 88 : Elesar_15
- Track 89 : BellaJr_15
- Track 90 : Bauer_15, Zucker_14
- Track 91 : BlackSpider_13
- Track 92 : Scotia_14
- Track 93 : Morrey_19, PrairieDogTown_13, EvenBluerMoon_13
- Track 94 : NoSwimming_14
- Track 95 : Hereford_14
- Track 96 : Aoka_13
- Track 97 : JanetJ_13
- Track 98 : CocoCinnamon_16
- Track 99 : Maja_12
- Track 100 : Skitty_12, MrSmee_12, Merpity_13, Cassini_13
- Track 101 : Colossa_14
- Track 102 : VanLee_14
- Track 103 : Corazon_43, Blackbeetle_45, Clarkson_46, VasuNzinga_45, FeliMaine_47, Poise_45, Marvin_43, Lilbit_44, Huphlepuuff_47, Gattaca_44, MosMoris_43, Caprice_42, GoongGoong_44, JoieB_46, Raela_45, Tesla_44, Pringar_45, RedRaider77_45, LittleLaf_45, Beelzebub_49
- Track 104 : Whitty_14, RonRayGun_14, Bernal13_14, ZenTime222_14, Nairb_14, Ibrahim_14
- Track 105 : Mendokysei_13, Nette_14
- Track 106 : ChewyVIII_49
- Track 107 : Gallia_31
- Track 108 : ArV2_11
- Track 109 : Whack_12
- Track 110 : REQ2_12
- Track 111 : P1201_38
- Track 112 : GMA4_13

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

The start number called the most often in the published annotations is 22, it was called in 123 of the 233 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AbbyDaisy_13, Abscondus_41, Alatato_11, AllBusiness_15, Aoka_13, Aphelion_42, Apiary_39, Arti_35, Bachita_44, Bantam_24, Bauer_15, BellaJr_15, BiPauneto_38,

BigSherm_16, BlackSpider_13, Bonum_38, Braxoaddie_39, BrayBeast_12, BrutonGaster_30, Buggaboo_36, C3PO_23, Cardigan_41, Cassini_13, ChewyVIII_49, ClubL_42, CoffeeBean_39, Cole_14, Commandaria_37, Cruella_23, Cucurbita_44, Culver_42, Dalilpop_40, Daredevil_23, Darwin_26, DatBoi_25, Dirdigger_16, Donatella_15, Dusty_41, Elesar_15, Emianna_35, Engineer_43, Ennea_41, EvenBluerMoon_13, Flapper_39, Float294_37, Foxboro_36, Fury_44, GMA4_13, GRU1_25, GTE5_26, GTE8_24, Gagieri_39, Gallia_31, Geeche_41, GoodLuckBabe_16, GrootJr_37, Guinevere_16, Gusanita_14, Halloweekend_14, Hereford_14, HomeFry_41, HubbaBubba_33, IDyn_36, Ichiang_14, IsHungry_16, JanetJ_13, JeanClaude_12, Jifall16_34, JonJames_41, Julie_16, Kabluna_38, KidneyBean_35, Kihatsu_17, Kimchi1738_23, Kumotta_13, Kurt_35, Lenoxika_16, Lollipop1437_40, Lozinak_42, MacGully_43, Maja_12, MargaretKali_13, Marietta_37, Maselop_39, MerCougar_36, Merpity_13, MillySue_16, Miskis_40, Mollymur_25, Morrey_19, MrSmee_12, NadineRae_35, Nandita_16, NatB6_35, NoSwimming_14, Norvs_43, NosilaM_38, NovumRegina_35, OneUp_36, Outis_36, P1201_38, Patio_38, Pemberton_38, PeteyPab_22, PhinkBoden_42, Phomeo_34, Pigu_12, Pleakley_44, Polyuyuki_39, Popper_14, PotatoChip_23, PrairieDogTown_13, QuinnAvery_16, Raqqa_13, RedRaider_42, Rooter_12, Ryan_16, Saintcarr_15, Sarge_12, Schism_16, Scuba_44, Shoya_11, Skitty_12, Skysand_37, Smoothie_43, SpeedDemon_250, StarStruck_36, Stickynote_25, Sukkupi_37, SuperSulley_36, ToastyOats_18, Toniann_42, Toodles_16, Towmatter_22, Tracker_35, Turuncu_39, Wheezy_35, WhoseManz_37, WilliamBoone_42, Yndexa_37, Yonex_16, Yvonnestic_39, Zaheer_16, Zion_23, Zucker_14,

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

- ArV2_11, CocoCinnamon_16, Scotia_14,

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

- Aleemily_13, Apricot_13, Archis_15, Azula_16, Banquo_21, Barco_14, BearBQ_13, Beelzebub_49, Begonia_14, Bernal13_14, Birdsong_13, Blackbeetle_45, BlingBling_14, Blino_14, Blueberry_16, Cafasso_13, Caprice_42, CaptainKirk2_14, CarolAnn_14, Catfish_16, CheeseSpider_16, Clarkson_46, Colossa_14, Corazon_43, Crater_13, Dardanus_19, Delian_14, DinoDaryn_19, Ecliptus_13, Fairfaxidum_14, Farewell_11, FeliMaine_47, Fenry_13, Frokostdame_14, Gambino_16, Gattaca_44, Goib_18, GoongGoong_44, Gsput1_15, Guacamole_14, Hitter_14, Huffy_19, Huphlepuuff_47, Ibrahim_14, InLimbo_13, Jalammah_15, JasperJr_14, JoieB_46, JuJu_14, KappaFarmDelta_14, Kudrefre_21, Kuwabara_13, LilJank_21, Lilbit_44, LittleLaf_45, Lucky10_12, Lysidious_14, Malachai_14, Marvin_43, Melba_14, Mellie_13, Mendokyse_13, MintFen_14, MissRona_16, ModicumRichard_13, Morgana_13, Morkie_12, MortyNRick_13, MosMoris_43, Murp_14, Nairb_14, Nette_14, Neville_21, ODay_13, ObLaDi_13, Obliviate_13, Octobien14_22, PCoral7_14, Petra_16, PhorbesPhlower_12, PhrostedPhlake_15, Pipp_14, Poise_45, PrincePatrick_14, Pringar_45, REQ2_12, Rabbitrun_23, Raela_45, RedRaider77_45, RonRayGun_14, SPB78_13, Samba_14, Schmidt_15, Sephiroth_22, Soilmate_14, Sparky_11, Splinter_17, Syleon_22, TZGordon_19, Tesla_44, TinaLin_20, Toast_14, Trax_21, UmaThurman_14, Utz_14, VanLee_14, VasuNzinga_45, Vendetta_17, Walrus_15, Whack_12, Whitty_14, William_14, Wisp_13, Wocket_15, Zarbodnamra_14, ZenTime222_14, ZiggyZoo_13, Zilla_14,

Summary by start number:

Start 14:

- Found in 3 of 266 (1.1%) of genes in pham

- Manual Annotations of this start: 2 of 233
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Kudrefre_21 (DU1), Sephiroth_22 (DU1),

Start 15:

- Found in 1 of 266 (0.4%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ArV2_11 (singleton),

Start 18:

- Found in 8 of 266 (3.0%) of genes in pham
- Manual Annotations of this start: 5 of 233
- Called 75.0% of time when present
- Phage (with cluster) where this start called: LilJank_21 (DU2), Neville_21 (DU2), Octobien14_22 (DU1), Rabbitrun_23 (DU2), Syleon_22 (DU1), Trax_21 (DU2),

Start 19:

- Found in 12 of 266 (4.5%) of genes in pham
- Manual Annotations of this start: 9 of 233
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aleemily_13 (DZ), Cafasso_13 (DZ), Colossa_14 (KA), Mendokysei_13 (T), ModicumRichard_13 (DZ), Morgana_13 (DZ), Nette_14 (T), ObLaDi_13 (DZ), REQ2_12 (singleton), SPB78_13 (BA), VanLee_14 (KA), Whack_12 (singleton),

Start 20:

- Found in 5 of 266 (1.9%) of genes in pham
- Manual Annotations of this start: 1 of 233
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Toast_14 (CV),

Start 21:

- Found in 26 of 266 (9.8%) of genes in pham
- Manual Annotations of this start: 25 of 233
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Beelzebub_49 (S), Bernal13_14 (T), Blackbeetle_45 (S), Caprice_42 (S), Clarkson_46 (S), Corazon_43 (S), FeliMaine_47 (S), Gattaca_44 (S), GoongGoong_44 (S), Huphlepuuff_47 (S), Ibrahim_14 (T), JoieB_46 (S), Lilbit_44 (S), LittleLaf_45 (S), Marvin_43 (S), MosMoris_43 (S), Nairb_14 (T), Poise_45 (S), Pringar_45 (S), Raela_45 (S), RedRaider77_45 (S), RonRayGun_14 (T), Tesla_44 (S), VasuNzinga_45 (S), Whitty_14 (T), ZenTime222_14 (T),

Start 22:

- Found in 148 of 266 (55.6%) of genes in pham
- Manual Annotations of this start: 123 of 233
- Called 98.0% of time when present
- Phage (with cluster) where this start called: AbbyDaisy_13 (AY), Abscondus_41 (CQ1), Alatato_11 (FB), AllBusiness_15 (FF), Aoka_13 (FO), Aphelion_42 (CQ1), Apiary_39 (CR6), Arti_35 (CR2), Bachita_44 (CQ1), Bantam_24 (DL), Bauer_15 (FN), BellaJr_15 (FN), BiPauneto_38 (CR4), BigSherm_16 (FF), BlackSpider_13 (FN), Bonum_38 (CR2), Braxoaddie_39 (CR6), BrayBeast_12 (FB), BrutonGaster_30

(CQ2), Buggaboo_36 (CR2), C3PO_23 (EN), Cardigan_41 (DD), Cassini_13 (FN), ChewyVIII_49 (singleton), ClubL_42 (CQ1), CoffeeBean_39 (CR6), Cole_14 (FF), Commandaria_37 (CR2), Cruella_23 (EN), Cucurbita_44 (CQ1), Culver_42 (CQ1), Dalilpop_40 (CR1), Daredevil_23 (DL), Darwin_26 (EN), DatBoi_25 (DL), Dirtdigger_16 (FF), Donatella_15 (FF), Dusty_41 (CQ1), Elesar_15 (FF), Emianna_35 (CR2), Engineer_43 (CQ1), Ennea_41 (CR3), EvenBluerMoon_13 (FO), Flapper_39 (CR1), Float294_37 (CR3), Foxboro_36 (CR2), Fury_44 (CR5), GMA4_13 (singleton), GRU1_25 (CR1), GTE5_26 (CR1), GTE8_24 (CR2), Gagieri_39 (CR6), Gallia_31 (singleton), Geeche_41 (CQ1), GoodLuckBabe_16 (FF), GrootJr_37 (CR2), Guinevere_16 (FF), Gusanita_14 (FF), Halloween_14 (FF), Hereford_14 (FO), HomeFry_41 (CR5), HubbaBubba_33 (CR4), IDyn_36 (CR4), Ichiang_14 (FF), IsHungry_16 (FF), JanetJ_13 (FO), JeanClaude_12 (FB), Jifall16_34 (CR2), JonJames_41 (DD), Julie_16 (FF), Kabluna_38 (CR2), KidneyBean_35 (CR2), Kihatsu_17 (FF), Kimchi1738_23 (EN), Kumotta_13 (FB), Kurt_35 (CR2), Lenoxika_16 (FF), Lollipop1437_40 (CR3), Lozinak_42 (CQ1), MacGully_43 (CR7), Maja_12 (FO), MargaretKali_13 (FB), Marietta_37 (CR4), Maselop_39 (CR6), MerCougar_36 (CR2), Merpity_13 (FQ1), MillySue_16 (FF), Miskis_40 (CQ1), Mollymur_25 (DL), Morrey_19 (FO), MrSme_12 (FQ1), NadineRae_35 (CR4), Nandita_16 (FF), NatB6_35 (CR2), NoSwimming_14 (FO), Norvs_43 (CQ1), NosilaM_38 (CR2), NovumRegina_35 (CR2), OneUp_36 (CQ2), Otis_36 (CR2), P1201_38 (singleton), Patio_38 (CR3), Pemberton_38 (CR4), PeteyPab_22 (EN), PhinkBoden_42 (CQ1), Phomeo_34 (CR2), Pigu_12 (FB), Pleakley_44 (CR5), Polyyuki_39 (CR6), Popper_14 (FF), PotatoChip_23 (EN), PrairieDogTown_13 (FO), QuinnAvery_16 (FF), Raqqa_13 (AY), RedRaider_42 (CR3), Rooter_12 (FB), Ryan_16 (FF), Saintcarr_15 (FF), Sarge_12 (FB), Schism_16 (FF), Scuba_44 (CR5), Shoya_11 (FB), Skitty_12 (FQ1), Skysand_37 (CR3), Smoothie_43 (CQ1), SpeedDemon_250 (DL), StarStruck_36 (CR2), Stickynote_25 (EN), Sukkupi_37 (CR4), SuperSulley_36 (CR2), ToastyOats_18 (FF), Toniann_42 (CQ1), Toodles_16 (FF), Towmatter_22 (DL), Tracker_35 (CR2), Turuncu_39 (CR1), Wheezy_35 (CR2), WhoseManz_37 (CR4), WilliamBoone_42 (CQ1), Yndexa_37 (CR4), Yonex_16 (FF), Yvonnestic_39 (DD), Zaheer_16 (FF), Zion_23 (EN), Zucker_14 (FN),

Start 23:

- Found in 2 of 266 (0.8%) of genes in pham
- Manual Annotations of this start: 2 of 233
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Farewell_11 (AF), Sparky_11 (AF),

Start 24:

- Found in 6 of 266 (2.3%) of genes in pham
- Manual Annotations of this start: 2 of 233
- Called 33.3% of time when present
- Phage (with cluster) where this start called: CocoCinnamon_16 (FO), Scotia_14 (FO),

Start 29:

- Found in 46 of 266 (17.3%) of genes in pham
- Manual Annotations of this start: 2 of 233
- Called 4.3% of time when present
- Phage (with cluster) where this start called: Obliviate_13 (CV), Pipp_14 (CV),

Start 31:

- Found in 46 of 266 (17.3%) of genes in pham

- Manual Annotations of this start: 40 of 233
- Called 93.5% of time when present
- Phage (with cluster) where this start called: Archis_15 (CV), Azula_16 (CV), Barco_14 (CV), Begonia_14 (CV), BlingBling_14 (CV), Blino_14 (CV), Blueberry_16 (CV), CaptainKirk2_14 (CV), CarolAnn_14 (CV), CheeseSpider_16 (CV), Delian_14 (CV), Fairfaxidum_14 (CV), Fenry_13 (CV), Frokostdame_14 (CV), Gambino_16 (CV), Guacamole_14 (CV), Hitter_14 (CV), Jalammah_15 (CV), JasperJr_14 (CV), JuJu_14 (CV), KappaFarmDelta_14 (CV), Lysidious_14 (CV), Malachai_14 (CV), Melba_14 (CV), Mellie_13 (CV), MintFen_14 (CV), MissRona_16 (CV), Murp_14 (CV), PCoral7_14 (CV), Petra_16 (CV), PhrostedPhlake_15 (CV), PrincePatrick_14 (CV), Samba_14 (CV), Soilmate_14 (CV), UmaThurman_14 (CV), Utz_14 (CV), Walrus_15 (CV), William_14 (CV), Wisp_13 (CV), Wocket_15 (CV), Zarbodnamra_14 (CV), ZiggyZoo_13 (CV), Zilla_14 (CV),

Start 36:

- Found in 1 of 266 (0.4%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gspu1_15 (CU2),

Start 37:

- Found in 31 of 266 (11.7%) of genes in pham
- Manual Annotations of this start: 22 of 233
- Called 74.2% of time when present
- Phage (with cluster) where this start called: Apricot_13 (DN3), Banquo_21 (CU1), BearBQ_13 (DN), Birdsong_13 (DN), Catfish_16 (CU5), Crater_13 (DN3), Dardanus_19 (CU3), DinoDaryn_19 (CU1), Ecliptus_13 (DN), Goib_18 (CU1), Huffy_19 (CU1), InLimbo_13 (DH), Kuwabara_13 (DN4), Lucky10_12 (DH), Morkie_12 (DH), MortyNRick_13 (DN), ODay_13 (DN), PhorbesPhlower_12 (DH), Schmidt_15 (CU4), Splinter_17 (CU1), TZGordon_19 (CU1), TinaLin_20 (CU1), Vendetta_17 (CU1),

Summary by clusters:

There are 37 clusters represented in this pham: DN, DL, BA, DH, DD, singleton, FB, DZ, FF, FN, FO, CU5, CU4, CU3, CU2, CU1, DU2, DN4, DN3, CQ2, CQ1, EN, AF, S, T, DU1, AY, CV, CR2, CR3, KA, CR1, CR6, CR7, CR4, CR5, FQ1,

Info for manual annotations of cluster AF:

- Start number 23 was manually annotated 2 times for cluster AF.

Info for manual annotations of cluster AY:

- Start number 22 was manually annotated 1 time for cluster AY.

Info for manual annotations of cluster CQ1:

- Start number 22 was manually annotated 15 times for cluster CQ1.

Info for manual annotations of cluster CQ2:

- Start number 22 was manually annotated 2 times for cluster CQ2.

Info for manual annotations of cluster CR1:

- Start number 22 was manually annotated 3 times for cluster CR1.

Info for manual annotations of cluster CR2:

- Start number 22 was manually annotated 21 times for cluster CR2.

Info for manual annotations of cluster CR3:

- Start number 22 was manually annotated 6 times for cluster CR3.

Info for manual annotations of cluster CR4:

- Start number 22 was manually annotated 8 times for cluster CR4.

Info for manual annotations of cluster CR5:

- Start number 22 was manually annotated 3 times for cluster CR5.

Info for manual annotations of cluster CR6:

- Start number 22 was manually annotated 6 times for cluster CR6.

Info for manual annotations of cluster CR7:

- Start number 22 was manually annotated 1 time for cluster CR7.

Info for manual annotations of cluster CU1:

- Start number 37 was manually annotated 8 times for cluster CU1.

Info for manual annotations of cluster CU3:

- Start number 37 was manually annotated 1 time for cluster CU3.

Info for manual annotations of cluster CU4:

- Start number 37 was manually annotated 1 time for cluster CU4.

Info for manual annotations of cluster CU5:

- Start number 37 was manually annotated 1 time for cluster CU5.

Info for manual annotations of cluster CV:

- Start number 20 was manually annotated 1 time for cluster CV.
- Start number 29 was manually annotated 2 times for cluster CV.
- Start number 31 was manually annotated 40 times for cluster CV.

Info for manual annotations of cluster DD:

- Start number 22 was manually annotated 2 times for cluster DD.

Info for manual annotations of cluster DH:

- Start number 37 was manually annotated 3 times for cluster DH.

Info for manual annotations of cluster DL:

- Start number 22 was manually annotated 6 times for cluster DL.

Info for manual annotations of cluster DN:

- Start number 37 was manually annotated 5 times for cluster DN.

Info for manual annotations of cluster DN3:

- Start number 37 was manually annotated 2 times for cluster DN3.

Info for manual annotations of cluster DN4:

- Start number 37 was manually annotated 1 time for cluster DN4.

Info for manual annotations of cluster DU1:

- Start number 14 was manually annotated 2 times for cluster DU1.
- Start number 18 was manually annotated 2 times for cluster DU1.

Info for manual annotations of cluster DU2:

- Start number 18 was manually annotated 3 times for cluster DU2.

Info for manual annotations of cluster DZ:

- Start number 19 was manually annotated 5 times for cluster DZ.

Info for manual annotations of cluster EN:

- Start number 22 was manually annotated 8 times for cluster EN.

Info for manual annotations of cluster FB:

- Start number 22 was manually annotated 6 times for cluster FB.

Info for manual annotations of cluster FF:

- Start number 22 was manually annotated 22 times for cluster FF.

Info for manual annotations of cluster FN:

- Start number 22 was manually annotated 3 times for cluster FN.

Info for manual annotations of cluster FO:

- Start number 22 was manually annotated 7 times for cluster FO.
- Start number 24 was manually annotated 2 times for cluster FO.

Info for manual annotations of cluster FQ1:

- Start number 22 was manually annotated 2 times for cluster FQ1.

Info for manual annotations of cluster KA:

- Start number 19 was manually annotated 2 times for cluster KA.

Info for manual annotations of cluster S:

- Start number 21 was manually annotated 19 times for cluster S.

Info for manual annotations of cluster T:

- Start number 19 was manually annotated 1 time for cluster T.
- Start number 21 was manually annotated 6 times for cluster T.

Gene Information:

Gene: AbbyDaisy_13 Start: 7857, Stop: 8522, Start Num: 22

Candidate Starts for AbbyDaisy_13:

(Start: 22 @7857 has 123 MA's), (51, 7950), (79, 8064), (90, 8127), (94, 8145), (101, 8175), (119, 8265), (139, 8349), (149, 8397), (155, 8421), (163, 8451), (167, 8463),

Gene: Abscondus_41 Start: 17642, Stop: 18307, Start Num: 22

Candidate Starts for Abscondus_41:

(Start: 22 @17642 has 123 MA's), (51, 17732), (129, 18089),

Gene: Alatato_11 Start: 7604, Stop: 8251, Start Num: 22

Candidate Starts for Alatato_11:

(Start: 22 @7604 has 123 MA's), (41, 7664), (58, 7715), (67, 7736), (73, 7766), (96, 7892), (100, 7913), (101, 7916), (135, 8063), (177, 8228),

Gene: Aleemily_13 Start: 8905, Stop: 9573, Start Num: 19

Candidate Starts for Aleemily_13:

(Start: 19 @8905 has 9 MA's), (118, 9307), (138, 9388), (149, 9445), (171, 9526), (177, 9547),

Gene: AllBusiness_15 Start: 9307, Stop: 9975, Start Num: 22

Candidate Starts for AllBusiness_15:

(Start: 22 @9307 has 123 MA's), (65, 9442), (81, 9529), (94, 9595), (119, 9715), (159, 9886), (163, 9901),

Gene: Aoka_13 Start: 9111, Stop: 9773, Start Num: 22

Candidate Starts for Aoka_13:

(Start: 22 @9111 has 123 MA's), (41, 9177), (73, 9282), (96, 9408), (101, 9432), (135, 9579), (177, 9744),

Gene: Aphelion_42 Start: 17911, Stop: 18576, Start Num: 22

Candidate Starts for Aphelion_42:

(Start: 22 @17911 has 123 MA's), (51, 18001), (129, 18358), (163, 18511),

Gene: Apiary_39 Start: 23228, Stop: 23896, Start Num: 22

Candidate Starts for Apiary_39:

(Start: 22 @23228 has 123 MA's), (47, 23309), (64, 23366), (81, 23450), (102, 23552), (103, 23564), (124, 23651), (138, 23708), (152, 23777), (154, 23783), (157, 23795), (176, 23861), (177, 23867),

Gene: Apricot_13 Start: 7836, Stop: 8429, Start Num: 37

Candidate Starts for Apricot_13:

(Start: 37 @7836 has 22 MA's), (44, 7857), (52, 7881), (78, 7995), (87, 8055), (94, 8085), (99, 8109), (101, 8115), (107, 8151), (108, 8154), (117, 8190), (128, 8229), (152, 8340),

Gene: ArV2_11 Start: 7388, Stop: 8074, Start Num: 15

Candidate Starts for ArV2_11:

(15, 7388), (17, 7394), (Start: 22 @7409 has 123 MA's), (34, 7454), (45, 7487), (73, 7580), (81, 7631), (90, 7679), (93, 7691), (94, 7697), (101, 7727), (113, 7793), (125, 7838), (139, 7901), (155, 7973), (163, 8003), (167, 8015), (172, 8033),

Gene: Archis_15 Start: 8891, Stop: 9529, Start Num: 31

Candidate Starts for Archis_15:

(Start: 29 @8888 has 2 MA's), (Start: 31 @8891 has 40 MA's), (61, 8981), (64, 8996), (92, 9149), (106, 9224), (110, 9248), (128, 9296), (141, 9353), (148, 9392), (170, 9476), (179, 9512),

Gene: Arti_35 Start: 21382, Stop: 22065, Start Num: 22

Candidate Starts for Arti_35:

(Start: 22 @21382 has 123 MA's), (30, 21400), (57, 21493), (76, 21580), (77, 21583), (102, 21715), (124, 21814), (138, 21871), (152, 21940), (160, 21970), (166, 21991), (177, 22030),

Gene: Azula_16 Start: 9023, Stop: 9661, Start Num: 31

Candidate Starts for Azula_16:

(Start: 29 @9020 has 2 MA's), (Start: 31 @9023 has 40 MA's), (61, 9113), (64, 9128), (76, 9194), (82, 9230), (92, 9281), (106, 9356), (110, 9380), (128, 9428), (141, 9485), (148, 9524), (170, 9608), (179, 9644),

Gene: Bachita_44 Start: 18344, Stop: 19009, Start Num: 22

Candidate Starts for Bachita_44:

(Start: 22 @18344 has 123 MA's), (51, 18434), (129, 18791), (163, 18944),

Gene: Banquo_21 Start: 11777, Stop: 12373, Start Num: 37

Candidate Starts for Banquo_21:

(Start: 37 @11777 has 22 MA's), (64, 11861), (71, 11885), (80, 11939), (103, 12062), (130, 12173), (131, 12176), (132, 12185), (137, 12203), (144, 12242), (158, 12293),

Gene: Bantam_24 Start: 15333, Stop: 15989, Start Num: 22

Candidate Starts for Bantam_24:

(7, 15276), (Start: 22 @15333 has 123 MA's), (38, 15384), (43, 15399), (106, 15678),

Gene: Barco_14 Start: 8679, Stop: 9317, Start Num: 31

Candidate Starts for Barco_14:

(Start: 29 @8676 has 2 MA's), (Start: 31 @8679 has 40 MA's), (61, 8769), (64, 8784), (92, 8937), (106, 9012), (110, 9036), (128, 9084), (141, 9141), (148, 9180), (170, 9264), (179, 9300),

Gene: Bauer_15 Start: 9233, Stop: 9898, Start Num: 22

Candidate Starts for Bauer_15:

(Start: 22 @9233 has 123 MA's), (34, 9278), (44, 9308), (73, 9401), (74, 9404), (80, 9443), (89, 9494), (113, 9614), (163, 9824), (172, 9854),

Gene: BearBQ_13 Start: 7836, Stop: 8429, Start Num: 37

Candidate Starts for BearBQ_13:

(Start: 37 @7836 has 22 MA's), (44, 7857), (52, 7881), (85, 8049), (99, 8109), (101, 8115), (107, 8151), (108, 8154), (117, 8190),

Gene: Beelzebub_49 Start: 19342, Stop: 20007, Start Num: 21

Candidate Starts for Beelzebub_49:

(Start: 21 @19342 has 25 MA's), (43, 19408), (72, 19501), (76, 19528), (91, 19612), (105, 19684), (139, 19831), (141, 19837), (147, 19864), (149, 19876),

Gene: Begonia_14 Start: 8682, Stop: 9320, Start Num: 31

Candidate Starts for Begonia_14:

(Start: 29 @8679 has 2 MA's), (Start: 31 @8682 has 40 MA's), (61, 8772), (64, 8787), (76, 8853), (106, 9015), (110, 9039), (128, 9087), (141, 9144), (148, 9183), (170, 9267), (179, 9303),

Gene: BellaJr_15 Start: 9265, Stop: 9927, Start Num: 22

Candidate Starts for BellaJr_15:

(Start: 22 @9265 has 123 MA's), (42, 9334), (48, 9352), (51, 9358), (81, 9487), (93, 9547), (101, 9583), (106, 9619), (109, 9631), (119, 9670), (139, 9754), (160, 9844),

Gene: Bernal13_14 Start: 9882, Stop: 10814, Start Num: 21

Candidate Starts for Bernal13_14:

(Start: 21 @9882 has 25 MA's), (25, 9897), (60, 10002), (70, 10047), (107, 10245), (125, 10320), (141, 10389), (146, 10413), (175, 10524), (188, 10635), (189, 10653), (191, 10668), (194, 10707), (195, 10725), (198, 10764),

Gene: BiPauneto_38 Start: 21225, Stop: 21905, Start Num: 22

Candidate Starts for BiPauneto_38:

(Start: 22 @21225 has 123 MA's), (76, 21420), (91, 21504), (102, 21555), (124, 21654), (138, 21711), (152, 21780), (166, 21831), (177, 21870),

Gene: BigSherm_16 Start: 9252, Stop: 9920, Start Num: 22

Candidate Starts for BigSherm_16:

(Start: 22 @9252 has 123 MA's), (94, 9540), (119, 9660), (149, 9792), (163, 9846),

Gene: Birdsong_13 Start: 7836, Stop: 8429, Start Num: 37

Candidate Starts for Birdsong_13:

(Start: 37 @7836 has 22 MA's), (44, 7857), (52, 7881), (85, 8049), (99, 8109), (101, 8115), (107, 8151), (108, 8154), (117, 8190),

Gene: BlackSpider_13 Start: 8260, Stop: 8922, Start Num: 22

Candidate Starts for BlackSpider_13:

(Start: 22 @8260 has 123 MA's), (42, 8329), (48, 8347), (51, 8353), (81, 8482), (93, 8542), (101, 8578), (106, 8614), (109, 8626), (119, 8665), (133, 8725), (139, 8749),

Gene: Blackbeetle_45 Start: 18361, Stop: 19026, Start Num: 21

Candidate Starts for Blackbeetle_45:

(Start: 21 @18361 has 25 MA's), (43, 18427), (72, 18520), (76, 18547), (91, 18631), (105, 18703), (139, 18850), (141, 18856), (147, 18883), (149, 18895),

Gene: BlingBling_14 Start: 8679, Stop: 9317, Start Num: 31

Candidate Starts for BlingBling_14:

(Start: 29 @8676 has 2 MA's), (Start: 31 @8679 has 40 MA's), (61, 8769), (64, 8784), (92, 8937), (106, 9012), (110, 9036), (128, 9084), (141, 9141), (148, 9180), (170, 9264), (179, 9300),

Gene: Blino_14 Start: 8579, Stop: 9217, Start Num: 31

Candidate Starts for Blino_14:

(Start: 29 @8576 has 2 MA's), (Start: 31 @8579 has 40 MA's), (61, 8669), (64, 8684), (76, 8750), (92, 8837), (106, 8912), (110, 8936), (128, 8984), (141, 9041), (148, 9080), (170, 9164), (179, 9200),

Gene: Blueberry_16 Start: 9023, Stop: 9661, Start Num: 31

Candidate Starts for Blueberry_16:

(Start: 29 @9020 has 2 MA's), (Start: 31 @9023 has 40 MA's), (61, 9113), (64, 9128), (76, 9194), (82, 9230), (92, 9281), (106, 9356), (110, 9380), (128, 9428), (141, 9485), (148, 9524), (170, 9608), (179, 9644),

Gene: Bonum_38 Start: 21700, Stop: 22383, Start Num: 22

Candidate Starts for Bonum_38:

(Start: 22 @21700 has 123 MA's), (77, 21901), (83, 21949), (102, 22033), (107, 22063), (124, 22132), (127, 22141), (138, 22189), (152, 22258), (177, 22348),

Gene: Braxoaddie_39 Start: 23217, Stop: 23885, Start Num: 22

Candidate Starts for Braxoaddie_39:

(Start: 22 @23217 has 123 MA's), (47, 23298), (64, 23355), (81, 23439), (102, 23541), (103, 23553), (124, 23640), (138, 23697), (152, 23766), (154, 23772), (157, 23784), (176, 23850), (177, 23856),

Gene: BrayBeast_12 Start: 8007, Stop: 8660, Start Num: 22

Candidate Starts for BrayBeast_12:

(Start: 22 @8007 has 123 MA's), (41, 8067), (58, 8118), (73, 8172), (89, 8268), (91, 8277), (96, 8298), (101, 8322), (106, 8355), (135, 8469), (177, 8634),

Gene: BrutonGaster_30 Start: 14524, Stop: 15189, Start Num: 22

Candidate Starts for BrutonGaster_30:

(16, 14506), (Start: 22 @14524 has 123 MA's), (81, 14755), (93, 14815), (95, 14824), (120, 14941),

Gene: Buggaboo_36 Start: 22185, Stop: 22868, Start Num: 22

Candidate Starts for Buggaboo_36:

(Start: 22 @22185 has 123 MA's), (77, 22386), (102, 22518), (124, 22617), (127, 22626), (138, 22674), (152, 22743), (177, 22833),

Gene: C3PO_23 Start: 15961, Stop: 16623, Start Num: 22

Candidate Starts for C3PO_23:

(Start: 22 @15961 has 123 MA's), (30, 15979), (47, 16042), (50, 16048), (102, 16282), (124, 16378), (138, 16435), (141, 16450), (177, 16594),

Gene: Cafasso_13 Start: 8905, Stop: 9573, Start Num: 19

Candidate Starts for Cafasso_13:

(Start: 19 @8905 has 9 MA's), (118, 9307), (138, 9388), (149, 9445), (171, 9526), (177, 9547),

Gene: Caprice_42 Start: 18431, Stop: 19096, Start Num: 21

Candidate Starts for Caprice_42:

(Start: 21 @18431 has 25 MA's), (43, 18497), (72, 18590), (76, 18617), (91, 18701), (105, 18773), (139, 18920), (141, 18926), (147, 18953), (149, 18965),

Gene: CaptainKirk2_14 Start: 8682, Stop: 9320, Start Num: 31

Candidate Starts for CaptainKirk2_14:

(Start: 29 @8679 has 2 MA's), (Start: 31 @8682 has 40 MA's), (61, 8772), (64, 8787), (92, 8940), (106, 9015), (110, 9039), (128, 9087), (141, 9144), (148, 9183), (170, 9267), (179, 9303),

Gene: Cardigan_41 Start: 19485, Stop: 20150, Start Num: 22

Candidate Starts for Cardigan_41:

(Start: 22 @19485 has 123 MA's), (52, 19578), (72, 19647), (106, 19836), (112, 19863), (157, 20052),

Gene: CarolAnn_14 Start: 8578, Stop: 9216, Start Num: 31

Candidate Starts for CarolAnn_14:

(Start: 29 @8575 has 2 MA's), (Start: 31 @8578 has 40 MA's), (61, 8668), (64, 8683), (76, 8749), (92, 8836), (106, 8911), (110, 8935), (128, 8983), (141, 9040), (148, 9079), (170, 9163), (179, 9199),

Gene: Cassini_13 Start: 8229, Stop: 8891, Start Num: 22

Candidate Starts for Cassini_13:

(Start: 22 @8229 has 123 MA's), (42, 8298), (48, 8316), (51, 8322), (81, 8451), (93, 8511), (101, 8547), (106, 8583), (109, 8595), (119, 8634), (139, 8718),

Gene: Catfish_16 Start: 9760, Stop: 10344, Start Num: 37

Candidate Starts for Catfish_16:

(28, 9721), (Start: 37 @9760 has 22 MA's), (54, 9811), (64, 9844), (71, 9868), (115, 10096), (123, 10135), (130, 10156), (132, 10168), (144, 10225), (162, 10291), (166, 10297),

Gene: CheeseSpider_16 Start: 9022, Stop: 9660, Start Num: 31

Candidate Starts for CheeseSpider_16:

(Start: 29 @9019 has 2 MA's), (Start: 31 @9022 has 40 MA's), (61, 9112), (64, 9127), (82, 9229), (92, 9280), (106, 9355), (110, 9379), (128, 9427), (148, 9523), (170, 9607), (179, 9643),

Gene: ChewyVIII_49 Start: 28800, Stop: 29486, Start Num: 22

Candidate Starts for ChewyVIII_49:

(Start: 22 @28800 has 123 MA's), (45, 28875), (91, 29088), (102, 29139), (124, 29238), (135, 29283), (138, 29295), (152, 29364), (154, 29370), (177, 29454), (182, 29472),

Gene: Clarkson_46 Start: 19043, Stop: 19708, Start Num: 21

Candidate Starts for Clarkson_46:

(Start: 21 @19043 has 25 MA's), (43, 19109), (72, 19202), (76, 19229), (91, 19313), (105, 19385), (139, 19532), (141, 19538), (147, 19565), (149, 19577),

Gene: ClubL_42 Start: 17833, Stop: 18498, Start Num: 22

Candidate Starts for ClubL_42:

(Start: 22 @17833 has 123 MA's), (51, 17923), (129, 18280), (163, 18433),

Gene: CocoCinnamon_16 Start: 9349, Stop: 9993, Start Num: 24

Candidate Starts for CocoCinnamon_16:

(Start: 22 @9346 has 123 MA's), (Start: 24 @9349 has 2 MA's), (41, 9406), (58, 9457), (67, 9478), (96, 9634), (101, 9658), (104, 9682), (119, 9742), (124, 9760), (177, 9970),

Gene: CoffeeBean_39 Start: 23172, Stop: 23840, Start Num: 22

Candidate Starts for CoffeeBean_39:

(Start: 22 @23172 has 123 MA's), (47, 23253), (64, 23310), (81, 23394), (102, 23496), (103, 23508), (124, 23595), (138, 23652), (152, 23721), (154, 23727), (157, 23739), (176, 23805), (177, 23811),

Gene: Cole_14 Start: 8911, Stop: 9579, Start Num: 22

Candidate Starts for Cole_14:

(Start: 22 @8911 has 123 MA's), (94, 9199), (119, 9319), (149, 9451), (163, 9505),

Gene: Colossa_14 Start: 8718, Stop: 9617, Start Num: 19

Candidate Starts for Colossa_14:

(Start: 19 @8718 has 9 MA's), (49, 8808), (63, 8853), (138, 9195), (181, 9369), (183, 9381), (184, 9414), (192, 9492),

Gene: Commandaria_37 Start: 22702, Stop: 23388, Start Num: 22

Candidate Starts for Commandaria_37:

(Start: 22 @22702 has 123 MA's), (76, 22900), (77, 22903), (83, 22951), (102, 23035), (124, 23134), (138, 23191), (150, 23251), (152, 23260), (160, 23290), (166, 23311), (177, 23350),

Gene: Corazon_43 Start: 18996, Stop: 19661, Start Num: 21

Candidate Starts for Corazon_43:

(Start: 21 @18996 has 25 MA's), (43, 19062), (72, 19155), (76, 19182), (91, 19266), (105, 19338), (139, 19485), (141, 19491), (147, 19518), (149, 19530),

Gene: Crater_13 Start: 7836, Stop: 8429, Start Num: 37

Candidate Starts for Crater_13:

(Start: 37 @7836 has 22 MA's), (44, 7857), (52, 7881), (78, 7995), (87, 8055), (94, 8085), (99, 8109), (101, 8115), (107, 8151), (108, 8154), (117, 8190), (128, 8229), (152, 8340),

Gene: Cruella_23 Start: 15961, Stop: 16623, Start Num: 22

Candidate Starts for Cruella_23:

(Start: 22 @15961 has 123 MA's), (30, 15979), (47, 16042), (50, 16048), (102, 16282), (124, 16378), (138, 16435), (141, 16450), (177, 16594),

Gene: Cucurbita_44 Start: 19203, Stop: 19868, Start Num: 22

Candidate Starts for Cucurbita_44:

(Start: 22 @19203 has 123 MA's), (51, 19293), (129, 19650), (163, 19803),

Gene: Culver_42 Start: 17642, Stop: 18307, Start Num: 22

Candidate Starts for Culver_42:

(Start: 22 @17642 has 123 MA's), (51, 17732), (129, 18089),

Gene: Dalilpop_40 Start: 23693, Stop: 24376, Start Num: 22

Candidate Starts for Dalilpop_40:

(Start: 22 @23693 has 123 MA's), (77, 23894), (102, 24026), (124, 24125), (133, 24164), (138, 24182), (152, 24251), (166, 24302), (177, 24341),

Gene: Dardanus_19 Start: 10822, Stop: 11409, Start Num: 37

Candidate Starts for Dardanus_19:

(Start: 37 @10822 has 22 MA's), (54, 10873), (59, 10888), (64, 10906), (71, 10930), (95, 11062), (103, 11107), (130, 11218), (162, 11353), (166, 11359),

Gene: Daredevil_23 Start: 13726, Stop: 14382, Start Num: 22

Candidate Starts for Daredevil_23:

(7, 13669), (Start: 22 @13726 has 123 MA's), (32, 13747), (38, 13777), (93, 14002), (116, 14104), (142, 14224), (163, 14311), (164, 14314), (166, 14320),

Gene: Darwin_26 Start: 16706, Stop: 17368, Start Num: 22

Candidate Starts for Darwin_26:

(Start: 22 @16706 has 123 MA's), (30, 16724), (47, 16787), (50, 16793), (102, 17027), (124, 17123), (138, 17180), (141, 17195), (177, 17339),

Gene: DatBoi_25 Start: 16122, Stop: 16778, Start Num: 22

Candidate Starts for DatBoi_25:

(7, 16065), (Start: 22 @16122 has 123 MA's), (38, 16173), (106, 16467),

Gene: Delian_14 Start: 8682, Stop: 9320, Start Num: 31

Candidate Starts for Delian_14:

(Start: 29 @8679 has 2 MA's), (Start: 31 @8682 has 40 MA's), (61, 8772), (64, 8787), (92, 8940), (106, 9015), (110, 9039), (128, 9087), (141, 9144), (148, 9183), (170, 9267), (179, 9303),

Gene: DinoDaryn_19 Start: 10919, Stop: 11509, Start Num: 37

Candidate Starts for DinoDaryn_19:

(Start: 37 @10919 has 22 MA's), (48, 10952), (59, 10985), (64, 11003), (103, 11204), (130, 11315), (131, 11318), (137, 11345), (152, 11417),

Gene: Dirdigger_16 Start: 9229, Stop: 9897, Start Num: 22

Candidate Starts for Dirdigger_16:

(Start: 22 @9229 has 123 MA's), (65, 9364), (81, 9451), (94, 9517), (119, 9637), (159, 9808), (163, 9823),

Gene: Donatella_15 Start: 9378, Stop: 10046, Start Num: 22

Candidate Starts for Donatella_15:

(Start: 22 @9378 has 123 MA's), (42, 9447), (81, 9600), (94, 9666), (119, 9786), (149, 9918), (163, 9972),

Gene: Dusty_41 Start: 17642, Stop: 18307, Start Num: 22

Candidate Starts for Dusty_41:

(Start: 22 @17642 has 123 MA's), (51, 17732), (129, 18089),

Gene: Ecliptus_13 Start: 7565, Stop: 8158, Start Num: 37

Candidate Starts for Ecliptus_13:

(Start: 37 @7565 has 22 MA's), (44, 7586), (52, 7610), (85, 7778), (87, 7784), (101, 7844), (107, 7880), (108, 7883), (117, 7919),

Gene: Elesar_15 Start: 9307, Stop: 9969, Start Num: 22

Candidate Starts for Elesar_15:

(Start: 22 @9307 has 123 MA's), (42, 9376), (48, 9394), (51, 9400), (88, 9568), (90, 9577), (93, 9589), (101, 9625), (139, 9796), (155, 9868), (160, 9886),

Gene: Emianna_35 Start: 22419, Stop: 23102, Start Num: 22

Candidate Starts for Emianna_35:

(Start: 22 @22419 has 123 MA's), (30, 22437), (57, 22530), (76, 22617), (77, 22620), (102, 22752), (124, 22851), (138, 22908), (152, 22977), (160, 23007), (166, 23028), (177, 23067),

Gene: Engineer_43 Start: 17859, Stop: 18524, Start Num: 22

Candidate Starts for Engineer_43:

(Start: 22 @17859 has 123 MA's), (51, 17949), (129, 18306), (163, 18459),

Gene: Ennea_41 Start: 23023, Stop: 23706, Start Num: 22

Candidate Starts for Ennea_41:

(Start: 22 @23023 has 123 MA's), (77, 23224), (102, 23356), (106, 23383), (124, 23455), (138, 23512), (152, 23581), (166, 23632), (177, 23671),

Gene: EvenBluerMoon_13 Start: 9146, Stop: 9808, Start Num: 22

Candidate Starts for EvenBluerMoon_13:

(Start: 22 @9146 has 123 MA's), (41, 9212), (66, 9284), (73, 9317), (96, 9443), (101, 9467), (177, 9779),

Gene: Fairfaxidum_14 Start: 8713, Stop: 9366, Start Num: 31

Candidate Starts for Fairfaxidum_14:

(Start: 20 @8683 has 1 MA's), (Start: 29 @8710 has 2 MA's), (Start: 31 @8713 has 40 MA's), (61, 8803), (64, 8818), (91, 8968), (106, 9046), (110, 9070), (122, 9100), (128, 9118), (148, 9214), (170, 9298),

Gene: Farewell_11 Start: 8044, Stop: 8706, Start Num: 23

Candidate Starts for Farewell_11:

(Start: 23 @8044 has 2 MA's), (32, 8065), (69, 8194), (79, 8242), (84, 8284), (92, 8311), (95, 8326), (112, 8410), (125, 8458), (141, 8527), (178, 8677),

Gene: FeliMaine_47 Start: 19044, Stop: 19709, Start Num: 21

Candidate Starts for FeliMaine_47:

(Start: 21 @19044 has 25 MA's), (43, 19110), (72, 19203), (76, 19230), (91, 19314), (105, 19386), (139, 19533), (141, 19539), (147, 19566), (149, 19578),

Gene: Fenry_13 Start: 8428, Stop: 9066, Start Num: 31

Candidate Starts for Fenry_13:

(Start: 29 @8425 has 2 MA's), (Start: 31 @8428 has 40 MA's), (61, 8518), (64, 8533), (92, 8686), (106, 8761), (110, 8785), (128, 8833), (141, 8890), (148, 8929), (170, 9013), (179, 9049),

Gene: Flapper_39 Start: 22775, Stop: 23458, Start Num: 22

Candidate Starts for Flapper_39:

(Start: 22 @22775 has 123 MA's), (77, 22976), (83, 23024), (102, 23108), (124, 23207), (133, 23246), (138, 23264), (152, 23333), (166, 23384), (177, 23423),

Gene: Float294_37 Start: 22462, Stop: 23145, Start Num: 22

Candidate Starts for Float294_37:

(Start: 22 @22462 has 123 MA's), (77, 22663), (102, 22795), (106, 22822), (124, 22894), (138, 22951), (152, 23020), (166, 23071), (177, 23110),

Gene: Foxboro_36 Start: 22925, Stop: 23608, Start Num: 22

Candidate Starts for Foxboro_36:

(Start: 22 @22925 has 123 MA's), (30, 22943), (57, 23036), (76, 23123), (77, 23126), (102, 23258), (124, 23357), (138, 23414), (152, 23483), (160, 23513), (166, 23534), (177, 23573),

Gene: Frokostdame_14 Start: 8673, Stop: 9311, Start Num: 31

Candidate Starts for Frokostdame_14:

(1, 8058), (2, 8316), (Start: 29 @8670 has 2 MA's), (Start: 31 @8673 has 40 MA's), (64, 8778), (92, 8931), (106, 9006), (110, 9030), (128, 9078), (148, 9174), (170, 9258), (179, 9294),

Gene: Fury_44 Start: 22072, Stop: 22755, Start Num: 22

Candidate Starts for Fury_44:

(Start: 22 @22072 has 123 MA's), (77, 22273), (91, 22354), (101, 22399), (102, 22405), (103, 22417), (124, 22504), (138, 22561), (152, 22630), (166, 22681), (174, 22711), (177, 22720),

Gene: GMA4_13 Start: 8955, Stop: 9626, Start Num: 22

Candidate Starts for GMA4_13:

(11, 8925), (17, 8940), (Start: 22 @8955 has 123 MA's), (35, 9000), (55, 9060), (112, 9342), (152, 9513), (154, 9519),

Gene: GRU1_25 Start: 14660, Stop: 15343, Start Num: 22

Candidate Starts for GRU1_25:

(Start: 22 @14660 has 123 MA's), (77, 14861), (102, 14993), (124, 15092), (133, 15131), (138, 15149), (152, 15218), (166, 15269), (177, 15308),

Gene: GTE5_26 Start: 15663, Stop: 16346, Start Num: 22

Candidate Starts for GTE5_26:

(Start: 22 @15663 has 123 MA's), (77, 15864), (102, 15996), (124, 16095), (133, 16134), (138, 16152), (152, 16221), (166, 16272), (177, 16311),

Gene: GTE8_24 Start: 15678, Stop: 16361, Start Num: 22

Candidate Starts for GTE8_24:

(Start: 22 @15678 has 123 MA's), (30, 15696), (102, 16011), (106, 16038), (124, 16110), (138, 16167), (152, 16236), (160, 16266), (163, 16278), (166, 16287), (177, 16326),

Gene: Gagieri_39 Start: 23053, Stop: 23721, Start Num: 22

Candidate Starts for Gagieri_39:

(Start: 22 @23053 has 123 MA's), (47, 23134), (51, 23143), (81, 23275), (102, 23377), (103, 23389), (124, 23476), (138, 23533), (152, 23602), (154, 23608), (157, 23620), (177, 23692),

Gene: Gallia_31 Start: 19628, Stop: 20296, Start Num: 22

Candidate Starts for Gallia_31:

(Start: 22 @19628 has 123 MA's), (56, 19736), (76, 19814), (86, 19880), (95, 19916), (114, 20003), (138, 20102), (152, 20171), (177, 20261),

Gene: Gambino_16 Start: 9023, Stop: 9661, Start Num: 31

Candidate Starts for Gambino_16:

(Start: 29 @9020 has 2 MA's), (Start: 31 @9023 has 40 MA's), (61, 9113), (64, 9128), (76, 9194), (82, 9230), (92, 9281), (106, 9356), (110, 9380), (128, 9428), (141, 9485), (148, 9524), (170, 9608), (179, 9644),

Gene: Gattaca_44 Start: 18223, Stop: 18888, Start Num: 21

Candidate Starts for Gattaca_44:

(Start: 21 @18223 has 25 MA's), (43, 18289), (72, 18382), (76, 18409), (91, 18493), (105, 18565), (139, 18712), (141, 18718), (147, 18745), (149, 18757),

Gene: Geeche_41 Start: 17733, Stop: 18398, Start Num: 22

Candidate Starts for Geeche_41:

(Start: 22 @17733 has 123 MA's), (51, 17823), (129, 18180), (163, 18333),

Gene: Goib_18 Start: 10694, Stop: 11284, Start Num: 37

Candidate Starts for Goib_18:

(Start: 37 @10694 has 22 MA's), (48, 10727), (59, 10760), (64, 10778), (80, 10856), (130, 11090), (131, 11093), (137, 11120), (152, 11192),

Gene: GoodLuckBabe_16 Start: 9206, Stop: 9874, Start Num: 22

Candidate Starts for GoodLuckBabe_16:

(Start: 22 @9206 has 123 MA's), (81, 9428), (94, 9494), (106, 9560), (119, 9614), (163, 9800),

Gene: GoongGoong_44 Start: 18263, Stop: 18928, Start Num: 21

Candidate Starts for GoongGoong_44:

(Start: 21 @18263 has 25 MA's), (43, 18329), (72, 18422), (76, 18449), (91, 18533), (105, 18605), (139, 18752), (141, 18758), (147, 18785), (149, 18797),

Gene: GrootJr_37 Start: 21777, Stop: 22460, Start Num: 22

Candidate Starts for GrootJr_37:

(Start: 22 @21777 has 123 MA's), (30, 21795), (57, 21888), (76, 21975), (77, 21978), (102, 22110), (124, 22209), (138, 22266), (152, 22335), (160, 22365), (166, 22386), (177, 22425),

Gene: Gspu1_15 Start: 9141, Stop: 9716, Start Num: 36

Candidate Starts for Gspu1_15:

(28, 9105), (36, 9141), (48, 9174), (53, 9186), (54, 9192), (59, 9207), (64, 9225), (95, 9381), (96, 9384), (111, 9468), (123, 9504), (130, 9525), (132, 9537),

Gene: Guacamole_14 Start: 8683, Stop: 9321, Start Num: 31

Candidate Starts for Guacamole_14:

(Start: 29 @8680 has 2 MA's), (Start: 31 @8683 has 40 MA's), (61, 8773), (64, 8788), (92, 8941), (106, 9016), (110, 9040), (128, 9088), (141, 9145), (148, 9184), (170, 9268), (179, 9304),

Gene: Guinevere_16 Start: 9237, Stop: 9905, Start Num: 22

Candidate Starts for Guinevere_16:

(Start: 22 @9237 has 123 MA's), (42, 9306), (81, 9459), (94, 9525), (119, 9645), (149, 9777), (163, 9831),

Gene: Gusanita_14 Start: 9128, Stop: 9796, Start Num: 22

Candidate Starts for Gusanita_14:

(Start: 22 @9128 has 123 MA's), (65, 9263), (81, 9350), (94, 9416), (119, 9536), (159, 9707), (163, 9722),

Gene: Halloweekend_14 Start: 8878, Stop: 9546, Start Num: 22

Candidate Starts for Halloweekend_14:

(Start: 22 @8878 has 123 MA's), (81, 9100), (94, 9166), (119, 9286), (149, 9418), (163, 9472),

Gene: Hereford_14 Start: 9291, Stop: 9953, Start Num: 22

Candidate Starts for Hereford_14:

(Start: 22 @9291 has 123 MA's), (41, 9357), (73, 9462), (96, 9588), (101, 9612), (177, 9924),

Gene: Hitter_14 Start: 8679, Stop: 9317, Start Num: 31

Candidate Starts for Hitter_14:

(Start: 29 @8676 has 2 MA's), (Start: 31 @8679 has 40 MA's), (61, 8769), (64, 8784), (76, 8850), (92, 8937), (106, 9012), (110, 9036), (128, 9084), (141, 9141), (148, 9180), (170, 9264), (179, 9300),

Gene: HomeFry_41 Start: 20719, Stop: 21402, Start Num: 22

Candidate Starts for HomeFry_41:

(3, 20545), (6, 20638), (Start: 22 @20719 has 123 MA's), (77, 20920), (91, 21001), (101, 21046), (102, 21052), (103, 21064), (124, 21151), (138, 21208), (152, 21277), (157, 21295), (163, 21319), (166, 21328), (174, 21358), (177, 21367),

Gene: HubbaBubba_33 Start: 18243, Stop: 18923, Start Num: 22

Candidate Starts for HubbaBubba_33:

(Start: 22 @18243 has 123 MA's), (76, 18438), (91, 18522), (102, 18573), (106, 18600), (124, 18672), (138, 18729), (152, 18798), (166, 18849), (177, 18888),

Gene: Huffy_19 Start: 10919, Stop: 11509, Start Num: 37

Candidate Starts for Huffy_19:

(Start: 37 @10919 has 22 MA's), (48, 10952), (59, 10985), (64, 11003), (103, 11204), (130, 11315), (131, 11318), (137, 11345), (152, 11417),

Gene: Huphlebuff_47 Start: 18848, Stop: 19513, Start Num: 21

Candidate Starts for Huphlebuff_47:

(Start: 21 @18848 has 25 MA's), (43, 18914), (72, 19007), (76, 19034), (91, 19118), (105, 19190), (139, 19337), (141, 19343), (147, 19370), (149, 19382),

Gene: IDyn_36 Start: 19639, Stop: 20319, Start Num: 22

Candidate Starts for IDyn_36:

(Start: 22 @19639 has 123 MA's), (76, 19834), (91, 19918), (102, 19969), (124, 20068), (138, 20125), (152, 20194), (166, 20245), (177, 20284),

Gene: Ibrahim_14 Start: 9882, Stop: 10814, Start Num: 21

Candidate Starts for Ibrahim_14:

(Start: 21 @9882 has 25 MA's), (25, 9897), (60, 10002), (70, 10047), (107, 10245), (125, 10320), (141, 10389), (146, 10413), (175, 10524), (188, 10635), (189, 10653), (191, 10668), (194, 10707), (195, 10725), (198, 10764),

Gene: Ichiang_14 Start: 8893, Stop: 9561, Start Num: 22

Candidate Starts for Ichiang_14:

(Start: 22 @8893 has 123 MA's), (42, 8962), (81, 9115), (94, 9181), (119, 9301), (163, 9487),

Gene: InLimbo_13 Start: 7004, Stop: 7594, Start Num: 37

Candidate Starts for InLimbo_13:

(Start: 37 @7004 has 22 MA's), (44, 7025), (64, 7094), (87, 7223), (101, 7283), (117, 7358), (137, 7436), (141, 7454), (151, 7502),

Gene: IsHungry_16 Start: 9202, Stop: 9870, Start Num: 22

Candidate Starts for IsHungry_16:

(Start: 22 @9202 has 123 MA's), (65, 9337), (81, 9424), (94, 9490), (119, 9610), (159, 9781), (163, 9796),

Gene: Jalammah_15 Start: 8950, Stop: 9588, Start Num: 31

Candidate Starts for Jalammah_15:

(Start: 29 @8947 has 2 MA's), (Start: 31 @8950 has 40 MA's), (61, 9040), (64, 9055), (76, 9121), (92, 9208), (106, 9283), (110, 9307), (128, 9355), (141, 9412), (148, 9451), (170, 9535), (179, 9571),

Gene: JanetJ_13 Start: 8928, Stop: 9581, Start Num: 22

Candidate Starts for JanetJ_13:

(Start: 22 @8928 has 123 MA's), (Start: 24 @8931 has 2 MA's), (70, 9081), (73, 9093), (96, 9219), (101, 9243), (102, 9249), (141, 9417), (177, 9555),

Gene: JasperJr_14 Start: 8683, Stop: 9321, Start Num: 31

Candidate Starts for JasperJr_14:

(Start: 29 @8680 has 2 MA's), (Start: 31 @8683 has 40 MA's), (61, 8773), (64, 8788), (92, 8941), (106, 9016), (110, 9040), (128, 9088), (141, 9145), (148, 9184), (170, 9268), (179, 9304),

Gene: JeanClaude_12 Start: 7914, Stop: 8567, Start Num: 22

Candidate Starts for JeanClaude_12:

(Start: 22 @7914 has 123 MA's), (41, 7974), (73, 8079), (89, 8175), (91, 8184), (96, 8205), (101, 8229), (106, 8262), (177, 8541),

Gene: Jifall16_34 Start: 22046, Stop: 22729, Start Num: 22

Candidate Starts for Jifall16_34:

(Start: 22 @22046 has 123 MA's), (30, 22064), (57, 22157), (76, 22244), (77, 22247), (102, 22379), (124, 22478), (138, 22535), (152, 22604), (160, 22634), (166, 22655), (177, 22694),

Gene: JoieB_46 Start: 19067, Stop: 19732, Start Num: 21

Candidate Starts for JoieB_46:

(Start: 21 @19067 has 25 MA's), (43, 19133), (72, 19226), (76, 19253), (91, 19337), (105, 19409), (139, 19556), (141, 19562), (147, 19589), (149, 19601),

Gene: JonJames_41 Start: 21700, Stop: 22365, Start Num: 22

Candidate Starts for JonJames_41:

(Start: 22 @21700 has 123 MA's), (52, 21793), (72, 21862), (106, 22051), (112, 22078), (157, 22267),

Gene: JuJu_14 Start: 8607, Stop: 9245, Start Num: 31

Candidate Starts for JuJu_14:

(Start: 29 @8604 has 2 MA's), (Start: 31 @8607 has 40 MA's), (61, 8697), (64, 8712), (92, 8865), (106, 8940), (110, 8964), (128, 9012), (141, 9069), (148, 9108), (170, 9192), (179, 9228),

Gene: Julie_16 Start: 9465, Stop: 10133, Start Num: 22

Candidate Starts for Julie_16:

(Start: 22 @9465 has 123 MA's), (65, 9600), (81, 9687), (94, 9753), (119, 9873), (159, 10044),

Gene: Kabluna_38 Start: 21100, Stop: 21783, Start Num: 22

Candidate Starts for Kabluna_38:

(Start: 22 @21100 has 123 MA's), (77, 21301), (83, 21349), (102, 21433), (124, 21532), (138, 21589), (152, 21658), (177, 21748),

Gene: KappaFarmDelta_14 Start: 8832, Stop: 9470, Start Num: 31

Candidate Starts for KappaFarmDelta_14:

(Start: 29 @8829 has 2 MA's), (Start: 31 @8832 has 40 MA's), (61, 8922), (64, 8937), (76, 9003), (82, 9039), (106, 9165), (110, 9189), (128, 9237), (141, 9294), (148, 9333), (170, 9417), (179, 9453),

Gene: KidneyBean_35 Start: 22194, Stop: 22877, Start Num: 22

Candidate Starts for KidneyBean_35:

(Start: 22 @22194 has 123 MA's), (30, 22212), (57, 22305), (77, 22395), (102, 22527), (124, 22626), (138, 22683), (152, 22752), (160, 22782), (166, 22803), (177, 22842),

Gene: Kihatsu_17 Start: 9559, Stop: 10227, Start Num: 22

Candidate Starts for Kihatsu_17:

(Start: 22 @9559 has 123 MA's), (94, 9847), (119, 9967), (149, 10099), (163, 10153),

Gene: Kimchi1738_23 Start: 15559, Stop: 16221, Start Num: 22

Candidate Starts for Kimchi1738_23:

(Start: 22 @15559 has 123 MA's), (30, 15577), (47, 15640), (50, 15646), (102, 15880), (124, 15976), (138, 16033), (141, 16048), (177, 16192),

Gene: Kudrefre_21 Start: 12302, Stop: 12976, Start Num: 14

Candidate Starts for Kudrefre_21:

(Start: 14 @12302 has 2 MA's), (Start: 18 @12317 has 5 MA's), (27, 12338), (33, 12359), (Start: 37 @12368 has 22 MA's), (50, 12407), (56, 12428), (74, 12488), (83, 12557), (92, 12593), (120, 12722), (127, 12746), (140, 12806), (143, 12827), (145, 12833), (165, 12905), (175, 12941),

Gene: Kumotta_13 Start: 8849, Stop: 9499, Start Num: 22

Candidate Starts for Kumotta_13:

(Start: 22 @8849 has 123 MA's), (41, 8909), (45, 8921), (70, 8999), (89, 9107), (96, 9137), (101, 9161), (104, 9185), (106, 9194), (135, 9308), (177, 9473),

Gene: Kurt_35 Start: 22434, Stop: 23117, Start Num: 22

Candidate Starts for Kurt_35:

(Start: 22 @22434 has 123 MA's), (30, 22452), (57, 22545), (76, 22632), (77, 22635), (102, 22767), (124, 22866), (138, 22923), (152, 22992), (160, 23022), (166, 23043), (177, 23082),

Gene: Kuwabara_13 Start: 7836, Stop: 8429, Start Num: 37

Candidate Starts for Kuwabara_13:

(Start: 37 @7836 has 22 MA's), (44, 7857), (52, 7881), (78, 7995), (87, 8055), (94, 8085), (99, 8109), (101, 8115), (107, 8151), (108, 8154), (117, 8190), (128, 8229), (152, 8340),

Gene: Lenoxika_16 Start: 9239, Stop: 9907, Start Num: 22

Candidate Starts for Lenoxika_16:

(Start: 22 @9239 has 123 MA's), (42, 9308), (81, 9461), (94, 9527), (119, 9647), (149, 9779), (163, 9833),

Gene: LilJank_21 Start: 12209, Stop: 12868, Start Num: 18

Candidate Starts for LilJank_21:

(Start: 18 @12209 has 5 MA's), (35, 12257), (Start: 37 @12260 has 22 MA's), (56, 12320), (64, 12350), (83, 12449), (87, 12467), (92, 12485), (101, 12527), (103, 12545), (104, 12551), (133, 12668), (139, 12695), (145, 12725), (150, 12746), (152, 12755), (165, 12797), (167, 12803),

Gene: Lilbit_44 Start: 19044, Stop: 19709, Start Num: 21

Candidate Starts for Lilbit_44:

(Start: 21 @19044 has 25 MA's), (43, 19110), (72, 19203), (76, 19230), (91, 19314), (105, 19386), (139, 19533), (141, 19539), (147, 19566), (149, 19578),

Gene: LittleLaf_45 Start: 18773, Stop: 19438, Start Num: 21

Candidate Starts for LittleLaf_45:

(Start: 21 @18773 has 25 MA's), (43, 18839), (72, 18932), (76, 18959), (91, 19043), (105, 19115), (139, 19262), (141, 19268), (147, 19295), (149, 19307),

Gene: Lollipop1437_40 Start: 23011, Stop: 23694, Start Num: 22

Candidate Starts for Lollipop1437_40:

(Start: 22 @23011 has 123 MA's), (77, 23212), (102, 23344), (106, 23371), (124, 23443), (138, 23500), (152, 23569), (166, 23620), (177, 23659),

Gene: Lozinak_42 Start: 17914, Stop: 18579, Start Num: 22

Candidate Starts for Lozinak_42:

(Start: 22 @17914 has 123 MA's), (51, 18004), (129, 18361), (163, 18514),

Gene: Lucky10_12 Start: 7042, Stop: 7632, Start Num: 37

Candidate Starts for Lucky10_12:

(Start: 37 @7042 has 22 MA's), (44, 7063), (64, 7132), (87, 7261), (101, 7321), (117, 7396), (137, 7474), (151, 7540),

Gene: Lysidious_14 Start: 8679, Stop: 9317, Start Num: 31

Candidate Starts for Lysidious_14:

(Start: 29 @8676 has 2 MA's), (Start: 31 @8679 has 40 MA's), (61, 8769), (64, 8784), (76, 8850), (92, 8937), (106, 9012), (110, 9036), (128, 9084), (141, 9141), (148, 9180), (170, 9264), (179, 9300),

Gene: MacGully_43 Start: 23224, Stop: 23904, Start Num: 22

Candidate Starts for MacGully_43:

(Start: 22 @23224 has 123 MA's), (34, 23263), (47, 23305), (81, 23449), (102, 23551), (103, 23563), (106, 23578), (124, 23650), (138, 23707), (145, 23746), (152, 23776), (157, 23794), (159, 23803), (163, 23818), (177, 23866), (180, 23878),

Gene: Maja_12 Start: 8474, Stop: 9121, Start Num: 22

Candidate Starts for Maja_12:

(Start: 22 @8474 has 123 MA's), (Start: 24 @8477 has 2 MA's), (41, 8534), (47, 8555), (58, 8585), (72, 8630), (96, 8762), (101, 8786), (119, 8870), (177, 9098),

Gene: Malachai_14 Start: 8682, Stop: 9320, Start Num: 31

Candidate Starts for Malachai_14:

(Start: 29 @8679 has 2 MA's), (Start: 31 @8682 has 40 MA's), (61, 8772), (64, 8787), (76, 8853), (106, 9015), (110, 9039), (128, 9087), (141, 9144), (148, 9183), (170, 9267), (179, 9303),

Gene: MargaretKali_13 Start: 8484, Stop: 9134, Start Num: 22

Candidate Starts for MargaretKali_13:

(Start: 22 @8484 has 123 MA's), (66, 8613), (68, 8619), (73, 8646), (93, 8760), (96, 8772), (101, 8796), (104, 8820), (106, 8829), (135, 8943), (149, 9012), (154, 9030), (171, 9093), (177, 9108),

Gene: Marietta_37 Start: 19554, Stop: 20234, Start Num: 22

Candidate Starts for Marietta_37:

(4, 19380), (Start: 22 @19554 has 123 MA's), (76, 19752), (102, 19887), (124, 19986), (133, 20025), (138, 20043), (150, 20103), (152, 20112), (166, 20163), (177, 20202), (180, 20214),

Gene: Marvin_43 Start: 19043, Stop: 19708, Start Num: 21

Candidate Starts for Marvin_43:

(Start: 21 @19043 has 25 MA's), (43, 19109), (72, 19202), (76, 19229), (91, 19313), (105, 19385), (139, 19532), (141, 19538), (147, 19565), (149, 19577),

Gene: Maselop_39 Start: 23248, Stop: 23916, Start Num: 22

Candidate Starts for Maselop_39:

(Start: 22 @23248 has 123 MA's), (47, 23329), (64, 23386), (81, 23470), (102, 23572), (103, 23584), (124, 23671), (138, 23728), (152, 23797), (154, 23803), (157, 23815), (176, 23881), (177, 23887),

Gene: Melba_14 Start: 8679, Stop: 9317, Start Num: 31

Candidate Starts for Melba_14:

(Start: 29 @8676 has 2 MA's), (Start: 31 @8679 has 40 MA's), (61, 8769), (64, 8784), (92, 8937), (106, 9012), (110, 9036), (128, 9084), (141, 9141), (148, 9180), (170, 9264), (179, 9300),

Gene: Mellie_13 Start: 8419, Stop: 9057, Start Num: 31

Candidate Starts for Mellie_13:

(Start: 29 @8416 has 2 MA's), (Start: 31 @8419 has 40 MA's), (61, 8509), (64, 8524), (76, 8590), (92, 8677), (106, 8752), (110, 8776), (128, 8824), (141, 8881), (148, 8920), (170, 9004), (179, 9040),

Gene: Mendokysei_13 Start: 9859, Stop: 10791, Start Num: 19

Candidate Starts for Mendokysei_13:

(Start: 19 @9859 has 9 MA's), (25, 9874), (27, 9877), (70, 10024), (107, 10222), (125, 10297), (141, 10366), (146, 10390), (153, 10420), (160, 10450), (168, 10477), (185, 10573), (186, 10585), (193, 10675), (194, 10684), (195, 10702),

Gene: MerCougar_36 Start: 22307, Stop: 22990, Start Num: 22

Candidate Starts for MerCougar_36:

(Start: 22 @22307 has 123 MA's), (77, 22508), (102, 22640), (124, 22739), (127, 22748), (138, 22796), (152, 22865), (177, 22955),

Gene: Merpity_13 Start: 7019, Stop: 7681, Start Num: 22

Candidate Starts for Merpity_13:

(Start: 22 @7019 has 123 MA's), (42, 7088), (48, 7106), (51, 7112), (81, 7241), (93, 7301), (101, 7337), (106, 7373), (109, 7385), (119, 7424), (139, 7508),

Gene: MillySue_16 Start: 9251, Stop: 9919, Start Num: 22

Candidate Starts for MillySue_16:

(Start: 22 @9251 has 123 MA's), (65, 9386), (81, 9473), (94, 9539), (119, 9659), (163, 9845),

Gene: MintFen_14 Start: 8679, Stop: 9317, Start Num: 31

Candidate Starts for MintFen_14:

(Start: 29 @8676 has 2 MA's), (Start: 31 @8679 has 40 MA's), (61, 8769), (64, 8784), (92, 8937), (106, 9012), (110, 9036), (128, 9084), (141, 9141), (148, 9180), (170, 9264), (179, 9300),

Gene: Miskis_40 Start: 17677, Stop: 18342, Start Num: 22
Candidate Starts for Miskis_40:
(Start: 22 @17677 has 123 MA's), (51, 17767), (129, 18124),

Gene: MissRona_16 Start: 9023, Stop: 9661, Start Num: 31
Candidate Starts for MissRona_16:
(Start: 29 @9020 has 2 MA's), (Start: 31 @9023 has 40 MA's), (61, 9113), (64, 9128), (76, 9194), (82, 9230), (92, 9281), (106, 9356), (110, 9380), (128, 9428), (141, 9485), (148, 9524), (170, 9608), (179, 9644),

Gene: ModicumRichard_13 Start: 8905, Stop: 9573, Start Num: 19
Candidate Starts for ModicumRichard_13:
(Start: 19 @8905 has 9 MA's), (118, 9307), (138, 9388), (149, 9445), (171, 9526), (177, 9547),

Gene: Mollymur_25 Start: 16148, Stop: 16804, Start Num: 22
Candidate Starts for Mollymur_25:
(Start: 22 @16148 has 123 MA's), (39, 16202), (43, 16214), (74, 16313), (112, 16520), (120, 16550), (121, 16553),

Gene: Morgana_13 Start: 8909, Stop: 9580, Start Num: 19
Candidate Starts for Morgana_13:
(Start: 19 @8909 has 9 MA's), (118, 9311), (138, 9392), (149, 9449), (171, 9530), (177, 9551),

Gene: Morkie_12 Start: 7004, Stop: 7594, Start Num: 37
Candidate Starts for Morkie_12:
(Start: 37 @7004 has 22 MA's), (44, 7025), (64, 7094), (87, 7223), (101, 7283), (117, 7358), (137, 7436), (141, 7454), (151, 7502),

Gene: Morrey_19 Start: 9148, Stop: 9810, Start Num: 22
Candidate Starts for Morrey_19:
(Start: 22 @9148 has 123 MA's), (41, 9214), (66, 9286), (73, 9319), (96, 9445), (101, 9469), (177, 9781),

Gene: MortyNRick_13 Start: 7836, Stop: 8429, Start Num: 37
Candidate Starts for MortyNRick_13:
(Start: 37 @7836 has 22 MA's), (44, 7857), (52, 7881), (85, 8049), (99, 8109), (101, 8115), (107, 8151), (108, 8154), (117, 8190),

Gene: MosMoris_43 Start: 18223, Stop: 18888, Start Num: 21
Candidate Starts for MosMoris_43:
(Start: 21 @18223 has 25 MA's), (43, 18289), (72, 18382), (76, 18409), (91, 18493), (105, 18565), (139, 18712), (141, 18718), (147, 18745), (149, 18757),

Gene: MrSmee_12 Start: 7019, Stop: 7681, Start Num: 22
Candidate Starts for MrSmee_12:
(Start: 22 @7019 has 123 MA's), (42, 7088), (48, 7106), (51, 7112), (81, 7241), (93, 7301), (101, 7337), (106, 7373), (109, 7385), (119, 7424), (139, 7508),

Gene: Murp_14 Start: 8672, Stop: 9310, Start Num: 31
Candidate Starts for Murp_14:
(Start: 29 @8669 has 2 MA's), (Start: 31 @8672 has 40 MA's), (61, 8762), (64, 8777), (76, 8843), (82, 8879), (92, 8930), (106, 9005), (110, 9029), (141, 9134), (148, 9173), (170, 9257), (179, 9293),

Gene: NadineRae_35 Start: 18802, Stop: 19482, Start Num: 22

Candidate Starts for NadineRae_35:

(Start: 22 @18802 has 123 MA's), (76, 18997), (91, 19081), (102, 19132), (124, 19231), (138, 19288), (152, 19357), (166, 19408), (177, 19447),

Gene: Nairb_14 Start: 9882, Stop: 10814, Start Num: 21

Candidate Starts for Nairb_14:

(Start: 21 @9882 has 25 MA's), (25, 9897), (60, 10002), (70, 10047), (107, 10245), (125, 10320), (141, 10389), (146, 10413), (175, 10524), (188, 10635), (189, 10653), (191, 10668), (194, 10707), (195, 10725), (198, 10764),

Gene: Nandita_16 Start: 9237, Stop: 9905, Start Num: 22

Candidate Starts for Nandita_16:

(Start: 22 @9237 has 123 MA's), (42, 9306), (81, 9459), (94, 9525), (119, 9645), (149, 9777), (163, 9831),

Gene: NatB6_35 Start: 21443, Stop: 22126, Start Num: 22

Candidate Starts for NatB6_35:

(Start: 22 @21443 has 123 MA's), (30, 21461), (57, 21554), (76, 21641), (77, 21644), (102, 21776), (124, 21875), (138, 21932), (152, 22001), (160, 22031), (166, 22052), (177, 22091),

Gene: Nette_14 Start: 9868, Stop: 10800, Start Num: 19

Candidate Starts for Nette_14:

(Start: 19 @9868 has 9 MA's), (25, 9883), (27, 9886), (70, 10033), (107, 10231), (125, 10306), (141, 10375), (146, 10399), (153, 10429), (160, 10459), (168, 10486), (185, 10582), (186, 10594), (193, 10684), (194, 10693), (195, 10711),

Gene: Neville_21 Start: 12158, Stop: 12817, Start Num: 18

Candidate Starts for Neville_21:

(Start: 18 @12158 has 5 MA's), (35, 12206), (Start: 37 @12209 has 22 MA's), (56, 12269), (64, 12299), (83, 12398), (87, 12416), (92, 12434), (101, 12476), (103, 12494), (104, 12500), (133, 12617), (139, 12644), (145, 12674), (150, 12695), (165, 12746), (167, 12752),

Gene: NoSwimming_14 Start: 10095, Stop: 10754, Start Num: 22

Candidate Starts for NoSwimming_14:

(Start: 22 @10095 has 123 MA's), (Start: 24 @10098 has 2 MA's), (41, 10155), (73, 10260), (96, 10386), (101, 10410), (102, 10416), (173, 10716), (177, 10722), (181, 10740),

Gene: Norvs_43 Start: 17916, Stop: 18581, Start Num: 22

Candidate Starts for Norvs_43:

(Start: 22 @17916 has 123 MA's), (51, 18006), (129, 18363), (163, 18516),

Gene: NosilaM_38 Start: 21997, Stop: 22680, Start Num: 22

Candidate Starts for NosilaM_38:

(Start: 22 @21997 has 123 MA's), (77, 22198), (83, 22246), (102, 22330), (124, 22429), (138, 22486), (152, 22555), (177, 22645),

Gene: NovumRegina_35 Start: 21776, Stop: 22459, Start Num: 22

Candidate Starts for NovumRegina_35:

(Start: 22 @21776 has 123 MA's), (30, 21794), (57, 21887), (76, 21974), (77, 21977), (102, 22109), (124, 22208), (138, 22265), (152, 22334), (160, 22364), (166, 22385), (177, 22424),

Gene: ODay_13 Start: 7563, Stop: 8147, Start Num: 37

Candidate Starts for ODay_13:

(Start: 37 @7563 has 22 MA's), (44, 7584), (52, 7608), (85, 7776), (87, 7782), (101, 7842), (107, 7878), (108, 7881), (117, 7917), (169, 8124),

Gene: ObLaDi_13 Start: 8905, Stop: 9573, Start Num: 19

Candidate Starts for ObLaDi_13:

(Start: 19 @8905 has 9 MA's), (118, 9307), (138, 9388), (149, 9445), (171, 9526), (177, 9547),

Gene: Obliviate_13 Start: 8445, Stop: 9086, Start Num: 29

Candidate Starts for Obliviate_13:

(Start: 29 @8445 has 2 MA's), (Start: 31 @8448 has 40 MA's), (61, 8538), (64, 8553), (76, 8619), (92, 8706), (106, 8781), (110, 8805), (128, 8853), (141, 8910), (148, 8949), (170, 9033), (179, 9069),

Gene: Octobien14_22 Start: 13362, Stop: 14021, Start Num: 18

Candidate Starts for Octobien14_22:

(Start: 18 @13362 has 5 MA's), (33, 13404), (Start: 37 @13413 has 22 MA's), (50, 13452), (56, 13473), (64, 13503), (92, 13638), (120, 13767), (127, 13791), (140, 13851), (143, 13872), (145, 13878), (150, 13899), (165, 13950), (175, 13986),

Gene: OneUp_36 Start: 15613, Stop: 16278, Start Num: 22

Candidate Starts for OneUp_36:

(16, 15595), (Start: 22 @15613 has 123 MA's), (81, 15844), (93, 15904), (95, 15913), (120, 16030),

Gene: Outis_36 Start: 22001, Stop: 22684, Start Num: 22

Candidate Starts for Outis_36:

(Start: 22 @22001 has 123 MA's), (77, 22202), (102, 22334), (124, 22433), (127, 22442), (138, 22490), (152, 22559), (177, 22649),

Gene: P1201_38 Start: 22813, Stop: 23490, Start Num: 22

Candidate Starts for P1201_38:

(Start: 22 @22813 has 123 MA's), (56, 22921), (62, 22942), (76, 22999), (86, 23065), (95, 23101), (114, 23188), (138, 23287), (152, 23356), (177, 23446),

Gene: PCoral7_14 Start: 8656, Stop: 9306, Start Num: 31

Candidate Starts for PCoral7_14:

(Start: 20 @8626 has 1 MA's), (Start: 29 @8653 has 2 MA's), (Start: 31 @8656 has 40 MA's), (61, 8746), (64, 8761), (82, 8863), (91, 8911), (106, 8989), (110, 9013), (122, 9043), (128, 9061), (148, 9157), (170, 9241),

Gene: Patio_38 Start: 22247, Stop: 22930, Start Num: 22

Candidate Starts for Patio_38:

(Start: 22 @22247 has 123 MA's), (77, 22448), (102, 22580), (106, 22607), (124, 22679), (138, 22736), (152, 22805), (166, 22856), (177, 22895),

Gene: Pemberton_38 Start: 19542, Stop: 20222, Start Num: 22

Candidate Starts for Pemberton_38:

(Start: 22 @19542 has 123 MA's), (76, 19737), (91, 19821), (102, 19872), (124, 19971), (138, 20028), (152, 20097), (166, 20148), (177, 20187),

Gene: PeteyPab_22 Start: 15926, Stop: 16588, Start Num: 22

Candidate Starts for PeteyPab_22:

(Start: 22 @15926 has 123 MA's), (30, 15944), (47, 16007), (50, 16013), (102, 16247), (124, 16343), (138, 16400), (141, 16415), (177, 16559),

Gene: Petra_16 Start: 9059, Stop: 9697, Start Num: 31

Candidate Starts for Petra_16:

(Start: 29 @9056 has 2 MA's), (Start: 31 @9059 has 40 MA's), (61, 9149), (64, 9164), (76, 9230), (92, 9317), (106, 9392), (110, 9416), (128, 9464), (141, 9521), (148, 9560), (170, 9644), (179, 9680),

Gene: PhinkBoden_42 Start: 18297, Stop: 18962, Start Num: 22

Candidate Starts for PhinkBoden_42:

(Start: 22 @18297 has 123 MA's), (51, 18387), (129, 18744), (163, 18897),

Gene: Phomeo_34 Start: 22069, Stop: 22752, Start Num: 22

Candidate Starts for Phomeo_34:

(Start: 22 @22069 has 123 MA's), (30, 22087), (57, 22180), (76, 22267), (77, 22270), (102, 22402), (124, 22501), (138, 22558), (152, 22627), (160, 22657), (166, 22678), (177, 22717),

Gene: PhorbesPhlower_12 Start: 7004, Stop: 7594, Start Num: 37

Candidate Starts for PhorbesPhlower_12:

(Start: 37 @7004 has 22 MA's), (44, 7025), (64, 7094), (87, 7223), (101, 7283), (117, 7358), (137, 7436), (141, 7454), (151, 7502),

Gene: PhrostedPhlake_15 Start: 9037, Stop: 9675, Start Num: 31

Candidate Starts for PhrostedPhlake_15:

(Start: 29 @9034 has 2 MA's), (Start: 31 @9037 has 40 MA's), (61, 9127), (64, 9142), (76, 9208), (92, 9295), (106, 9370), (110, 9394), (128, 9442), (141, 9499), (148, 9538), (170, 9622), (179, 9658),

Gene: Pigu_12 Start: 7560, Stop: 8207, Start Num: 22

Candidate Starts for Pigu_12:

(Start: 22 @7560 has 123 MA's), (Start: 24 @7563 has 2 MA's), (41, 7620), (58, 7671), (67, 7692), (91, 7827), (96, 7848), (101, 7872), (106, 7905), (124, 7974), (177, 8184),

Gene: Pipp_14 Start: 8651, Stop: 9292, Start Num: 29

Candidate Starts for Pipp_14:

(Start: 29 @8651 has 2 MA's), (Start: 31 @8654 has 40 MA's), (61, 8744), (64, 8759), (106, 8987), (110, 9011), (128, 9059), (141, 9116), (148, 9155), (170, 9239), (179, 9275),

Gene: Pleakley_44 Start: 22073, Stop: 22756, Start Num: 22

Candidate Starts for Pleakley_44:

(Start: 22 @22073 has 123 MA's), (77, 22274), (91, 22355), (101, 22400), (102, 22406), (103, 22418), (124, 22505), (138, 22562), (152, 22631), (166, 22682), (174, 22712), (177, 22721),

Gene: Poise_45 Start: 18361, Stop: 19026, Start Num: 21

Candidate Starts for Poise_45:

(Start: 21 @18361 has 25 MA's), (43, 18427), (72, 18520), (76, 18547), (91, 18631), (105, 18703), (139, 18850), (141, 18856), (147, 18883), (149, 18895),

Gene: Polyzuki_39 Start: 23240, Stop: 23908, Start Num: 22

Candidate Starts for Polyzuki_39:

(Start: 22 @23240 has 123 MA's), (47, 23321), (64, 23378), (81, 23462), (102, 23564), (103, 23576), (124, 23663), (138, 23720), (152, 23789), (154, 23795), (157, 23807), (176, 23873), (177, 23879),

Gene: Popper_14 Start: 8768, Stop: 9433, Start Num: 22

Candidate Starts for Popper_14:

(Start: 22 @8768 has 123 MA's), (81, 8990), (90, 9038), (93, 9050), (94, 9056), (101, 9086), (119, 9176), (134, 9239), (141, 9266), (163, 9362),

Gene: PotatoChip_23 Start: 15928, Stop: 16590, Start Num: 22

Candidate Starts for PotatoChip_23:

(Start: 22 @15928 has 123 MA's), (30, 15946), (47, 16009), (50, 16015), (102, 16249), (124, 16345), (138, 16402), (141, 16417), (177, 16561),

Gene: PrairieDogTown_13 Start: 9148, Stop: 9810, Start Num: 22

Candidate Starts for PrairieDogTown_13:

(Start: 22 @9148 has 123 MA's), (41, 9214), (66, 9286), (73, 9319), (96, 9445), (101, 9469), (177, 9781),

Gene: PrincePatrick_14 Start: 8714, Stop: 9367, Start Num: 31

Candidate Starts for PrincePatrick_14:

(Start: 20 @8684 has 1 MA's), (Start: 29 @8711 has 2 MA's), (Start: 31 @8714 has 40 MA's), (61, 8804), (64, 8819), (82, 8921), (91, 8969), (106, 9047), (110, 9071), (122, 9101), (128, 9119), (148, 9215), (170, 9299),

Gene: Pringar_45 Start: 18673, Stop: 19338, Start Num: 21

Candidate Starts for Pringar_45:

(Start: 21 @18673 has 25 MA's), (43, 18739), (72, 18832), (76, 18859), (91, 18943), (105, 19015), (139, 19162), (141, 19168), (147, 19195), (149, 19207),

Gene: QuinnAvery_16 Start: 9252, Stop: 9920, Start Num: 22

Candidate Starts for QuinnAvery_16:

(Start: 22 @9252 has 123 MA's), (94, 9540), (119, 9660), (149, 9792), (163, 9846),

Gene: REQ2_12 Start: 7795, Stop: 8721, Start Num: 19

Candidate Starts for REQ2_12:

(8, 7759), (9, 7762), (12, 7777), (Start: 19 @7795 has 9 MA's), (30, 7822), (41, 7864), (46, 7879), (48, 7885), (75, 7975), (79, 8008), (84, 8050), (103, 8137), (154, 8359), (156, 8368), (190, 8563), (196, 8656), (199, 8674),

Gene: Rabbitrun_23 Start: 12721, Stop: 13380, Start Num: 18

Candidate Starts for Rabbitrun_23:

(Start: 18 @12721 has 5 MA's), (35, 12769), (Start: 37 @12772 has 22 MA's), (50, 12811), (56, 12832), (64, 12862), (74, 12892), (83, 12961), (87, 12979), (92, 12997), (101, 13039), (104, 13063), (149, 13255), (165, 13309), (167, 13315),

Gene: Raela_45 Start: 18916, Stop: 19581, Start Num: 21

Candidate Starts for Raela_45:

(Start: 21 @18916 has 25 MA's), (43, 18982), (72, 19075), (76, 19102), (91, 19186), (105, 19258), (139, 19405), (141, 19411), (147, 19438), (149, 19450),

Gene: Raqqa_13 Start: 8165, Stop: 8830, Start Num: 22

Candidate Starts for Raqqa_13:

(Start: 22 @8165 has 123 MA's), (44, 8240), (51, 8258), (65, 8300), (79, 8372), (81, 8387), (94, 8453), (97, 8462), (101, 8483), (126, 8597), (139, 8657),

Gene: RedRaider_42 Start: 24251, Stop: 24934, Start Num: 22

Candidate Starts for RedRaider_42:

(Start: 22 @24251 has 123 MA's), (77, 24452), (102, 24584), (106, 24611), (124, 24683), (138, 24740), (152, 24809), (166, 24860), (177, 24899),

Gene: RedRaider77_45 Start: 18817, Stop: 19482, Start Num: 21

Candidate Starts for RedRaider77_45:

(Start: 21 @18817 has 25 MA's), (43, 18883), (72, 18976), (76, 19003), (91, 19087), (105, 19159), (139, 19306), (141, 19312), (147, 19339), (149, 19351),

Gene: RonRayGun_14 Start: 9882, Stop: 10814, Start Num: 21

Candidate Starts for RonRayGun_14:

(Start: 21 @9882 has 25 MA's), (25, 9897), (60, 10002), (70, 10047), (107, 10245), (125, 10320), (141, 10389), (146, 10413), (175, 10524), (188, 10635), (189, 10653), (191, 10668), (194, 10707), (195, 10725), (198, 10764),

Gene: Rooter_12 Start: 7551, Stop: 8204, Start Num: 22

Candidate Starts for Rooter_12:

(Start: 22 @7551 has 123 MA's), (41, 7611), (73, 7716), (89, 7812), (91, 7821), (96, 7842), (101, 7866), (106, 7899), (177, 8178),

Gene: Ryan_16 Start: 9383, Stop: 10051, Start Num: 22

Candidate Starts for Ryan_16:

(Start: 22 @9383 has 123 MA's), (81, 9605), (94, 9671), (119, 9791), (149, 9923), (163, 9977),

Gene: SPB78_13 Start: 8500, Stop: 9165, Start Num: 19

Candidate Starts for SPB78_13:

(Start: 19 @8500 has 9 MA's), (26, 8518), (40, 8566), (43, 8575), (70, 8659), (80, 8713), (91, 8773), (136, 8977), (152, 9055),

Gene: Saintcarr_15 Start: 9257, Stop: 9925, Start Num: 22

Candidate Starts for Saintcarr_15:

(Start: 22 @9257 has 123 MA's), (42, 9326), (81, 9479), (94, 9545), (119, 9665), (149, 9797), (163, 9851),

Gene: Samba_14 Start: 8787, Stop: 9425, Start Num: 31

Candidate Starts for Samba_14:

(Start: 29 @8784 has 2 MA's), (Start: 31 @8787 has 40 MA's), (61, 8877), (64, 8892), (106, 9120), (110, 9144), (128, 9192), (141, 9249), (148, 9288), (170, 9372), (179, 9408),

Gene: Sarge_12 Start: 7918, Stop: 8571, Start Num: 22

Candidate Starts for Sarge_12:

(Start: 22 @7918 has 123 MA's), (41, 7978), (73, 8083), (89, 8179), (91, 8188), (96, 8209), (101, 8233), (106, 8266), (177, 8545),

Gene: Schism_16 Start: 9237, Stop: 9905, Start Num: 22

Candidate Starts for Schism_16:

(Start: 22 @9237 has 123 MA's), (42, 9306), (81, 9459), (94, 9525), (119, 9645), (149, 9777), (163, 9831),

Gene: Schmidt_15 Start: 9115, Stop: 9729, Start Num: 37

Candidate Starts for Schmidt_15:

(5, 8911), (Start: 37 @9115 has 22 MA's), (54, 9166), (59, 9181), (64, 9199), (71, 9223), (82, 9289), (91, 9337), (108, 9421), (123, 9487), (131, 9511),

Gene: Scotia_14 Start: 10104, Stop: 10754, Start Num: 24

Candidate Starts for Scotia_14:

(Start: 22 @10101 has 123 MA's), (Start: 24 @10104 has 2 MA's), (41, 10161), (73, 10266), (96, 10392), (101, 10416), (102, 10422), (177, 10728),

Gene: Scuba_44 Start: 22163, Stop: 22846, Start Num: 22

Candidate Starts for Scuba_44:

(Start: 22 @22163 has 123 MA's), (77, 22364), (91, 22445), (101, 22490), (102, 22496), (103, 22508), (124, 22595), (138, 22652), (152, 22721), (166, 22772), (174, 22802), (177, 22811),

Gene: Sephiroth_22 Start: 12473, Stop: 13147, Start Num: 14

Candidate Starts for Sephiroth_22:

(Start: 14 @12473 has 2 MA's), (Start: 18 @12488 has 5 MA's), (27, 12509), (33, 12530), (Start: 37 @12539 has 22 MA's), (50, 12578), (56, 12599), (74, 12659), (83, 12728), (92, 12764), (120, 12893), (127, 12917), (140, 12977), (143, 12998), (145, 13004), (165, 13076), (175, 13112),

Gene: Shoya_11 Start: 7554, Stop: 8207, Start Num: 22

Candidate Starts for Shoya_11:

(Start: 22 @7554 has 123 MA's), (41, 7614), (73, 7719), (89, 7815), (91, 7824), (96, 7845), (101, 7869), (106, 7902), (177, 8181),

Gene: Skitty_12 Start: 7019, Stop: 7681, Start Num: 22

Candidate Starts for Skitty_12:

(Start: 22 @7019 has 123 MA's), (42, 7088), (48, 7106), (51, 7112), (81, 7241), (93, 7301), (101, 7337), (106, 7373), (109, 7385), (119, 7424), (139, 7508),

Gene: Skysand_37 Start: 22464, Stop: 23147, Start Num: 22

Candidate Starts for Skysand_37:

(Start: 22 @22464 has 123 MA's), (77, 22665), (102, 22797), (106, 22824), (124, 22896), (138, 22953), (152, 23022), (166, 23073), (177, 23112),

Gene: Smoothie_43 Start: 17914, Stop: 18579, Start Num: 22

Candidate Starts for Smoothie_43:

(Start: 22 @17914 has 123 MA's), (51, 18004), (129, 18361), (163, 18514),

Gene: Soilmate_14 Start: 8578, Stop: 9216, Start Num: 31

Candidate Starts for Soilmate_14:

(Start: 29 @8575 has 2 MA's), (Start: 31 @8578 has 40 MA's), (61, 8668), (64, 8683), (76, 8749), (92, 8836), (106, 8911), (110, 8935), (128, 8983), (141, 9040), (148, 9079), (170, 9163), (179, 9199),

Gene: Sparky_11 Start: 8045, Stop: 8707, Start Num: 23

Candidate Starts for Sparky_11:

(Start: 23 @8045 has 2 MA's), (32, 8066), (69, 8195), (79, 8243), (84, 8285), (92, 8312), (95, 8327), (125, 8459), (141, 8528), (178, 8678),

Gene: SpeedDemon_250 Start: 15649, Stop: 16305, Start Num: 22

Candidate Starts for SpeedDemon_250:

(7, 15592), (Start: 22 @15649 has 123 MA's), (38, 15700), (43, 15715), (106, 15994),

Gene: Splinter_17 Start: 10694, Stop: 11284, Start Num: 37

Candidate Starts for Splinter_17:

(Start: 37 @10694 has 22 MA's), (48, 10727), (59, 10760), (64, 10778), (80, 10856), (130, 11090), (131, 11093), (137, 11120), (152, 11192),

Gene: StarStruck_36 Start: 22001, Stop: 22684, Start Num: 22

Candidate Starts for StarStruck_36:

(Start: 22 @22001 has 123 MA's), (77, 22202), (102, 22334), (124, 22433), (127, 22442), (138, 22490), (152, 22559), (177, 22649),

Gene: Stickynote_25 Start: 16738, Stop: 17400, Start Num: 22

Candidate Starts for Stickynote_25:

(Start: 22 @16738 has 123 MA's), (30, 16756), (47, 16819), (50, 16825), (102, 17059), (124, 17155), (138, 17212), (141, 17227), (177, 17371),

Gene: Sukkupi_37 Start: 21116, Stop: 21796, Start Num: 22

Candidate Starts for Sukkupi_37:

(Start: 22 @21116 has 123 MA's), (76, 21311), (91, 21395), (102, 21446), (124, 21545), (138, 21602), (152, 21671), (166, 21722), (177, 21761),

Gene: SuperSulley_36 Start: 22185, Stop: 22868, Start Num: 22

Candidate Starts for SuperSulley_36:

(Start: 22 @22185 has 123 MA's), (77, 22386), (102, 22518), (124, 22617), (127, 22626), (138, 22674), (152, 22743), (177, 22833),

Gene: Syleon_22 Start: 12411, Stop: 13070, Start Num: 18

Candidate Starts for Syleon_22:

(Start: 14 @12396 has 2 MA's), (Start: 18 @12411 has 5 MA's), (27, 12432), (33, 12453), (Start: 37 @12462 has 22 MA's), (50, 12501), (56, 12522), (64, 12552), (74, 12582), (83, 12651), (92, 12687), (120, 12816), (127, 12840), (140, 12900), (143, 12921), (145, 12927), (165, 12999), (175, 13035),

Gene: TZGordon_19 Start: 10836, Stop: 11426, Start Num: 37

Candidate Starts for TZGordon_19:

(Start: 37 @10836 has 22 MA's), (48, 10869), (59, 10902), (64, 10920), (103, 11121), (130, 11232), (131, 11235), (137, 11262), (152, 11334),

Gene: Tesla_44 Start: 18666, Stop: 19331, Start Num: 21

Candidate Starts for Tesla_44:

(Start: 21 @18666 has 25 MA's), (43, 18732), (72, 18825), (76, 18852), (91, 18936), (105, 19008), (139, 19155), (141, 19161), (147, 19188), (149, 19200),

Gene: TinaLin_20 Start: 11401, Stop: 11997, Start Num: 37

Candidate Starts for TinaLin_20:

(Start: 37 @11401 has 22 MA's), (64, 11485), (71, 11509), (80, 11563), (103, 11686), (130, 11797), (131, 11800), (132, 11809), (137, 11827), (144, 11866), (158, 11917),

Gene: Toast_14 Start: 8626, Stop: 9306, Start Num: 20

Candidate Starts for Toast_14:

(Start: 20 @8626 has 1 MA's), (Start: 29 @8653 has 2 MA's), (Start: 31 @8656 has 40 MA's), (61, 8746), (64, 8761), (82, 8863), (91, 8911), (106, 8989), (110, 9013), (122, 9043), (128, 9061), (148, 9157), (170, 9241),

Gene: ToastyOats_18 Start: 9715, Stop: 10383, Start Num: 22

Candidate Starts for ToastyOats_18:

(Start: 22 @9715 has 123 MA's), (94, 10003), (119, 10123), (149, 10255), (163, 10309),

Gene: Toniann_42 Start: 17859, Stop: 18524, Start Num: 22

Candidate Starts for Toniann_42:

(Start: 22 @17859 has 123 MA's), (51, 17949), (129, 18306), (163, 18459),

Gene: Toodles_16 Start: 9447, Stop: 10112, Start Num: 22

Candidate Starts for Toodles_16:

(Start: 22 @9447 has 123 MA's), (70, 9606), (90, 9717), (94, 9735), (119, 9855), (159, 10026), (163, 10041),

Gene: Towmatter_22 Start: 13548, Stop: 14204, Start Num: 22

Candidate Starts for Towmatter_22:

(7, 13491), (Start: 22 @13548 has 123 MA's), (32, 13569), (38, 13599), (93, 13824), (116, 13926), (142, 14046), (163, 14133), (164, 14136), (166, 14142),

Gene: Tracker_35 Start: 21197, Stop: 21880, Start Num: 22

Candidate Starts for Tracker_35:

(Start: 22 @21197 has 123 MA's), (30, 21215), (57, 21308), (76, 21395), (77, 21398), (102, 21530), (124, 21629), (138, 21686), (152, 21755), (160, 21785), (166, 21806), (177, 21845),

Gene: Trax_21 Start: 12158, Stop: 12817, Start Num: 18

Candidate Starts for Trax_21:

(Start: 18 @12158 has 5 MA's), (35, 12206), (Start: 37 @12209 has 22 MA's), (56, 12269), (64, 12299), (83, 12398), (87, 12416), (92, 12434), (101, 12476), (103, 12494), (104, 12500), (133, 12617), (145, 12674), (150, 12695), (165, 12746), (167, 12752),

Gene: Turuncu_39 Start: 22468, Stop: 23151, Start Num: 22

Candidate Starts for Turuncu_39:

(Start: 22 @22468 has 123 MA's), (77, 22669), (102, 22801), (124, 22900), (133, 22939), (138, 22957), (152, 23026), (166, 23077), (177, 23116),

Gene: UmaThurman_14 Start: 8786, Stop: 9424, Start Num: 31

Candidate Starts for UmaThurman_14:

(Start: 29 @8783 has 2 MA's), (Start: 31 @8786 has 40 MA's), (61, 8876), (64, 8891), (92, 9044), (106, 9119), (110, 9143), (128, 9191), (141, 9248), (148, 9287), (170, 9371), (179, 9407),

Gene: Utz_14 Start: 8653, Stop: 9291, Start Num: 31

Candidate Starts for Utz_14:

(Start: 29 @8650 has 2 MA's), (Start: 31 @8653 has 40 MA's), (61, 8743), (64, 8758), (92, 8911), (106, 8986), (110, 9010), (128, 9058), (141, 9115), (148, 9154), (170, 9238), (179, 9274),

Gene: VanLee_14 Start: 8706, Stop: 9605, Start Num: 19

Candidate Starts for VanLee_14:

(Start: 19 @8706 has 9 MA's), (49, 8796), (63, 8841), (65, 8850), (138, 9183), (181, 9357), (192, 9480), (197, 9573),

Gene: VasuNzinga_45 Start: 18250, Stop: 18915, Start Num: 21

Candidate Starts for VasuNzinga_45:

(Start: 21 @18250 has 25 MA's), (43, 18316), (72, 18409), (76, 18436), (91, 18520), (105, 18592), (139, 18739), (141, 18745), (147, 18772), (149, 18784),

Gene: Vendetta_17 Start: 10694, Stop: 11284, Start Num: 37

Candidate Starts for Vendetta_17:

(Start: 37 @10694 has 22 MA's), (48, 10727), (59, 10760), (64, 10778), (80, 10856), (130, 11090), (131, 11093), (137, 11120), (152, 11192),

Gene: Walrus_15 Start: 8881, Stop: 9519, Start Num: 31

Candidate Starts for Walrus_15:

(Start: 29 @8878 has 2 MA's), (Start: 31 @8881 has 40 MA's), (61, 8971), (64, 8986), (76, 9052), (92, 9139), (106, 9214), (110, 9238), (128, 9286), (141, 9343), (148, 9382), (170, 9466), (179, 9502),

Gene: Whack_12 Start: 7754, Stop: 8692, Start Num: 19

Candidate Starts for Whack_12:

(10, 7721), (13, 7736), (Start: 19 @7754 has 9 MA's), (46, 7841), (48, 7847), (68, 7904), (103, 8099), (106, 8114), (142, 8267), (149, 8303), (156, 8330), (157, 8333), (161, 8351), (187, 8495), (190, 8534),

Gene: Wheezy_35 Start: 21402, Stop: 22085, Start Num: 22

Candidate Starts for Wheezy_35:

(Start: 22 @21402 has 123 MA's), (30, 21420), (57, 21513), (76, 21600), (77, 21603), (102, 21735), (124, 21834), (138, 21891), (152, 21960), (160, 21990), (166, 22011), (177, 22050),

Gene: Whitty_14 Start: 9882, Stop: 10814, Start Num: 21

Candidate Starts for Whitty_14:

(Start: 21 @9882 has 25 MA's), (25, 9897), (60, 10002), (70, 10047), (107, 10245), (125, 10320), (141, 10389), (146, 10413), (175, 10524), (188, 10635), (189, 10653), (191, 10668), (194, 10707), (195, 10725), (198, 10764),

Gene: WhoseManz_37 Start: 19168, Stop: 19848, Start Num: 22

Candidate Starts for WhoseManz_37:

(Start: 22 @19168 has 123 MA's), (76, 19363), (91, 19447), (102, 19498), (106, 19525), (124, 19597), (138, 19654), (152, 19723), (166, 19774), (177, 19813),

Gene: William_14 Start: 8602, Stop: 9252, Start Num: 31

Candidate Starts for William_14:

(Start: 20 @8572 has 1 MA's), (Start: 29 @8599 has 2 MA's), (Start: 31 @8602 has 40 MA's), (61, 8692), (64, 8707), (82, 8809), (91, 8857), (106, 8935), (110, 8959), (122, 8989), (128, 9007), (148, 9103), (170, 9187),

Gene: WilliamBoone_42 Start: 17223, Stop: 17888, Start Num: 22

Candidate Starts for WilliamBoone_42:

(Start: 22 @17223 has 123 MA's), (95, 17523), (106, 17583), (129, 17670),

Gene: Wisp_13 Start: 8419, Stop: 9057, Start Num: 31

Candidate Starts for Wisp_13:

(Start: 29 @8416 has 2 MA's), (Start: 31 @8419 has 40 MA's), (61, 8509), (64, 8524), (76, 8590), (92, 8677), (106, 8752), (110, 8776), (128, 8824), (141, 8881), (148, 8920), (170, 9004), (179, 9040),

Gene: Wocket_15 Start: 8904, Stop: 9542, Start Num: 31

Candidate Starts for Wocket_15:

(Start: 29 @8901 has 2 MA's), (Start: 31 @8904 has 40 MA's), (61, 8994), (64, 9009), (76, 9075), (98, 9195), (106, 9237), (110, 9261), (128, 9309), (148, 9405), (170, 9489), (179, 9525),

Gene: Yndexa_37 Start: 21116, Stop: 21796, Start Num: 22

Candidate Starts for Yndexa_37:

(Start: 22 @21116 has 123 MA's), (76, 21311), (91, 21395), (102, 21446), (124, 21545), (138, 21602), (152, 21671), (166, 21722), (177, 21761),

Gene: Yonex_16 Start: 9383, Stop: 10051, Start Num: 22

Candidate Starts for Yonex_16:

(Start: 22 @9383 has 123 MA's), (81, 9605), (94, 9671), (119, 9791), (149, 9923), (163, 9977),

Gene: Yvonnetastic_39 Start: 19249, Stop: 19914, Start Num: 22

Candidate Starts for Yvonnetastic_39:

(Start: 22 @19249 has 123 MA's), (52, 19342), (72, 19411), (106, 19600), (112, 19627), (157, 19816),

Gene: Zaheer_16 Start: 9472, Stop: 10140, Start Num: 22

Candidate Starts for Zaheer_16:

(Start: 22 @9472 has 123 MA's), (42, 9541), (81, 9694), (94, 9760), (119, 9880), (163, 10066),

Gene: Zarbodnamra_14 Start: 8678, Stop: 9316, Start Num: 31

Candidate Starts for Zarbodnamra_14:

(Start: 29 @8675 has 2 MA's), (Start: 31 @8678 has 40 MA's), (61, 8768), (64, 8783), (92, 8936), (106, 9011), (110, 9035), (128, 9083), (141, 9140), (148, 9179), (170, 9263), (179, 9299),

Gene: ZenTime222_14 Start: 9882, Stop: 10814, Start Num: 21

Candidate Starts for ZenTime222_14:

(Start: 21 @9882 has 25 MA's), (25, 9897), (60, 10002), (70, 10047), (107, 10245), (125, 10320), (141, 10389), (146, 10413), (175, 10524), (188, 10635), (189, 10653), (191, 10668), (194, 10707), (195, 10725), (198, 10764),

Gene: ZiggyZoo_13 Start: 8448, Stop: 9086, Start Num: 31

Candidate Starts for ZiggyZoo_13:

(Start: 29 @8445 has 2 MA's), (Start: 31 @8448 has 40 MA's), (61, 8538), (64, 8553), (76, 8619), (92, 8706), (106, 8781), (110, 8805), (128, 8853), (141, 8910), (148, 8949), (170, 9033), (179, 9069),

Gene: Zilla_14 Start: 8728, Stop: 9366, Start Num: 31

Candidate Starts for Zilla_14:

(Start: 29 @8725 has 2 MA's), (Start: 31 @8728 has 40 MA's), (61, 8818), (64, 8833), (76, 8899), (92, 8986), (106, 9061), (110, 9085), (128, 9133), (141, 9190), (148, 9229), (170, 9313), (179, 9349),

Gene: Zion_23 Start: 15926, Stop: 16588, Start Num: 22

Candidate Starts for Zion_23:

(Start: 22 @15926 has 123 MA's), (30, 15944), (47, 16007), (50, 16013), (102, 16247), (124, 16343), (138, 16400), (141, 16415), (177, 16559),

Gene: Zucker_14 Start: 8546, Stop: 9211, Start Num: 22

Candidate Starts for Zucker_14:

(Start: 22 @8546 has 123 MA's), (34, 8591), (44, 8621), (73, 8714), (74, 8717), (80, 8756), (89, 8807), (113, 8927), (163, 9137), (172, 9167),