

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 311333 Report

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

Pham number 311333 has 147 members, 15 are drafts.

Phages represented in each track:

- Track 1 : Kittykat_18
- Track 2 : Albanese_22, Lakshmi_22, Oxyfriuus_22
- Track 3 : Makoto_18
- Track 4 : GreenHearts_22
- Track 5 : Immaculata_22, Wawa_22, Cholula_22, Carpal_22, TattModd_22, Potatoes_22, Scuttle_22, Vallejo_22, Kalizoi_22
- Track 6 : BigMack_18
- Track 7 : EstebanJulior_18
- Track 8 : Glenn_22
- Track 9 : LilStuart_18, CristinaYang_18, Christian_18, DrRobert_18, Nancia_18, OurGirlNessie_18, Lennox_18, Bodacious_18, ChewChew_18, Pterodactyl_18
- Track 10 : BrotherBLo_22, RAP15_22, Jumboset_22, MeganNoll_22, Savage2526_22
- Track 11 : Sergei_18, Herb_18, Temper16_18, Maria1952_18, Daiboju_18
- Track 12 : OMalley_18, Eunoia_18, Aledel_18, Chridison_18, Riovina_18, AustinPowers_18
- Track 13 : Moki_18, Huckleberry_18, HeadNerd_18
- Track 14 : Greenhouse_22
- Track 15 : Rozby_22, Beethoven_22
- Track 16 : KingBob_18
- Track 17 : Lasagna_18
- Track 18 : MrGloopy_22
- Track 19 : Litotes_22
- Track 20 : HunterDalle_18, Vulture_18
- Track 21 : CallieOMalley_22
- Track 22 : Korra_23, Dino_22, Zorro_22
- Track 23 : Fluke_22
- Track 24 : Urla_18
- Track 25 : Graynor_22
- Track 26 : Nubia_22
- Track 27 : Bennie_18
- Track 28 : MrBoss_22
- Track 29 : Canowicakte_22, Suppi_22
- Track 30 : Riverdale_22
- Track 31 : DreamTeam_18, Gisselle_18
- Track 32 : Lucy_18, PitaDog_18, WonderBoy_18
- Track 33 : Misaeng_22

- Track 34 : RcigaStruga_22, Huntingdon_22
- Track 35 : PartyCup_22
- Track 36 : Pumancara_18
- Track 37 : PinkFriday_18
- Track 38 : AppleCider_22
- Track 39 : MamaPearl_18
- Track 40 : Joann_22
- Track 41 : Preamble_18
- Track 42 : Wayne_22
- Track 43 : Supakev_18
- Track 44 : Sashimi_22
- Track 45 : EvePickles_21
- Track 46 : Faja_21
- Track 47 : Crewmate_21, ObiToo_20
- Track 48 : Reedo_20
- Track 49 : KeAlii_20
- Track 50 : VResidence_20
- Track 51 : Snek_20, Tweety19_20
- Track 52 : Gibbzilla_20
- Track 53 : Dirdigger_22
- Track 54 : Cole_20, QuinnAvery_22, BigSherm_22, Halloweekend_20
- Track 55 : AllBusiness_21
- Track 56 : Schism_22, Nandita_22, Guinevere_22
- Track 57 : Toodles_22
- Track 58 : Julie_22
- Track 59 : MillySue_22
- Track 60 : GoodLuckBabe_22
- Track 61 : Ichiang_20, Saintcarr_21
- Track 62 : IsHungry_22
- Track 63 : Gusanita_20
- Track 64 : Lenoxika_22
- Track 65 : Elesar_21
- Track 66 : Donatella_21
- Track 67 : Yonex_22, Ryan_22, Zaheer_22
- Track 68 : Popper_20
- Track 69 : Kihatsu_23
- Track 70 : ToastyOats_24
- Track 71 : Kukla_19
- Track 72 : PetriParty_19, TripleJ_20
- Track 73 : DreamEater_18
- Track 74 : GUPitcher_19
- Track 75 : CardboardBox_20, AnnabelLee_19, ChipsNGuac_19, Roberts_19, ChamoyPickle_20, Gerri43_19
- Track 76 : TMaxx_19
- Track 77 : Makima_20
- Track 78 : LastNadiia_22, Audell_22
- Track 79 : Neuville_19
- Track 80 : Ezurina_18
- Track 81 : Mireles_19
- Track 82 : TripleC_22
- Track 83 : Studio_20
- Track 84 : Agamoto_21
- Track 85 : Shambre1_22

- Track 86 : Ball_18
- Track 87 : OnionKnight_19

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

The start number called the most often in the published annotations is 7, it was called in 64 of the 132 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Albanese_22, Aledel_18, AppleCider_22, AustinPowers_18, Ball_18, Beethoven_22, BrotherBLo_22, CallieOMalley_22, Canowicakte_22, Carpal_22, Cholula_22, Chridison_18, Crewmate_21, Daiboju_18, Dino_22, EstebanJulior_18, Eunoia_18, Graynor_22, GreenHearts_22, Greenhouse_22, Herb_18, HunterDalle_18, Huntingdon_22, Immaculata_22, Joann_22, Jumboset_22, Kalizoi_22, KeAlii_20, KingBob_18, Korra_23, Lakshmi_22, Litotes_22, MamaPearl_18, Maria1952_18, MeganNoll_22, Misaeng_22, MrBoss_22, Nubia_22, OMalley_18, ObiToo_20, Oxynfrius_22, PartyCup_22, PinkFriday_18, Potatoes_22, Pumancara_18, RAP15_22, RcigaStruga_22, Reedo_20, Riovina_18, Riverdale_22, Rozby_22, Savage2526_22, Scuttle_22, Sergei_18, Snek_20, Supakev_18, Suppi_22, TattModd_22, Temper16_18, Tweety19_20, Urla_18, VResidence_20, Vallejo_22, Vulture_18, Wawa_22, Wayne_22, Zorro_22,

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

- Fluke_22, Glenn_22, MrGloopy_22, OnionKnight_19,

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

- Agamoto_21, AllBusiness_21, AnnabelLee_19, Audell_22, Bennie_18, BigMack_18, BigSherm_22, Bodacious_18, CardboardBox_20, ChamoyPickle_20, ChewChew_18, ChipsNGuac_19, Christian_18, Cole_20, CristinaYang_18, Dirtdigger_22, Donatella_21, DrRobert_18, DreamEater_18, DreamTeam_18, Elesar_21, EvePickles_21, Ezurina_18, Faja_21, GUPitcher_19, Gerri43_19, Gibbzilla_20, Gisselle_18, GoodLuckBabe_22, Guinevere_22, Gusanita_20, Halloweekend_20, HeadNerd_18, Huckleberry_18, Ichiang_20, IsHungry_22, Julie_22, Kihatsu_23, Kittykat_18, Kukla_19, Lasagna_18, LastNadiia_22, Lennox_18, Lenoxika_22, LilStuart_18, Lucy_18, Makima_20, Makoto_18, MillySue_22, Mireles_19, Moki_18, Nancia_18, Nandita_22, Neuville_19, OurGirlNessie_18, PetriParty_19, PitaDog_18, Popper_20, Preamble_18, Pterodactyl_18, QuinnAvery_22, Roberts_19, Ryan_22, Saintcarr_21, Sashimi_22, Schism_22, Shambre1_22, Studio_20, TMaxx_19, ToastyOats_24, Toodles_22, TripleC_22, TripleJ_20, WonderBoy_18, Yonex_22, Zaheer_22,

Summary by start number:

Start 1:

- Found in 13 of 147 (8.8%) of genes in pham
- Manual Annotations of this start: 1 of 132
- Called 23.1% of time when present
- Phage (with cluster) where this start called: Neuville_19 (FR), OnionKnight_19 (singleton), Studio_20 (FR),

Start 3:

- Found in 1 of 147 (0.7%) of genes in pham
- Manual Annotations of this start: 1 of 132
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Shambre1_22 (singleton),

Start 5:

- Found in 28 of 147 (19.0%) of genes in pham
- Manual Annotations of this start: 24 of 132
- Called 96.4% of time when present
- Phage (with cluster) where this start called: Bennie_18 (AK), BigMack_18 (AK), Bodacious_18 (AK), ChewChew_18 (AK), Christian_18 (AK), CristinaYang_18 (AK), DrRobert_18 (AK), DreamTeam_18 (AK), Ezurina_18 (FR), GUPitcher_19 (FJ), Gibbzilla_20 (FB), Gisselle_18 (AK), HeadNerd_18 (AK), Huckleberry_18 (AK), Kittykat_18 (AK), Lasagna_18 (AK), Lennox_18 (AK), LiiStuart_18 (AK), Lucy_18 (AK), Makoto_18 (AK), Moki_18 (AK), Nancia_18 (AK), OurGirlNessie_18 (AK), PitaDog_18 (AK), Preamble_18 (AK), Pterodactyl_18 (AK), WonderBoy_18 (AK),

Start 6:

- Found in 9 of 147 (6.1%) of genes in pham
- Manual Annotations of this start: 7 of 132
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GoodLuckBabe_22 (FF), Guinevere_22 (FF), Kihatsu_23 (FF), Lenoxika_22 (FF), Nandita_22 (FF), Ryan_22 (FF), Schism_22 (FF), Yonex_22 (FF), Zaheer_22 (FF),

Start 7:

- Found in 71 of 147 (48.3%) of genes in pham
- Manual Annotations of this start: 64 of 132
- Called 94.4% of time when present
- Phage (with cluster) where this start called: Albanese_22 (AK), Aledel_18 (AK), AppleCider_22 (AK), AustinPowers_18 (AK), Ball_18 (singleton), Beethoven_22 (AK), BrotherBLo_22 (AK), CallieOMalley_22 (AK), Canowicakte_22 (AK), Carpal_22 (AK), Cholula_22 (AK), Chridison_18 (AK), Crewmate_21 (AZ1), Daiboju_18 (AK), Dino_22 (AK), EstebanJulior_18 (AK), Eunoia_18 (AK), Graynor_22 (AK), GreenHearts_22 (AK), Greenhouse_22 (AK), Herb_18 (AK), HunterDalle_18 (AK), Huntingdon_22 (AK), Immaculata_22 (AK), Joann_22 (AK), Jumboset_22 (AK), Kalizoi_22 (AK), KeAlii_20 (AZ1), KingBob_18 (AK), Korra_23 (AK), Lakshmi_22 (AK), Litotes_22 (AK), MamaPearl_18 (AK), Maria1952_18 (AK), MeganNoll_22 (AK), Misaeng_22 (AK), MrBoss_22 (AK), Nubia_22 (AK), OMalley_18 (AK), ObiToo_20 (AZ1), Oxynfrius_22 (AK), PartyCup_22 (AK), PinkFriday_18 (AK), Potatoes_22 (AK), Pumancara_18 (AK), RAP15_22 (AK), RcigaStruga_22 (AK), Reedo_20 (AZ1), Rivovina_18 (AK), Riverdale_22 (AK), Rozby_22 (AK), Savage2526_22 (AK), Scuttle_22 (AK), Sergei_18 (AK), Snek_20 (AZ3), Supakev_18 (AK), Suppi_22 (AK), TattModd_22 (AK), Temper16_18 (AK), Tweety19_20 (AZ3), Urla_18 (AK), VResidence_20 (AZ1), Vallejo_22 (AK), Vulture_18 (AK), Wawa_22 (AK), Wayne_22 (AK), Zorro_22 (AK),

Start 9:

- Found in 65 of 147 (44.2%) of genes in pham
- Manual Annotations of this start: 35 of 132
- Called 61.5% of time when present

- Phage (with cluster) where this start called: Agamoto_21 (FR), AllBusiness_21 (FF), AnnabelLee_19 (FR), Audell_22 (FR), BigSherm_22 (FF), CardboardBox_20 (FR), ChamoyPickle_20 (FR), ChipsNGuac_19 (FR), Cole_20 (FF), Dirtdigger_22 (FF), Donatella_21 (FF), DreamEater_18 (FJ), Elesar_21 (FF), EvePickles_21 (AY), Faja_21 (AY), Fluke_22 (AK), Gerri43_19 (FR), Glenn_22 (AK), Gusanita_20 (FF), Halloweekend_20 (FF), Ichiang_20 (FF), IsHungry_22 (FF), Julie_22 (FF), Kukla_19 (FJ), LastNadiia_22 (FR), Makima_20 (FR), MillySue_22 (FF), Mireles_19 (FR), MrGloopy_22 (AK), PetriParty_19 (FJ), Popper_20 (FF), QuinnAvery_22 (FF), Roberts_19 (FR), Saintcarr_21 (FF), Sashimi_22 (AY), TMaxx_19 (FR), ToastyOats_24 (FF), Toodles_22 (FF), TripleC_22 (FR), TripleJ_20 (FJ),

Summary by clusters:

There are 9 clusters represented in this pham: FR, AK, singleton, FB, FF, AY, AZ1, FJ, AZ3,

Info for manual annotations of cluster AK:

- Start number 5 was manually annotated 24 times for cluster AK.
- Start number 7 was manually annotated 57 times for cluster AK.
- Start number 9 was manually annotated 3 times for cluster AK.

Info for manual annotations of cluster AY:

- Start number 9 was manually annotated 3 times for cluster AY.

Info for manual annotations of cluster AZ1:

- Start number 7 was manually annotated 5 times for cluster AZ1.

Info for manual annotations of cluster AZ3:

- Start number 7 was manually annotated 2 times for cluster AZ3.

Info for manual annotations of cluster FF:

- Start number 6 was manually annotated 7 times for cluster FF.
- Start number 9 was manually annotated 15 times for cluster FF.

Info for manual annotations of cluster FJ:

- Start number 9 was manually annotated 3 times for cluster FJ.

Info for manual annotations of cluster FR:

- Start number 9 was manually annotated 11 times for cluster FR.

Gene Information:

Gene: Agamoto_21 Start: 15857, Stop: 16783, Start Num: 9

Candidate Starts for Agamoto_21:

(Start: 1 @15842 has 1 MA's), (Start: 9 @15857 has 35 MA's), (13, 15908), (17, 15929), (37, 16028), (41, 16046), (44, 16079), (62, 16217), (81, 16337), (83, 16355), (100, 16439), (119, 16568), (123, 16577), (134, 16625), (141, 16658), (154, 16703),

Gene: Albanese_22 Start: 18260, Stop: 19336, Start Num: 7

Candidate Starts for Albanese_22:

(Start: 7 @18260 has 64 MA's), (15, 18329), (24, 18383), (25, 18386), (31, 18407), (32, 18410), (42, 18461), (60, 18617), (70, 18689), (77, 18728), (82, 18755), (98, 18848), (102, 18875), (117, 18977), (134, 19031), (136, 19043), (153, 19118), (164, 19187), (172, 19250), (175, 19265), (181, 19316),

Gene: Aledel_18 Start: 16583, Stop: 17662, Start Num: 7

Candidate Starts for Aledel_18:

(Start: 7 @16583 has 64 MA's), (25, 16712), (32, 16736), (36, 16757), (42, 16787), (50, 16847), (70, 17015), (74, 17036), (85, 17111), (99, 17177), (117, 17303), (123, 17315), (134, 17357), (151, 17435), (153, 17444), (164, 17513), (172, 17576), (181, 17642),

Gene: AllBusiness_21 Start: 16818, Stop: 17876, Start Num: 9

Candidate Starts for AllBusiness_21:

(Start: 9 @16818 has 35 MA's), (33, 16965), (41, 17007), (44, 17040), (62, 17178), (80, 17292), (86, 17340), (137, 17589), (138, 17592), (151, 17649), (181, 17856),

Gene: AnnabelLee_19 Start: 12817, Stop: 13746, Start Num: 9

Candidate Starts for AnnabelLee_19:

(Start: 1 @12802 has 1 MA's), (Start: 9 @12817 has 35 MA's), (13, 12868), (26, 12940), (41, 13006), (44, 13039), (74, 13261), (81, 13297), (92, 13369), (100, 13399), (124, 13537), (137, 13594), (140, 13615), (162, 13729),

Gene: AppleCider_22 Start: 18203, Stop: 19279, Start Num: 7

Candidate Starts for AppleCider_22:

(Start: 7 @18203 has 64 MA's), (15, 18272), (38, 18383), (42, 18404), (53, 18500), (64, 18575), (71, 18635), (82, 18698), (85, 18728), (98, 18791), (100, 18800), (117, 18920), (131, 18965), (134, 18974), (153, 19061), (157, 19088), (164, 19130), (175, 19208), (181, 19259),

Gene: Audell_22 Start: 16138, Stop: 17070, Start Num: 9

Candidate Starts for Audell_22:

(Start: 9 @16138 has 35 MA's), (13, 16189), (41, 16327), (44, 16360), (51, 16399), (62, 16498), (68, 16534), (81, 16618), (83, 16636), (100, 16720), (114, 16819), (121, 16852), (124, 16858), (140, 16939), (162, 17053),

Gene: AustinPowers_18 Start: 16584, Stop: 17663, Start Num: 7

Candidate Starts for AustinPowers_18:

(Start: 7 @16584 has 64 MA's), (25, 16713), (32, 16737), (36, 16758), (42, 16788), (50, 16848), (70, 17016), (74, 17037), (85, 17112), (99, 17178), (117, 17304), (123, 17316), (134, 17358), (151, 17436), (153, 17445), (164, 17514), (172, 17577), (181, 17643),

Gene: Ball_18 Start: 15235, Stop: 16251, Start Num: 7

Candidate Starts for Ball_18:

(Start: 7 @15235 has 64 MA's), (14, 15292), (30, 15379), (32, 15385), (36, 15403), (42, 15433), (54, 15535), (62, 15598), (98, 15826), (103, 15850), (107, 15883), (168, 16147), (179, 16222),

Gene: Beethoven_22 Start: 18140, Stop: 19216, Start Num: 7

Candidate Starts for Beethoven_22:

(Start: 7 @18140 has 64 MA's), (Start: 9 @18146 has 35 MA's), (15, 18209), (24, 18263), (25, 18266), (31, 18287), (32, 18290), (60, 18497), (70, 18569), (79, 18620), (100, 18737), (134, 18911), (151, 18989), (157, 19025), (164, 19067), (181, 19196),

Gene: Bennie_18 Start: 16595, Stop: 17674, Start Num: 5

Candidate Starts for Bennie_18:

(Start: 5 @16595 has 24 MA's), (36, 16769), (42, 16799), (56, 16910), (58, 16925), (62, 16964), (70, 17027), (85, 17123), (94, 17171), (99, 17189), (100, 17195), (117, 17315), (131, 17360), (134, 17369), (153, 17456), (164, 17525), (175, 17603), (181, 17654), (182, 17657),

Gene: BigMack_18 Start: 16583, Stop: 17662, Start Num: 5

Candidate Starts for BigMack_18:

(Start: 5 @16583 has 24 MA's), (23, 16694), (24, 16709), (25, 16712), (32, 16736), (36, 16757), (42, 16787), (46, 16826), (54, 16889), (56, 16898), (58, 16913), (62, 16952), (70, 17015), (71, 17018), (85, 17111), (94, 17159), (99, 17177), (100, 17183), (131, 17348), (134, 17357), (151, 17435), (153, 17444), (157, 17471), (164, 17513), (181, 17642), (182, 17645),

Gene: BigSherm_22 Start: 16746, Stop: 17804, Start Num: 9

Candidate Starts for BigSherm_22:

(Start: 9 @16746 has 35 MA's), (40, 16932), (41, 16935), (44, 16968), (51, 17007), (62, 17106), (80, 17220), (86, 17268), (106, 17376), (137, 17517), (138, 17520), (144, 17547), (147, 17559), (151, 17577), (156, 17610), (167, 17676),

Gene: Bodacious_18 Start: 16602, Stop: 17681, Start Num: 5

Candidate Starts for Bodacious_18:

(Start: 5 @16602 has 24 MA's), (23, 16713), (25, 16731), (32, 16755), (36, 16776), (42, 16806), (45, 16839), (46, 16845), (56, 16917), (58, 16932), (70, 17034), (72, 17040), (73, 17052), (85, 17130), (90, 17163), (99, 17196), (131, 17367), (134, 17376), (151, 17454), (153, 17463), (164, 17532), (172, 17595), (181, 17661), (182, 17664),

Gene: BrotherBLo_22 Start: 18146, Stop: 19222, Start Num: 7

Candidate Starts for BrotherBLo_22:

(Start: 7 @18146 has 64 MA's), (Start: 9 @18152 has 35 MA's), (15, 18215), (24, 18269), (25, 18272), (31, 18293), (32, 18296), (60, 18503), (70, 18575), (79, 18626), (100, 18743), (131, 18908), (134, 18917), (151, 18995), (157, 19031), (164, 19073), (181, 19202),

Gene: CallieOMalley_22 Start: 18203, Stop: 19279, Start Num: 7

Candidate Starts for CallieOMalley_22:

(Start: 7 @18203 has 64 MA's), (15, 18272), (42, 18404), (53, 18500), (64, 18575), (71, 18635), (82, 18698), (98, 18791), (100, 18800), (117, 18920), (131, 18965), (134, 18974), (153, 19061), (157, 19088), (164, 19130), (172, 19193), (175, 19208), (181, 19259),

Gene: Canowicakte_22 Start: 18238, Stop: 19314, Start Num: 7

Candidate Starts for Canowicakte_22:

(Start: 7 @18238 has 64 MA's), (15, 18307), (31, 18385), (42, 18439), (53, 18535), (64, 18610), (71, 18670), (82, 18733), (98, 18826), (100, 18835), (117, 18955), (131, 19000), (134, 19009), (153, 19096), (157, 19123), (164, 19165), (175, 19243), (181, 19294),

Gene: CardboardBox_20 Start: 12817, Stop: 13746, Start Num: 9

Candidate Starts for CardboardBox_20:

(Start: 1 @12802 has 1 MA's), (Start: 9 @12817 has 35 MA's), (13, 12868), (26, 12940), (41, 13006), (44, 13039), (74, 13261), (81, 13297), (92, 13369), (100, 13399), (124, 13537), (137, 13594), (140, 13615), (162, 13729),

Gene: Carpal_22 Start: 18147, Stop: 19223, Start Num: 7

Candidate Starts for Carpal_22:

(Start: 7 @18147 has 64 MA's), (Start: 9 @18153 has 35 MA's), (15, 18216), (24, 18270), (25, 18273), (31, 18294), (32, 18297), (56, 18459), (60, 18504), (70, 18576), (79, 18627), (100, 18744), (134, 18918), (151, 18996), (157, 19032), (164, 19074), (181, 19203),

Gene: ChamoyPickle_20 Start: 12817, Stop: 13746, Start Num: 9

Candidate Starts for ChamoyPickle_20:

(Start: 1 @12802 has 1 MA's), (Start: 9 @12817 has 35 MA's), (13, 12868), (26, 12940), (41, 13006), (44, 13039), (74, 13261), (81, 13297), (92, 13369), (100, 13399), (124, 13537), (137, 13594), (140, 13615), (162, 13729),

Gene: ChewChew_18 Start: 16601, Stop: 17680, Start Num: 5

Candidate Starts for ChewChew_18:

(Start: 5 @16601 has 24 MA's), (23, 16712), (25, 16730), (32, 16754), (36, 16775), (42, 16805), (45, 16838), (46, 16844), (56, 16916), (58, 16931), (70, 17033), (72, 17039), (73, 17051), (85, 17129), (90, 17162), (99, 17195), (131, 17366), (134, 17375), (151, 17453), (153, 17462), (164, 17531), (172, 17594), (181, 17660), (182, 17663),

Gene: ChipsNGuac_19 Start: 12817, Stop: 13746, Start Num: 9

Candidate Starts for ChipsNGuac_19:

(Start: 1 @12802 has 1 MA's), (Start: 9 @12817 has 35 MA's), (13, 12868), (26, 12940), (41, 13006), (44, 13039), (74, 13261), (81, 13297), (92, 13369), (100, 13399), (124, 13537), (137, 13594), (140, 13615), (162, 13729),

Gene: Cholula_22 Start: 18192, Stop: 19268, Start Num: 7

Candidate Starts for Cholula_22:

(Start: 7 @18192 has 64 MA's), (Start: 9 @18198 has 35 MA's), (15, 18261), (24, 18315), (25, 18318), (31, 18339), (32, 18342), (56, 18504), (60, 18549), (70, 18621), (79, 18672), (100, 18789), (134, 18963), (151, 19041), (157, 19077), (164, 19119), (181, 19248),

Gene: Chridison_18 Start: 16584, Stop: 17663, Start Num: 7

Candidate Starts for Chridison_18:

(Start: 7 @16584 has 64 MA's), (25, 16713), (32, 16737), (36, 16758), (42, 16788), (50, 16848), (70, 17016), (74, 17037), (85, 17112), (99, 17178), (117, 17304), (123, 17316), (134, 17358), (151, 17436), (153, 17445), (164, 17514), (172, 17577), (181, 17643),

Gene: Christian_18 Start: 16602, Stop: 17681, Start Num: 5

Candidate Starts for Christian_18:

(Start: 5 @16602 has 24 MA's), (23, 16713), (25, 16731), (32, 16755), (36, 16776), (42, 16806), (45, 16839), (46, 16845), (56, 16917), (58, 16932), (70, 17034), (72, 17040), (73, 17052), (85, 17130), (90, 17163), (99, 17196), (131, 17367), (134, 17376), (151, 17454), (153, 17463), (164, 17532), (172, 17595), (181, 17661), (182, 17664),

Gene: Cole_20 Start: 16408, Stop: 17466, Start Num: 9

Candidate Starts for Cole_20:

(Start: 9 @16408 has 35 MA's), (40, 16594), (41, 16597), (44, 16630), (51, 16669), (62, 16768), (80, 16882), (86, 16930), (106, 17038), (137, 17179), (138, 17182), (144, 17209), (147, 17221), (151, 17239), (156, 17272), (167, 17338),

Gene: Crewmate_21 Start: 16598, Stop: 17668, Start Num: 7

Candidate Starts for Crewmate_21:

(Start: 7 @16598 has 64 MA's), (36, 16766), (79, 17081), (96, 17183), (137, 17378), (157, 17474), (169, 17561), (172, 17582),

Gene: CristinaYang_18 Start: 16602, Stop: 17681, Start Num: 5

Candidate Starts for CristinaYang_18:

(Start: 5 @16602 has 24 MA's), (23, 16713), (25, 16731), (32, 16755), (36, 16776), (42, 16806), (45, 16839), (46, 16845), (56, 16917), (58, 16932), (70, 17034), (72, 17040), (73, 17052), (85, 17130), (90, 17163), (99, 17196), (131, 17367), (134, 17376), (151, 17454), (153, 17463), (164, 17532), (172, 17595), (181, 17661), (182, 17664),

Gene: Daiboju_18 Start: 16598, Stop: 17677, Start Num: 7

Candidate Starts for Daiboju_18:

(Start: 7 @16598 has 64 MA's), (24, 16724), (36, 16772), (42, 16802), (54, 16904), (56, 16913), (70, 17030), (73, 17048), (74, 17051), (85, 17126), (99, 17192), (117, 17318), (134, 17372), (153, 17459), (157, 17486), (164, 17528), (172, 17591), (181, 17657),

Gene: Dino_22 Start: 18145, Stop: 19221, Start Num: 7

Candidate Starts for Dino_22:

(Start: 7 @18145 has 64 MA's), (Start: 9 @18151 has 35 MA's), (15, 18214), (24, 18268), (25, 18271), (31, 18292), (32, 18295), (56, 18457), (60, 18502), (70, 18574), (100, 18742), (134, 18916), (151, 18994), (157, 19030), (164, 19072), (181, 19201),

Gene: Dirdigger_22 Start: 16726, Stop: 17784, Start Num: 9

Candidate Starts for Dirdigger_22:

(Start: 9 @16726 has 35 MA's), (40, 16912), (41, 16915), (44, 16948), (51, 16987), (57, 17038), (62, 17086), (80, 17200), (106, 17356), (137, 17497), (138, 17500), (147, 17539), (151, 17557), (156, 17590),

Gene: Donatella_21 Start: 16872, Stop: 17930, Start Num: 9

Candidate Starts for Donatella_21:

(Start: 9 @16872 has 35 MA's), (33, 17019), (40, 17058), (41, 17061), (44, 17094), (51, 17133), (62, 17232), (80, 17346), (86, 17394), (137, 17643), (138, 17646), (173, 17847),

Gene: DrRobert_18 Start: 16602, Stop: 17681, Start Num: 5

Candidate Starts for DrRobert_18:

(Start: 5 @16602 has 24 MA's), (23, 16713), (25, 16731), (32, 16755), (36, 16776), (42, 16806), (45, 16839), (46, 16845), (56, 16917), (58, 16932), (70, 17034), (72, 17040), (73, 17052), (85, 17130), (90, 17163), (99, 17196), (131, 17367), (134, 17376), (151, 17454), (153, 17463), (164, 17532), (172, 17595), (181, 17661), (182, 17664),

Gene: DreamEater_18 Start: 16382, Stop: 17440, Start Num: 9

Candidate Starts for DreamEater_18:

(Start: 9 @16382 has 35 MA's), (11, 16412), (22, 16481), (26, 16505), (34, 16532), (41, 16571), (44, 16604), (62, 16742), (65, 16751), (74, 16826), (87, 16907), (95, 16940), (100, 16961), (106, 17012), (138, 17156), (147, 17195), (151, 17213), (173, 17357), (181, 17420),

Gene: DreamTeam_18 Start: 16635, Stop: 17714, Start Num: 5

Candidate Starts for DreamTeam_18:

(Start: 5 @16635 has 24 MA's), (24, 16761), (25, 16764), (32, 16788), (42, 16839), (54, 16941), (56, 16950), (64, 17010), (71, 17070), (91, 17199), (99, 17229), (117, 17355), (134, 17409), (147, 17469), (157, 17523), (175, 17643), (181, 17694), (182, 17697),

Gene: Elesar_21 Start: 16799, Stop: 17857, Start Num: 9

Candidate Starts for Elesar_21:

(Start: 9 @16799 has 35 MA's), (22, 16898), (33, 16946), (40, 16985), (41, 16988), (44, 17021), (51, 17060), (62, 17159), (80, 17273), (81, 17279), (86, 17321), (106, 17429), (137, 17570), (138, 17573), (144, 17600), (147, 17612), (148, 17618), (151, 17630), (156, 17663), (181, 17837),

Gene: EstebanJulior_18 Start: 16600, Stop: 17679, Start Num: 7

Candidate Starts for EstebanJulior_18:

(Start: 7 @16600 has 64 MA's), (8, 16603), (Start: 9 @16606 has 35 MA's), (17, 16678), (18, 16681), (24, 16726), (32, 16753), (36, 16774), (42, 16804), (53, 16900), (60, 16960), (77, 17071), (89, 17146), (98, 17191), (102, 17218), (123, 17332), (134, 17374), (151, 17452), (153, 17461), (164, 17530), (175, 17608),

Gene: Eunoia_18 Start: 16583, Stop: 17662, Start Num: 7

Candidate Starts for Eunoia_18:

(Start: 7 @16583 has 64 MA's), (25, 16712), (32, 16736), (36, 16757), (42, 16787), (50, 16847), (70, 17015), (74, 17036), (85, 17111), (99, 17177), (117, 17303), (123, 17315), (134, 17357), (151, 17435), (153, 17444), (164, 17513), (172, 17576), (181, 17642),

Gene: EvePickles_21 Start: 16081, Stop: 17058, Start Num: 9

Candidate Starts for EvePickles_21:

(Start: 9 @16081 has 35 MA's), (26, 16204), (31, 16222), (33, 16228), (41, 16270), (44, 16303), (49, 16330), (52, 16357), (65, 16450), (74, 16525), (98, 16654), (100, 16663), (104, 16690), (108, 16744), (116, 16795),

Gene: Ezurina_18 Start: 12389, Stop: 13480, Start Num: 5

Candidate Starts for Ezurina_18:

(Start: 1 @12374 has 1 MA's), (Start: 5 @12389 has 24 MA's), (22, 12500), (32, 12545), (47, 12644), (107, 13061), (116, 13115), (123, 13133), (132, 13178), (134, 13184), (158, 13313), (166, 13361), (177, 13445),

Gene: Faja_21 Start: 15977, Stop: 16954, Start Num: 9

Candidate Starts for Faja_21:

(Start: 9 @15977 has 35 MA's), (33, 16124), (41, 16166), (44, 16199), (80, 16451), (81, 16457), (100, 16559), (108, 16640), (116, 16691), (125, 16712), (128, 16730), (166, 16922),

Gene: Fluke_22 Start: 18194, Stop: 19264, Start Num: 9

Candidate Starts for Fluke_22:

(Start: 7 @18188 has 64 MA's), (Start: 9 @18194 has 35 MA's), (15, 18257), (24, 18311), (25, 18314), (31, 18335), (32, 18338), (56, 18500), (60, 18545), (70, 18617), (79, 18668), (100, 18785), (134, 18959), (151, 19037), (153, 19046), (157, 19073), (164, 19115), (181, 19244),

Gene: GUPitcher_19 Start: 15725, Stop: 16819, Start Num: 5

Candidate Starts for GUPitcher_19:

(Start: 5 @15725 has 24 MA's), (11, 15755), (41, 15914), (44, 15947), (51, 15986), (63, 16088), (109, 16391), (122, 16454), (148, 16580), (175, 16748),

Gene: Gerri43_19 Start: 12817, Stop: 13746, Start Num: 9

Candidate Starts for Gerri43_19:

(Start: 1 @12802 has 1 MA's), (Start: 9 @12817 has 35 MA's), (13, 12868), (26, 12940), (41, 13006), (44, 13039), (74, 13261), (81, 13297), (92, 13369), (100, 13399), (124, 13537), (137, 13594), (140, 13615), (162, 13729),

Gene: Gibbzilla_20 Start: 13767, Stop: 14849, Start Num: 5

Candidate Starts for Gibbzilla_20:

(Start: 5 @13767 has 24 MA's), (19, 13845), (41, 13956), (44, 13989), (59, 14115), (80, 14241), (117, 14484), (120, 14490), (143, 14586), (145, 14595),

Gene: Gisselle_18 Start: 16635, Stop: 17714, Start Num: 5

Candidate Starts for Gisselle_18:

(Start: 5 @16635 has 24 MA's), (24, 16761), (25, 16764), (32, 16788), (42, 16839), (54, 16941), (56, 16950), (64, 17010), (71, 17070), (91, 17199), (99, 17229), (117, 17355), (134, 17409), (147, 17469), (157, 17523), (175, 17643), (181, 17694), (182, 17697),

Gene: Glenn_22 Start: 18203, Stop: 19273, Start Num: 9

Candidate Starts for Glenn_22:

(Start: 7 @18197 has 64 MA's), (Start: 9 @18203 has 35 MA's), (15, 18266), (24, 18320), (25, 18323), (31, 18344), (54, 18500), (56, 18509), (60, 18554), (70, 18626), (79, 18677), (100, 18794), (134, 18968), (151, 19046), (157, 19082), (164, 19124), (181, 19253),

Gene: GoodLuckBabe_22 Start: 16701, Stop: 17774, Start Num: 6

Candidate Starts for GoodLuckBabe_22:

(2, 16689), (Start: 6 @16701 has 7 MA's), (11, 16731), (34, 16851), (41, 16890), (44, 16923), (51, 16962), (75, 17154), (86, 17223), (122, 17424), (143, 17514), (145, 17523), (169, 17667), (171, 17682), (175, 17703),

Gene: Graynor_22 Start: 18224, Stop: 19300, Start Num: 7

Candidate Starts for Graynor_22:

(Start: 7 @18224 has 64 MA's), (15, 18293), (31, 18371), (42, 18425), (53, 18521), (64, 18596), (71, 18656), (82, 18719), (98, 18812), (100, 18821), (117, 18941), (123, 18953), (131, 18986), (134, 18995), (153, 19082), (157, 19109), (164, 19151), (175, 19229), (181, 19280),

Gene: GreenHearts_22 Start: 18307, Stop: 19383, Start Num: 7

Candidate Starts for GreenHearts_22:

(Start: 7 @18307 has 64 MA's), (15, 18376), (25, 18433), (31, 18454), (32, 18457), (42, 18508), (60, 18664), (70, 18736), (77, 18775), (82, 18802), (98, 18895), (117, 19024), (134, 19078), (136, 19090), (153, 19165), (164, 19234), (172, 19297), (175, 19312), (181, 19363),

Gene: Greenhouse_22 Start: 18231, Stop: 19307, Start Num: 7

Candidate Starts for Greenhouse_22:

(Start: 7 @18231 has 64 MA's), (15, 18300), (24, 18354), (25, 18357), (31, 18378), (32, 18381), (37, 18408), (42, 18432), (60, 18588), (70, 18660), (73, 18678), (77, 18699), (82, 18726), (98, 18819), (117, 18948), (134, 19002), (136, 19014), (153, 19089), (164, 19158), (172, 19221), (175, 19236), (181, 19287),

Gene: Guinevere_22 Start: 16732, Stop: 17805, Start Num: 6

Candidate Starts for Guinevere_22:

(2, 16720), (Start: 6 @16732 has 7 MA's), (11, 16762), (34, 16882), (41, 16921), (44, 16954), (51, 16993), (72, 17161), (75, 17185), (86, 17254), (109, 17392), (122, 17455), (143, 17545), (145, 17554), (171, 17713), (175, 17734),

Gene: Gusanita_20 Start: 16621, Stop: 17679, Start Num: 9

Candidate Starts for Gusanita_20:

(2, 16609), (Start: 9 @16621 has 35 MA's), (22, 16720), (41, 16810), (44, 16843), (51, 16882), (55, 16921), (69, 17029), (72, 17050), (74, 17065), (83, 17119), (86, 17143), (87, 17146), (132, 17368), (138, 17395), (139, 17404), (153, 17461), (156, 17485), (173, 17596), (181, 17659),

Gene: Halloweekend_20 Start: 16372, Stop: 17430, Start Num: 9

Candidate Starts for Halloweekend_20:

(Start: 9 @16372 has 35 MA's), (40, 16558), (41, 16561), (44, 16594), (51, 16633), (62, 16732), (80, 16846), (86, 16894), (106, 17002), (137, 17143), (138, 17146), (144, 17173), (147, 17185), (151, 17203), (156, 17236), (167, 17302),

Gene: HeadNerd_18 Start: 16595, Stop: 17674, Start Num: 5

Candidate Starts for HeadNerd_18:

(Start: 5 @16595 has 24 MA's), (36, 16769), (42, 16799), (58, 16925), (62, 16964), (70, 17027), (85, 17123), (94, 17171), (99, 17189), (100, 17195), (117, 17315), (131, 17360), (134, 17369), (153, 17456), (164, 17525), (175, 17603), (181, 17654), (182, 17657),

Gene: Herb_18 Start: 16598, Stop: 17677, Start Num: 7

Candidate Starts for Herb_18:

(Start: 7 @16598 has 64 MA's), (24, 16724), (36, 16772), (42, 16802), (54, 16904), (56, 16913), (70, 17030), (73, 17048), (74, 17051), (85, 17126), (99, 17192), (117, 17318), (134, 17372), (153, 17459), (157, 17486), (164, 17528), (172, 17591), (181, 17657),

Gene: Huckleberry_18 Start: 16595, Stop: 17674, Start Num: 5

Candidate Starts for Huckleberry_18:

(Start: 5 @16595 has 24 MA's), (36, 16769), (42, 16799), (58, 16925), (62, 16964), (70, 17027), (85, 17123), (94, 17171), (99, 17189), (100, 17195), (117, 17315), (131, 17360), (134, 17369), (153, 17456), (164, 17525), (175, 17603), (181, 17654), (182, 17657),

Gene: HunterDalle_18 Start: 16583, Stop: 17662, Start Num: 7

Candidate Starts for HunterDalle_18:

(Start: 7 @16583 has 64 MA's), (25, 16712), (32, 16736), (36, 16757), (42, 16787), (50, 16847), (53, 16883), (70, 17015), (74, 17036), (85, 17111), (94, 17159), (99, 17177), (117, 17303), (123, 17315), (134, 17357), (151, 17435), (153, 17444), (164, 17513), (172, 17576), (181, 17642),

Gene: Huntingdon_22 Start: 18199, Stop: 19275, Start Num: 7

Candidate Starts for Huntingdon_22:

(Start: 7 @18199 has 64 MA's), (15, 18268), (20, 18283), (23, 18307), (24, 18322), (25, 18325), (32, 18349), (39, 18382), (62, 18565), (70, 18628), (71, 18631), (72, 18634), (79, 18679), (82, 18694), (117, 18916), (134, 18970), (136, 18982), (151, 19048), (153, 19057), (164, 19126), (175, 19204), (181, 19255),

Gene: Ichiang_20 Start: 16389, Stop: 17447, Start Num: 9

Candidate Starts for Ichiang_20:

(Start: 9 @16389 has 35 MA's), (33, 16536), (41, 16578), (44, 16611), (62, 16749), (86, 16911), (137, 17160), (138, 17163), (147, 17202), (173, 17364),

Gene: Immaculata_22 Start: 18191, Stop: 19267, Start Num: 7

Candidate Starts for Immaculata_22:

(Start: 7 @18191 has 64 MA's), (Start: 9 @18197 has 35 MA's), (15, 18260), (24, 18314), (25, 18317), (31, 18338), (32, 18341), (56, 18503), (60, 18548), (70, 18620), (79, 18671), (100, 18788), (134, 18962), (151, 19040), (157, 19076), (164, 19118), (181, 19247),

Gene: IsHungry_22 Start: 16699, Stop: 17757, Start Num: 9

Candidate Starts for IsHungry_22:

(Start: 9 @16699 has 35 MA's), (41, 16888), (44, 16921), (51, 16960), (55, 16999), (86, 17221), (87, 17224), (110, 17371), (132, 17446), (138, 17473), (139, 17482), (147, 17512), (153, 17539), (156, 17563), (173, 17674), (181, 17737),

Gene: Joann_22 Start: 18211, Stop: 19287, Start Num: 7

Candidate Starts for Joann_22:

(Start: 7 @18211 has 64 MA's), (15, 18280), (25, 18337), (31, 18358), (32, 18361), (42, 18412), (60, 18568), (70, 18640), (77, 18679), (82, 18706), (98, 18799), (102, 18826), (134, 18982), (136, 18994),

(153, 19069), (161, 19126), (164, 19138), (172, 19201), (175, 19216), (181, 19267),

Gene: Julie_22 Start: 16962, Stop: 18038, Start Num: 9

Candidate Starts for Julie_22:

(Start: 9 @16962 has 35 MA's), (33, 17109), (41, 17151), (44, 17184), (51, 17223), (62, 17322), (65, 17331), (80, 17436), (86, 17484), (87, 17487), (98, 17532), (109, 17622), (111, 17634), (144, 17778), (147, 17790), (175, 17967), (176, 17979), (180, 18012),

Gene: Jumboset_22 Start: 18140, Stop: 19216, Start Num: 7

Candidate Starts for Jumboset_22:

(Start: 7 @18140 has 64 MA's), (Start: 9 @18146 has 35 MA's), (15, 18209), (24, 18263), (25, 18266), (31, 18287), (32, 18290), (60, 18497), (70, 18569), (79, 18620), (100, 18737), (131, 18902), (134, 18911), (151, 18989), (157, 19025), (164, 19067), (181, 19196),

Gene: Kalizoi_22 Start: 18139, Stop: 19215, Start Num: 7

Candidate Starts for Kalizoi_22:

(Start: 7 @18139 has 64 MA's), (Start: 9 @18145 has 35 MA's), (15, 18208), (24, 18262), (25, 18265), (31, 18286), (32, 18289), (56, 18451), (60, 18496), (70, 18568), (79, 18619), (100, 18736), (134, 18910), (151, 18988), (157, 19024), (164, 19066), (181, 19195),

Gene: KeAlii_20 Start: 16165, Stop: 17235, Start Num: 7

Candidate Starts for KeAlii_20:

(Start: 7 @16165 has 64 MA's), (36, 16333), (61, 16522), (96, 16747), (100, 16762), (113, 16852), (165, 17089), (170, 17140), (175, 17167),

Gene: Kihatsu_23 Start: 17054, Stop: 18130, Start Num: 6

Candidate Starts for Kihatsu_23:

(2, 17042), (Start: 6 @17054 has 7 MA's), (11, 17084), (34, 17204), (41, 17243), (44, 17276), (51, 17315), (75, 17507), (86, 17576), (105, 17669), (109, 17714), (122, 17777), (143, 17867), (144, 17870), (145, 17876), (171, 18038), (175, 18059),

Gene: KingBob_18 Start: 16598, Stop: 17677, Start Num: 7

Candidate Starts for KingBob_18:

(Start: 7 @16598 has 64 MA's), (24, 16724), (36, 16772), (42, 16802), (54, 16904), (56, 16913), (70, 17030), (73, 17048), (74, 17051), (85, 17126), (99, 17192), (117, 17318), (134, 17372), (153, 17459), (157, 17486), (164, 17528), (172, 17591), (173, 17594), (181, 17657),

Gene: Kittykat_18 Start: 16619, Stop: 17698, Start Num: 5

Candidate Starts for Kittykat_18:

(Start: 5 @16619 has 24 MA's), (24, 16745), (25, 16748), (32, 16772), (42, 16823), (54, 16925), (56, 16934), (58, 16949), (64, 16994), (70, 17051), (71, 17054), (91, 17183), (99, 17213), (100, 17219), (117, 17339), (134, 17393), (147, 17453), (157, 17507), (175, 17627), (181, 17678), (182, 17681),

Gene: Korra_23 Start: 18145, Stop: 19221, Start Num: 7

Candidate Starts for Korra_23:

(Start: 7 @18145 has 64 MA's), (Start: 9 @18151 has 35 MA's), (15, 18214), (24, 18268), (25, 18271), (31, 18292), (32, 18295), (56, 18457), (60, 18502), (70, 18574), (100, 18742), (134, 18916), (151, 18994), (157, 19030), (164, 19072), (181, 19201),

Gene: Kukla_19 Start: 15456, Stop: 16433, Start Num: 9

Candidate Starts for Kukla_19:

(2, 15444), (4, 15450), (Start: 9 @15456 has 35 MA's), (22, 15555), (33, 15603), (41, 15645), (44, 15678), (65, 15825), (80, 15930), (81, 15936), (98, 16029), (103, 16059), (108, 16119), (116, 16170),

(125, 16191),

Gene: Lakshmi_22 Start: 18236, Stop: 19312, Start Num: 7

Candidate Starts for Lakshmi_22:

(Start: 7 @18236 has 64 MA's), (15, 18305), (24, 18359), (25, 18362), (31, 18383), (32, 18386), (42, 18437), (60, 18593), (70, 18665), (77, 18704), (82, 18731), (98, 18824), (102, 18851), (117, 18953), (134, 19007), (136, 19019), (153, 19094), (164, 19163), (172, 19226), (175, 19241), (181, 19292),

Gene: Lasagna_18 Start: 16602, Stop: 17681, Start Num: 5

Candidate Starts for Lasagna_18:

(Start: 5 @16602 has 24 MA's), (12, 16647), (23, 16713), (25, 16731), (32, 16755), (36, 16776), (42, 16806), (45, 16839), (46, 16845), (56, 16917), (58, 16932), (70, 17034), (72, 17040), (85, 17130), (90, 17163), (99, 17196), (131, 17367), (134, 17376), (151, 17454), (153, 17463), (164, 17532), (181, 17661), (182, 17664),

Gene: LastNadiia_22 Start: 15090, Stop: 16022, Start Num: 9

Candidate Starts for LastNadiia_22:

(Start: 9 @15090 has 35 MA's), (13, 15141), (41, 15279), (44, 15312), (51, 15351), (62, 15450), (68, 15486), (81, 15570), (83, 15588), (100, 15672), (114, 15771), (121, 15804), (124, 15810), (140, 15891), (162, 16005),

Gene: Lennox_18 Start: 16590, Stop: 17669, Start Num: 5

Candidate Starts for Lennox_18:

(Start: 5 @16590 has 24 MA's), (23, 16701), (25, 16719), (32, 16743), (36, 16764), (42, 16794), (45, 16827), (46, 16833), (56, 16905), (58, 16920), (70, 17022), (72, 17028), (73, 17040), (85, 17118), (90, 17151), (99, 17184), (131, 17355), (134, 17364), (151, 17442), (153, 17451), (164, 17520), (172, 17583), (181, 17649), (182, 17652),

Gene: Lenoxika_22 Start: 16728, Stop: 17801, Start Num: 6

Candidate Starts for Lenoxika_22:

(2, 16716), (Start: 6 @16728 has 7 MA's), (11, 16758), (34, 16878), (41, 16917), (44, 16950), (51, 16989), (72, 17157), (75, 17181), (86, 17250), (109, 17388), (122, 17451), (143, 17541), (145, 17550), (175, 17730),

Gene: LilStuart_18 Start: 16590, Stop: 17669, Start Num: 5

Candidate Starts for LilStuart_18:

(Start: 5 @16590 has 24 MA's), (23, 16701), (25, 16719), (32, 16743), (36, 16764), (42, 16794), (45, 16827), (46, 16833), (56, 16905), (58, 16920), (70, 17022), (72, 17028), (73, 17040), (85, 17118), (90, 17151), (99, 17184), (131, 17355), (134, 17364), (151, 17442), (153, 17451), (164, 17520), (172, 17583), (181, 17649), (182, 17652),

Gene: Litotes_22 Start: 18188, Stop: 19264, Start Num: 7

Candidate Starts for Litotes_22:

(Start: 7 @18188 has 64 MA's), (15, 18257), (31, 18335), (38, 18368), (42, 18389), (53, 18485), (64, 18560), (71, 18620), (82, 18683), (98, 18776), (100, 18785), (117, 18905), (131, 18950), (134, 18959), (153, 19046), (157, 19073), (164, 19115), (175, 19193), (181, 19244),

Gene: Lucy_18 Start: 16582, Stop: 17661, Start Num: 5

Candidate Starts for Lucy_18:

(Start: 5 @16582 has 24 MA's), (12, 16627), (23, 16693), (25, 16711), (32, 16735), (36, 16756), (42, 16786), (45, 16819), (46, 16825), (56, 16897), (58, 16912), (70, 17014), (72, 17020), (73, 17032), (85, 17110), (90, 17143), (99, 17176), (131, 17347), (134, 17356), (151, 17434), (153, 17443), (164, 17512), (172, 17575), (181, 17641), (182, 17644),

Gene: Makima_20 Start: 14173, Stop: 15105, Start Num: 9

Candidate Starts for Makima_20:

(Start: 9 @14173 has 35 MA's), (13, 14224), (41, 14362), (44, 14395), (62, 14533), (81, 14653), (83, 14671), (100, 14755), (114, 14854), (124, 14893), (133, 14932), (135, 14938), (140, 14974), (162, 15088),

Gene: Makoto_18 Start: 16603, Stop: 17682, Start Num: 5

Candidate Starts for Makoto_18:

(Start: 5 @16603 has 24 MA's), (23, 16714), (25, 16732), (32, 16756), (36, 16777), (42, 16807), (45, 16840), (46, 16846), (56, 16918), (58, 16933), (70, 17035), (72, 17041), (73, 17053), (85, 17131), (90, 17164), (99, 17197), (131, 17368), (134, 17377), (151, 17455), (164, 17533), (172, 17596), (181, 17662), (182, 17665),

Gene: MamaPearl_18 Start: 16600, Stop: 17679, Start Num: 7

Candidate Starts for MamaPearl_18:

(Start: 7 @16600 has 64 MA's), (8, 16603), (Start: 9 @16606 has 35 MA's), (17, 16678), (18, 16681), (24, 16726), (32, 16753), (36, 16774), (42, 16804), (53, 16900), (60, 16960), (77, 17071), (89, 17146), (98, 17191), (102, 17218), (123, 17332), (134, 17374), (151, 17452), (153, 17461), (164, 17530), (174, 17599), (175, 17608),

Gene: Maria1952_18 Start: 16598, Stop: 17677, Start Num: 7

Candidate Starts for Maria1952_18:

(Start: 7 @16598 has 64 MA's), (24, 16724), (36, 16772), (42, 16802), (54, 16904), (56, 16913), (70, 17030), (73, 17048), (74, 17051), (85, 17126), (99, 17192), (117, 17318), (134, 17372), (153, 17459), (157, 17486), (164, 17528), (172, 17591), (181, 17657),

Gene: MeganNoll_22 Start: 18197, Stop: 19273, Start Num: 7

Candidate Starts for MeganNoll_22:

(Start: 7 @18197 has 64 MA's), (Start: 9 @18203 has 35 MA's), (15, 18266), (24, 18320), (25, 18323), (31, 18344), (32, 18347), (60, 18554), (70, 18626), (79, 18677), (100, 18794), (131, 18959), (134, 18968), (151, 19046), (157, 19082), (164, 19124), (181, 19253),

Gene: MillySue_22 Start: 16748, Stop: 17806, Start Num: 9

Candidate Starts for MillySue_22:

(Start: 9 @16748 has 35 MA's), (33, 16895), (41, 16937), (44, 16970), (62, 17108), (86, 17270), (137, 17519), (138, 17522), (147, 17561), (151, 17579),

Gene: Mireles_19 Start: 12581, Stop: 13513, Start Num: 9

Candidate Starts for Mireles_19:

(Start: 1 @12566 has 1 MA's), (Start: 9 @12581 has 35 MA's), (11, 12611), (13, 12632), (41, 12770), (44, 12803), (51, 12842), (67, 12959), (81, 13061), (86, 13103), (100, 13163), (137, 13361), (146, 13403), (148, 13412),

Gene: Misaeng_22 Start: 18281, Stop: 19357, Start Num: 7

Candidate Starts for Misaeng_22:

(Start: 7 @18281 has 64 MA's), (21, 18371), (24, 18404), (25, 18407), (31, 18428), (39, 18464), (51, 18548), (54, 18584), (61, 18641), (70, 18710), (82, 18776), (102, 18896), (117, 18998), (134, 19052), (136, 19064), (151, 19130), (153, 19139), (164, 19208), (172, 19271), (175, 19286), (181, 19337),

Gene: Moki_18 Start: 16595, Stop: 17674, Start Num: 5

Candidate Starts for Moki_18:

(Start: 5 @16595 has 24 MA's), (36, 16769), (42, 16799), (58, 16925), (62, 16964), (70, 17027), (85, 17123), (94, 17171), (99, 17189), (100, 17195), (117, 17315), (131, 17360), (134, 17369), (153, 17456), (164, 17525), (175, 17603), (181, 17654), (182, 17657),

Gene: MrBoss_22 Start: 18188, Stop: 19264, Start Num: 7

Candidate Starts for MrBoss_22:

(Start: 7 @18188 has 64 MA's), (15, 18257), (38, 18368), (42, 18389), (53, 18485), (64, 18560), (71, 18620), (82, 18683), (98, 18776), (100, 18785), (117, 18905), (131, 18950), (134, 18959), (153, 19046), (157, 19073), (164, 19115), (175, 19193), (181, 19244),

Gene: MrGloopy_22 Start: 18137, Stop: 19207, Start Num: 9

Candidate Starts for MrGloopy_22:

(Start: 7 @18131 has 64 MA's), (Start: 9 @18137 has 35 MA's), (15, 18200), (24, 18254), (25, 18257), (31, 18278), (32, 18281), (56, 18443), (60, 18488), (70, 18560), (79, 18611), (100, 18728), (131, 18893), (134, 18902), (151, 18980), (157, 19016), (164, 19058), (181, 19187),

Gene: Nancia_18 Start: 16602, Stop: 17681, Start Num: 5

Candidate Starts for Nancia_18:

(Start: 5 @16602 has 24 MA's), (23, 16713), (25, 16731), (32, 16755), (36, 16776), (42, 16806), (45, 16839), (46, 16845), (56, 16917), (58, 16932), (70, 17034), (72, 17040), (73, 17052), (85, 17130), (90, 17163), (99, 17196), (131, 17367), (134, 17376), (151, 17454), (153, 17463), (164, 17532), (172, 17595), (181, 17661), (182, 17664),

Gene: Nandita_22 Start: 16732, Stop: 17805, Start Num: 6

Candidate Starts for Nandita_22:

(2, 16720), (Start: 6 @16732 has 7 MA's), (11, 16762), (34, 16882), (41, 16921), (44, 16954), (51, 16993), (72, 17161), (75, 17185), (86, 17254), (109, 17392), (122, 17455), (143, 17545), (145, 17554), (171, 17713), (175, 17734),

Gene: Neuville_19 Start: 12802, Stop: 13746, Start Num: 1

Candidate Starts for Neuville_19:

(Start: 1 @12802 has 1 MA's), (Start: 9 @12817 has 35 MA's), (13, 12868), (26, 12940), (41, 13006), (44, 13039), (74, 13261), (81, 13297), (92, 13369), (100, 13399), (124, 13537), (137, 13594), (140, 13615), (162, 13729),

Gene: Nubia_22 Start: 18196, Stop: 19272, Start Num: 7

Candidate Starts for Nubia_22:

(Start: 7 @18196 has 64 MA's), (15, 18265), (25, 18322), (31, 18343), (32, 18346), (42, 18397), (60, 18553), (70, 18625), (77, 18664), (82, 18691), (98, 18784), (102, 18811), (117, 18913), (134, 18967), (136, 18979), (153, 19054), (164, 19123), (172, 19186), (175, 19201), (181, 19252),

Gene: OMalley_18 Start: 16583, Stop: 17662, Start Num: 7

Candidate Starts for OMalley_18:

(Start: 7 @16583 has 64 MA's), (25, 16712), (32, 16736), (36, 16757), (42, 16787), (50, 16847), (70, 17015), (74, 17036), (85, 17111), (99, 17177), (117, 17303), (123, 17315), (134, 17357), (151, 17435), (153, 17444), (164, 17513), (172, 17576), (181, 17642),

Gene: ObiToo_20 Start: 16335, Stop: 17405, Start Num: 7

Candidate Starts for ObiToo_20:

(Start: 7 @16335 has 64 MA's), (36, 16503), (79, 16818), (96, 16920), (137, 17115), (157, 17211), (169, 17298), (172, 17319),

Gene: OnionKnight_19 Start: 15001, Stop: 16035, Start Num: 1

Candidate Starts for OnionKnight_19:

(Start: 1 @15001 has 1 MA's), (Start: 7 @15022 has 64 MA's), (Start: 9 @15028 has 35 MA's), (27, 15166), (29, 15172), (35, 15196), (36, 15202), (49, 15286), (51, 15298), (57, 15352), (68, 15439), (71, 15469), (78, 15508), (88, 15571), (97, 15613), (98, 15616), (111, 15703), (134, 15796), (159, 15925), (160, 15934), (163, 15952),

Gene: OurGirlNessie_18 Start: 16582, Stop: 17661, Start Num: 5

Candidate Starts for OurGirlNessie_18:

(Start: 5 @16582 has 24 MA's), (23, 16693), (25, 16711), (32, 16735), (36, 16756), (42, 16786), (45, 16819), (46, 16825), (56, 16897), (58, 16912), (70, 17014), (72, 17020), (73, 17032), (85, 17110), (90, 17143), (99, 17176), (131, 17347), (134, 17356), (151, 17434), (153, 17443), (164, 17512), (172, 17575), (181, 17641), (182, 17644),

Gene: Oxynfrius_22 Start: 18209, Stop: 19285, Start Num: 7

Candidate Starts for Oxynfrius_22:

(Start: 7 @18209 has 64 MA's), (15, 18278), (24, 18332), (25, 18335), (31, 18356), (32, 18359), (42, 18410), (60, 18566), (70, 18638), (77, 18677), (82, 18704), (98, 18797), (102, 18824), (117, 18926), (134, 18980), (136, 18992), (153, 19067), (164, 19136), (172, 19199), (175, 19214), (181, 19265),

Gene: PartyCup_22 Start: 18235, Stop: 19311, Start Num: 7

Candidate Starts for PartyCup_22:

(Start: 7 @18235 has 64 MA's), (15, 18304), (31, 18382), (42, 18436), (53, 18532), (64, 18607), (71, 18667), (82, 18730), (85, 18760), (98, 18823), (100, 18832), (117, 18952), (131, 18997), (134, 19006), (153, 19093), (157, 19120), (164, 19162), (175, 19240), (181, 19291),

Gene: PetriParty_19 Start: 16361, Stop: 17455, Start Num: 9

Candidate Starts for PetriParty_19:

(Start: 9 @16361 has 35 MA's), (11, 16391), (26, 16484), (33, 16508), (41, 16550), (44, 16583), (51, 16622), (62, 16721), (63, 16724), (98, 16931), (109, 17027), (120, 17084), (122, 17090), (148, 17216), (175, 17384),

Gene: PinkFriday_18 Start: 16619, Stop: 17698, Start Num: 7

Candidate Starts for PinkFriday_18:

(Start: 7 @16619 has 64 MA's), (10, 16637), (36, 16793), (42, 16823), (58, 16949), (64, 16994), (66, 17003), (69, 17036), (70, 17051), (74, 17072), (85, 17147), (99, 17213), (111, 17300), (134, 17393), (147, 17453), (157, 17507), (175, 17627), (178, 17651), (181, 17678),

Gene: PitaDog_18 Start: 16593, Stop: 17672, Start Num: 5

Candidate Starts for PitaDog_18:

(Start: 5 @16593 has 24 MA's), (12, 16638), (23, 16704), (25, 16722), (32, 16746), (36, 16767), (42, 16797), (45, 16830), (46, 16836), (56, 16908), (58, 16923), (70, 17025), (72, 17031), (73, 17043), (85, 17121), (90, 17154), (99, 17187), (131, 17358), (134, 17367), (151, 17445), (153, 17454), (164, 17523), (172, 17586), (181, 17652), (182, 17655),

Gene: Popper_20 Start: 16260, Stop: 17336, Start Num: 9

Candidate Starts for Popper_20:

(Start: 9 @16260 has 35 MA's), (11, 16290), (33, 16407), (41, 16449), (43, 16470), (44, 16482), (51, 16521), (80, 16734), (109, 16920), (147, 17088), (152, 17109), (157, 17145), (175, 17265), (177, 17286), (180, 17310),

Gene: Potatoes_22 Start: 18192, Stop: 19268, Start Num: 7

Candidate Starts for Potatoes_22:

(Start: 7 @18192 has 64 MA's), (Start: 9 @18198 has 35 MA's), (15, 18261), (24, 18315), (25, 18318), (31, 18339), (32, 18342), (56, 18504), (60, 18549), (70, 18621), (79, 18672), (100, 18789), (134, 18963), (151, 19041), (157, 19077), (164, 19119), (181, 19248),

Gene: Preamble_18 Start: 16596, Stop: 17675, Start Num: 5

Candidate Starts for Preamble_18:

(Start: 5 @16596 has 24 MA's), (24, 16722), (25, 16725), (32, 16749), (42, 16800), (54, 16902), (56, 16911), (58, 16926), (64, 16971), (70, 17028), (71, 17031), (91, 17160), (99, 17190), (100, 17196), (104, 17226), (117, 17316), (134, 17370), (144, 17418), (147, 17430), (157, 17484), (175, 17604), (181, 17655), (182, 17658),

Gene: Pterodactyl_18 Start: 16583, Stop: 17662, Start Num: 5

Candidate Starts for Pterodactyl_18:

(Start: 5 @16583 has 24 MA's), (23, 16694), (25, 16712), (32, 16736), (36, 16757), (42, 16787), (45, 16820), (46, 16826), (56, 16898), (58, 16913), (70, 17015), (72, 17021), (73, 17033), (85, 17111), (90, 17144), (99, 17177), (131, 17348), (134, 17357), (151, 17435), (153, 17444), (164, 17513), (172, 17576), (181, 17642), (182, 17645),

Gene: Pumancara_18 Start: 16601, Stop: 17680, Start Num: 7

Candidate Starts for Pumancara_18:

(Start: 7 @16601 has 64 MA's), (24, 16727), (36, 16775), (42, 16805), (56, 16916), (70, 17033), (73, 17051), (74, 17054), (85, 17129), (99, 17195), (117, 17321), (134, 17375), (153, 17462), (157, 17489), (164, 17531), (172, 17594), (181, 17660),

Gene: QuinnAvery_22 Start: 16746, Stop: 17804, Start Num: 9

Candidate Starts for QuinnAvery_22:

(Start: 9 @16746 has 35 MA's), (40, 16932), (41, 16935), (44, 16968), (51, 17007), (62, 17106), (80, 17220), (86, 17268), (106, 17376), (137, 17517), (138, 17520), (144, 17547), (147, 17559), (151, 17577), (156, 17610), (167, 17676),

Gene: RAP15_22 Start: 18197, Stop: 19273, Start Num: 7

Candidate Starts for RAP15_22:

(Start: 7 @18197 has 64 MA's), (Start: 9 @18203 has 35 MA's), (15, 18266), (24, 18320), (25, 18323), (31, 18344), (32, 18347), (60, 18554), (70, 18626), (79, 18677), (100, 18794), (131, 18959), (134, 18968), (151, 19046), (157, 19082), (164, 19124), (181, 19253),

Gene: RcigaStruga_22 Start: 18199, Stop: 19275, Start Num: 7

Candidate Starts for RcigaStruga_22:

(Start: 7 @18199 has 64 MA's), (15, 18268), (20, 18283), (23, 18307), (24, 18322), (25, 18325), (32, 18349), (39, 18382), (62, 18565), (70, 18628), (71, 18631), (72, 18634), (79, 18679), (82, 18694), (117, 18916), (134, 18970), (136, 18982), (151, 19048), (153, 19057), (164, 19126), (175, 19204), (181, 19255),

Gene: Reedo_20 Start: 16179, Stop: 17249, Start Num: 7

Candidate Starts for Reedo_20:

(Start: 7 @16179 has 64 MA's), (36, 16347), (74, 16626), (79, 16662), (96, 16761), (150, 17013), (169, 17145),

Gene: Riovina_18 Start: 16583, Stop: 17662, Start Num: 7

Candidate Starts for Riovina_18:

(Start: 7 @16583 has 64 MA's), (25, 16712), (32, 16736), (36, 16757), (42, 16787), (50, 16847), (70, 17015), (74, 17036), (85, 17111), (99, 17177), (117, 17303), (123, 17315), (134, 17357), (151, 17435), (153, 17444), (164, 17513), (172, 17576), (181, 17642),

Gene: Riverdale_22 Start: 18127, Stop: 19203, Start Num: 7

Candidate Starts for Riverdale_22:

(Start: 7 @18127 has 64 MA's), (Start: 9 @18133 has 35 MA's), (15, 18196), (24, 18250), (25, 18253), (31, 18274), (32, 18277), (54, 18430), (56, 18439), (60, 18484), (70, 18556), (79, 18607), (100, 18724), (134, 18898), (151, 18976), (157, 19012), (164, 19054), (181, 19183),

Gene: Roberts_19 Start: 12817, Stop: 13746, Start Num: 9

Candidate Starts for Roberts_19:

(Start: 1 @12802 has 1 MA's), (Start: 9 @12817 has 35 MA's), (13, 12868), (26, 12940), (41, 13006), (44, 13039), (74, 13261), (81, 13297), (92, 13369), (100, 13399), (124, 13537), (137, 13594), (140, 13615), (162, 13729),

Gene: Rozby_22 Start: 18128, Stop: 19204, Start Num: 7

Candidate Starts for Rozby_22:

(Start: 7 @18128 has 64 MA's), (Start: 9 @18134 has 35 MA's), (15, 18197), (24, 18251), (25, 18254), (31, 18275), (32, 18278), (60, 18485), (70, 18557), (79, 18608), (100, 18725), (134, 18899), (151, 18977), (157, 19013), (164, 19055), (181, 19184),

Gene: Ryan_22 Start: 16878, Stop: 17954, Start Num: 6

Candidate Starts for Ryan_22:

(2, 16866), (Start: 6 @16878 has 7 MA's), (11, 16908), (34, 17028), (41, 17067), (44, 17100), (51, 17139), (75, 17331), (86, 17400), (109, 17538), (122, 17601), (143, 17691), (144, 17694), (145, 17700), (171, 17862),

Gene: Saintcarr_21 Start: 16756, Stop: 17814, Start Num: 9

Candidate Starts for Saintcarr_21:

(Start: 9 @16756 has 35 MA's), (33, 16903), (41, 16945), (44, 16978), (62, 17116), (86, 17278), (137, 17527), (138, 17530), (147, 17569), (173, 17731),

Gene: Sashimi_22 Start: 16083, Stop: 17060, Start Num: 9

Candidate Starts for Sashimi_22:

(Start: 9 @16083 has 35 MA's), (26, 16206), (33, 16230), (41, 16272), (44, 16305), (62, 16443), (100, 16665), (116, 16797), (125, 16818),

Gene: Savage2526_22 Start: 18191, Stop: 19267, Start Num: 7

Candidate Starts for Savage2526_22:

(Start: 7 @18191 has 64 MA's), (Start: 9 @18197 has 35 MA's), (15, 18260), (24, 18314), (25, 18317), (31, 18338), (32, 18341), (60, 18548), (70, 18620), (79, 18671), (100, 18788), (131, 18953), (134, 18962), (151, 19040), (157, 19076), (164, 19118), (181, 19247),

Gene: Schism_22 Start: 16732, Stop: 17805, Start Num: 6

Candidate Starts for Schism_22:

(2, 16720), (Start: 6 @16732 has 7 MA's), (11, 16762), (34, 16882), (41, 16921), (44, 16954), (51, 16993), (72, 17161), (75, 17185), (86, 17254), (109, 17392), (122, 17455), (143, 17545), (145, 17554), (171, 17713), (175, 17734),

Gene: Scuttle_22 Start: 18196, Stop: 19272, Start Num: 7

Candidate Starts for Scuttle_22:

(Start: 7 @18196 has 64 MA's), (Start: 9 @18202 has 35 MA's), (15, 18265), (24, 18319), (25, 18322), (31, 18343), (32, 18346), (56, 18508), (60, 18553), (70, 18625), (79, 18676), (100, 18793), (134, 18967), (151, 19045), (157, 19081), (164, 19123), (181, 19252),

Gene: Sergei_18 Start: 16598, Stop: 17677, Start Num: 7

Candidate Starts for Sergei_18:

(Start: 7 @16598 has 64 MA's), (24, 16724), (36, 16772), (42, 16802), (54, 16904), (56, 16913), (70, 17030), (73, 17048), (74, 17051), (85, 17126), (99, 17192), (117, 17318), (134, 17372), (153, 17459), (157, 17486), (164, 17528), (172, 17591), (181, 17657),

Gene: Shambre1_22 Start: 18595, Stop: 19725, Start Num: 3

Candidate Starts for Shambre1_22:

(Start: 3 @18595 has 1 MA's), (28, 18757), (36, 18787), (93, 19186), (97, 19204), (100, 19216), (103, 19240), (113, 19330), (182, 19708),

Gene: Snek_20 Start: 15214, Stop: 16278, Start Num: 7

Candidate Starts for Snek_20:

(Start: 7 @15214 has 64 MA's), (36, 15382), (76, 15673), (79, 15697), (84, 15730), (96, 15796), (126, 15946), (132, 15967), (151, 16051), (157, 16087),

Gene: Studio_20 Start: 12565, Stop: 13644, Start Num: 1

Candidate Starts for Studio_20:

(Start: 1 @12565 has 1 MA's), (Start: 5 @12580 has 24 MA's), (22, 12691), (31, 12733), (32, 12736), (48, 12838), (83, 13090), (96, 13159), (101, 13189), (107, 13252), (112, 13279), (115, 13291), (116, 13303), (118, 13309), (129, 13348), (137, 13390), (149, 13441), (155, 13465), (163, 13510), (180, 13639),

Gene: Supakev_18 Start: 16585, Stop: 17664, Start Num: 7

Candidate Starts for Supakev_18:

(Start: 7 @16585 has 64 MA's), (25, 16714), (32, 16738), (36, 16759), (42, 16789), (50, 16849), (53, 16885), (70, 17017), (74, 17038), (85, 17113), (99, 17179), (117, 17305), (123, 17317), (134, 17359), (151, 17437), (153, 17446), (164, 17515), (172, 17578), (181, 17644),

Gene: Suppi_22 Start: 18238, Stop: 19314, Start Num: 7

Candidate Starts for Suppi_22:

(Start: 7 @18238 has 64 MA's), (15, 18307), (31, 18385), (42, 18439), (53, 18535), (64, 18610), (71, 18670), (82, 18733), (98, 18826), (100, 18835), (117, 18955), (131, 19000), (134, 19009), (153, 19096), (157, 19123), (164, 19165), (175, 19243), (181, 19294),

Gene: TMaxx_19 Start: 12677, Stop: 13591, Start Num: 9

Candidate Starts for TMaxx_19:

(Start: 9 @12677 has 35 MA's), (13, 12728), (17, 12749), (41, 12866), (44, 12899), (62, 13037), (68, 13073), (81, 13157), (83, 13175), (92, 13229), (100, 13259), (124, 13388), (127, 13406), (130, 13418), (134, 13433), (141, 13466), (154, 13511),

Gene: TattModd_22 Start: 18190, Stop: 19266, Start Num: 7

Candidate Starts for TattModd_22:

(Start: 7 @18190 has 64 MA's), (Start: 9 @18196 has 35 MA's), (15, 18259), (24, 18313), (25, 18316), (31, 18337), (32, 18340), (56, 18502), (60, 18547), (70, 18619), (79, 18670), (100, 18787), (134, 18961), (151, 19039), (157, 19075), (164, 19117), (181, 19246),

Gene: Temper16_18 Start: 16598, Stop: 17677, Start Num: 7

Candidate Starts for Temper16_18:

(Start: 7 @16598 has 64 MA's), (24, 16724), (36, 16772), (42, 16802), (54, 16904), (56, 16913), (70, 17030), (73, 17048), (74, 17051), (85, 17126), (99, 17192), (117, 17318), (134, 17372), (153, 17459), (157, 17486), (164, 17528), (172, 17591), (181, 17657),

Gene: ToastyOats_24 Start: 17211, Stop: 18269, Start Num: 9

Candidate Starts for ToastyOats_24:

(Start: 9 @17211 has 35 MA's), (33, 17358), (41, 17400), (44, 17433), (62, 17571), (65, 17580), (86, 17733), (137, 17982), (138, 17985), (147, 18024),

Gene: Toodles_22 Start: 16957, Stop: 18015, Start Num: 9

Candidate Starts for Toodles_22:

(Start: 9 @16957 has 35 MA's), (33, 17104), (41, 17146), (44, 17179), (62, 17317), (80, 17431), (86, 17479), (137, 17728), (138, 17731), (147, 17770), (151, 17788), (181, 17995),

Gene: TripleC_22 Start: 16173, Stop: 17096, Start Num: 9

Candidate Starts for TripleC_22:

(Start: 1 @16158 has 1 MA's), (Start: 9 @16173 has 35 MA's), (13, 16224), (41, 16362), (44, 16395), (51, 16434), (62, 16533), (81, 16653), (83, 16671), (100, 16755), (132, 16932), (142, 16983), (154, 17025), (157, 17049),

Gene: TripleJ_20 Start: 16378, Stop: 17472, Start Num: 9

Candidate Starts for TripleJ_20:

(Start: 9 @16378 has 35 MA's), (11, 16408), (26, 16501), (33, 16525), (41, 16567), (44, 16600), (51, 16639), (62, 16738), (63, 16741), (98, 16948), (109, 17044), (120, 17101), (122, 17107), (148, 17233), (175, 17401),

Gene: Tweety19_20 Start: 15213, Stop: 16277, Start Num: 7

Candidate Starts for Tweety19_20:

(Start: 7 @15213 has 64 MA's), (36, 15381), (76, 15672), (79, 15696), (84, 15729), (96, 15795), (126, 15945), (132, 15966), (151, 16050), (157, 16086),

Gene: Urla_18 Start: 16602, Stop: 17681, Start Num: 7

Candidate Starts for Urla_18:

(Start: 7 @16602 has 64 MA's), (8, 16605), (Start: 9 @16608 has 35 MA's), (17, 16680), (18, 16683), (24, 16728), (32, 16755), (36, 16776), (42, 16806), (53, 16902), (54, 16908), (60, 16962), (89, 17148), (102, 17220), (123, 17334), (134, 17376), (151, 17454), (153, 17463), (164, 17532), (175, 17610),

Gene: VResidence_20 Start: 16231, Stop: 17301, Start Num: 7

Candidate Starts for VResidence_20:

(Start: 7 @16231 has 64 MA's), (16, 16303), (20, 16315), (36, 16399), (45, 16462), (74, 16678), (79, 16714), (95, 16807), (96, 16813), (113, 16918), (132, 16984), (162, 17137), (169, 17197), (175, 17233),

Gene: Vallejo_22 Start: 18129, Stop: 19205, Start Num: 7

Candidate Starts for Vallejo_22:

(Start: 7 @18129 has 64 MA's), (Start: 9 @18135 has 35 MA's), (15, 18198), (24, 18252), (25, 18255), (31, 18276), (32, 18279), (56, 18441), (60, 18486), (70, 18558), (79, 18609), (100, 18726), (134, 18900), (151, 18978), (157, 19014), (164, 19056), (181, 19185),

Gene: Vulture_18 Start: 16583, Stop: 17662, Start Num: 7

Candidate Starts for Vulture_18:

(Start: 7 @16583 has 64 MA's), (25, 16712), (32, 16736), (36, 16757), (42, 16787), (50, 16847), (53, 16883), (70, 17015), (74, 17036), (85, 17111), (94, 17159), (99, 17177), (117, 17303), (123, 17315), (134, 17357), (151, 17435), (153, 17444), (164, 17513), (172, 17576), (181, 17642),

Gene: Wawa_22 Start: 18166, Stop: 19242, Start Num: 7

Candidate Starts for Wawa_22:

(Start: 7 @18166 has 64 MA's), (Start: 9 @18172 has 35 MA's), (15, 18235), (24, 18289), (25, 18292), (31, 18313), (32, 18316), (56, 18478), (60, 18523), (70, 18595), (79, 18646), (100, 18763), (134, 18937), (151, 19015), (157, 19051), (164, 19093), (181, 19222),

Gene: Wayne_22 Start: 18284, Stop: 19360, Start Num: 7

Candidate Starts for Wayne_22:

(Start: 7 @18284 has 64 MA's), (15, 18353), (31, 18431), (38, 18464), (42, 18485), (53, 18581), (64, 18656), (71, 18716), (82, 18779), (98, 18872), (100, 18881), (117, 19001), (131, 19046), (134, 19055), (153, 19142), (157, 19169), (164, 19211), (172, 19274), (175, 19289), (181, 19340),

Gene: WonderBoy_18 Start: 16583, Stop: 17662, Start Num: 5

Candidate Starts for WonderBoy_18:

(Start: 5 @16583 has 24 MA's), (12, 16628), (23, 16694), (25, 16712), (32, 16736), (36, 16757), (42, 16787), (45, 16820), (46, 16826), (56, 16898), (58, 16913), (70, 17015), (72, 17021), (73, 17033), (85, 17111), (90, 17144), (99, 17177), (131, 17348), (134, 17357), (151, 17435), (153, 17444), (164, 17513), (172, 17576), (181, 17642), (182, 17645),

Gene: Yonex_22 Start: 16878, Stop: 17954, Start Num: 6

Candidate Starts for Yonex_22:

(2, 16866), (Start: 6 @16878 has 7 MA's), (11, 16908), (34, 17028), (41, 17067), (44, 17100), (51, 17139), (75, 17331), (86, 17400), (109, 17538), (122, 17601), (143, 17691), (144, 17694), (145, 17700), (171, 17862),

Gene: Zaheer_22 Start: 16967, Stop: 18043, Start Num: 6

Candidate Starts for Zaheer_22:

(2, 16955), (Start: 6 @16967 has 7 MA's), (11, 16997), (34, 17117), (41, 17156), (44, 17189), (51, 17228), (75, 17420), (86, 17489), (109, 17627), (122, 17690), (143, 17780), (144, 17783), (145, 17789), (171, 17951),

Gene: Zorro_22 Start: 18145, Stop: 19221, Start Num: 7

Candidate Starts for Zorro_22:

(Start: 7 @18145 has 64 MA's), (Start: 9 @18151 has 35 MA's), (15, 18214), (24, 18268), (25, 18271), (31, 18292), (32, 18295), (56, 18457), (60, 18502), (70, 18574), (100, 18742), (134, 18916), (151, 18994), (157, 19030), (164, 19072), (181, 19201),