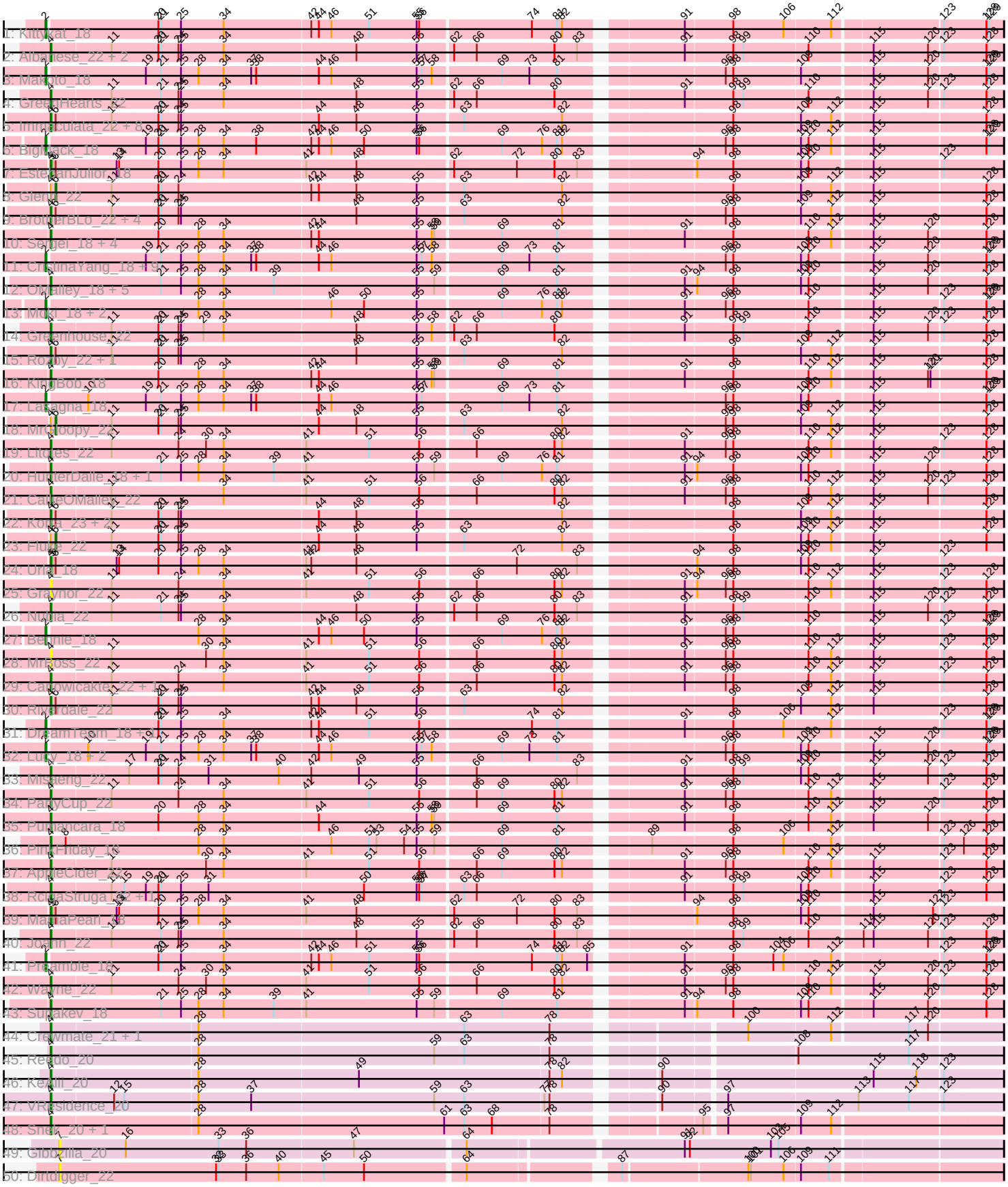
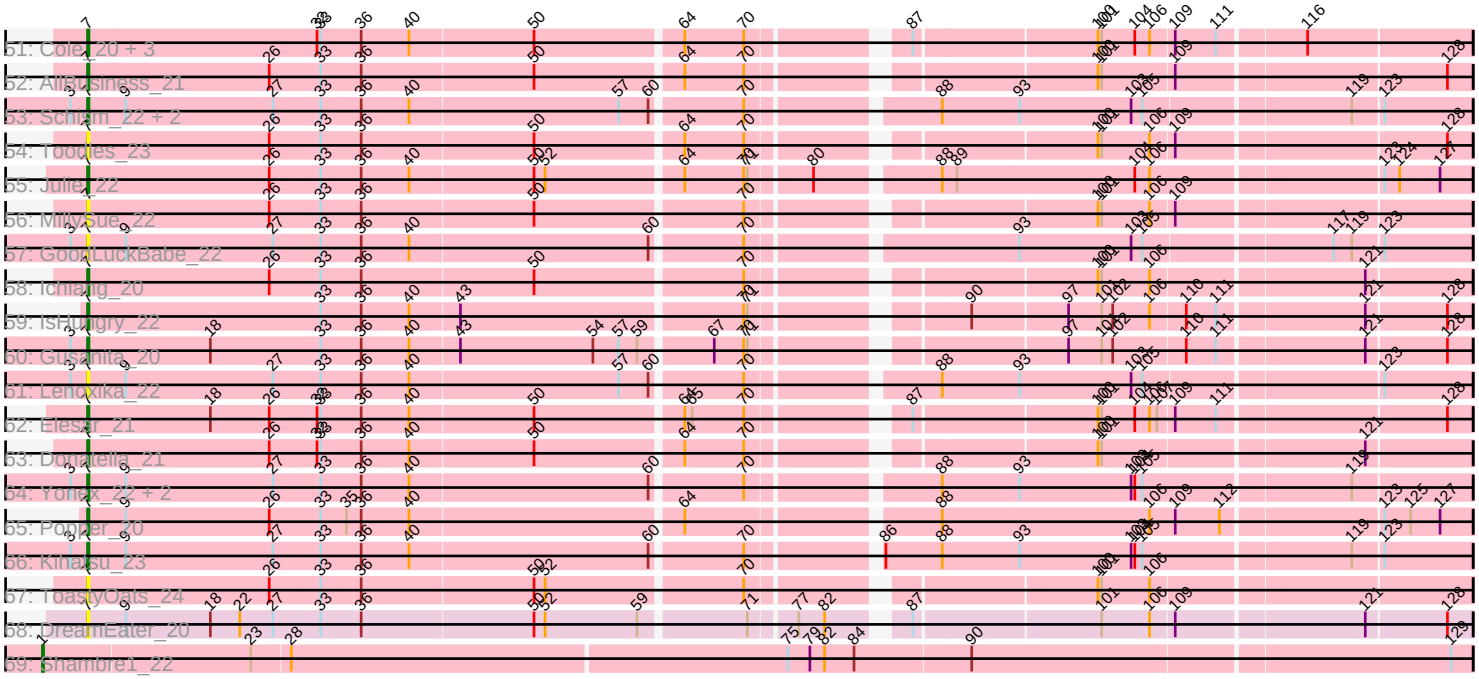
Pham 283619



Pham 283619


51: Colet_20 + 3
52: AllBusiness_21
53: Schism_22 + 2
54: Toodles_23
55: Juliet_22
56: MilkSue_22
57: GoodLuckBabe_22
58: Ichiang_20
59: IshHungry_22
60: Gusanita_20
61: Lenoxika_22
62: Elesar_21
63: Donatella_21
64: Yonax_22 + 2
65: Powder_20
66: Kinasu_23
67: ToastyOats_24
68: DreamEater_20
69: Chambre1_22

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 283619 Report

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

Pham number 283619 has 121 members, 12 are drafts.

Phages represented in each track:
• Track 1 : Kittykat_18
• Track 2 : Albanese_22, Lakshmi_22, Oxynfrius_22
• Track 3 : Makoto_18
• Track 4 : GreenHearts_22
• Track 5 : Immaculata_22, Cholula_22, Wawa_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 : BrotherBLo_22, RAP15_22, Jumboset_22, MeganNoll_22, Savage2526_22
• Track 10 : Sergei_18, Herb_18, Temper16_18, Maria1952_18, Daiboju_18
• Track 11 : CristinaYang_18, Christian_18, DrRobert_18, LilStuart_18, Nancia_18, OurGirlNessie_18, Bodacious_18, Lennox_18, ChewChew_18, Pterodactyl_18
• Track 12 : OMalley_18, Eunoia_18, Aledel_18, Chridison_18, AustinPowers_18, Riovina_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 : PartyCup_22
• Track 35 : Pumancara_18
• Track 36 : PinkFriday_18
• Track 37 : AppleCider_22
• Track 38 : RcigaStruga_22, Huntingdon_22
• Track 39 : MamaPearl_18
• Track 40 : Joann_22
• Track 41 : Preamble_18
• Track 42 : Wayne_22
• Track 43 : Supakev_18
• Track 44 : Crewmate_21, ObiToo_20
• Track 45 : Reedo_20
• Track 46 : KeAlii_20
• Track 47 : VResidence_20
• Track 48 : Snek_20, Tweety19_20
• Track 49 : Gibbzilla_20
• Track 50 : Dirtdigger_22
• Track 51 : Cole_20, QuinnAvery_22, BigSherm_21, Halloweekend_20
• Track 52 : AllBusiness_21
• Track 53 : Schism_22, Nandita_22, Guinevere_22
• Track 54 : Toodles_23
• Track 55 : Julie_22
• Track 56 : MillySue_22
• Track 57 : GoodLuckBabe_22
• Track 58 : Ichiang_20
• Track 59 : IsHungry_22
• Track 60 : Gusanita_20
• Track 61 : Lenoxika_22
• Track 62 : Elesar_21
• Track 63 : Donatella_21
• Track 64 : Yonex_22, Ryan_22, Zaheer_22
• Track 65 : Popper_20
• Track 66 : Kihatsu_23
• Track 67 : ToastyOats_24
• Track 68 : DreamEater_20
• Track 69 : Shambre1_22

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

The start number called the most often in the published annotations is 4, it was called in 64 of the 109 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Albanese_22, Aledel_18, AppleCider_22, AustinPowers_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,

Genes that do not have the "Most Annotated" start:
• AllBusiness_21, Bennie_18, BigMack_18, BigSherm_21, Bodacious_18, ChewChew_18, Christian_18, Cole_20, CristinaYang_18, Dirtdigger_22, Donatella_21, DrRobert_18, DreamEater_20, DreamTeam_18, Elesar_21, 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, Lasagna_18, Lennox_18, Lenoxika_22, LilStuart_18, Lucy_18, Makoto_18, MillySue_22, Moki_18, Nancia_18, Nandita_22, OurGirlNessie_18, PitaDog_18, Popper_20, Preamble_18, Pterodactyl_18, QuinnAvery_22, Ryan_22, Schism_22, Shambre1_22, ToastyOats_24, Toodles_23, WonderBoy_18, Yonex_22, Zaheer_22,

Summary by start number:

Start 1:
• Found in 1 of 121 (0.8%) of genes in pham
• Manual Annotations of this start: 1 of 109
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Shambre1_22 (singleton),

Start 2:
• Found in 24 of 121 (19.8%) of genes in pham
• Manual Annotations of this start: 24 of 109
• Called 100.0% 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), Gisselle_18 (AK), HeadNerd_18 (AK), Huckleberry_18 (AK), Kittykat_18 (AK), Lasagna_18 (AK), Lennox_18 (AK), LilStuart_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 4:
• Found in 69 of 121 (57.0%) of genes in pham
• Manual Annotations of this start: 64 of 109
• Called 95.7% of time when present
• Phage (with cluster) where this start called: Albanese_22 (AK), Aledel_18 (AK), AppleCider_22 (AK), AustinPowers_18 (AK), 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), Riovina_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 6:
• Found in 26 of 121 (21.5%) of genes in pham
• Manual Annotations of this start: 3 of 109
• Called 11.5% of time when present
• Phage (with cluster) where this start called: Fluke_22 (AK), Glenn_22 (AK), MrGloopy_22 (AK),

Start 7:
• Found in 27 of 121 (22.3%) of genes in pham
• Manual Annotations of this start: 17 of 109
• Called 100.0% of time when present
• Phage (with cluster) where this start called: AllBusiness_21 (FF), BigSherm_21 (FF), Cole_20 (FF), Dirtdigger_22 (FF), Donatella_21 (FF), DreamEater_20 (FJ), Elesar_21 (FF), Gibbzilla_20 (FB), GoodLuckBabe_22 (FF), Guinevere_22 (FF), Gusanita_20 (FF), Halloweekend_20 (FF), Ichiang_20 (FF), IsHungry_22 (FF), Julie_22 (FF), Kihatsu_23 (FF), Lenoxika_22 (FF), MillySue_22 (FF), Nandita_22 (FF), Popper_20 (FF), QuinnAvery_22 (FF), Ryan_22 (FF), Schism_22 (FF), ToastyOats_24 (FF), Toodles_23 (FF), Yonex_22 (FF), Zaheer_22 (FF),

Summary by clusters:

There are 7 clusters represented in this pham: singleton, AK, FB, FF, AZ1, FJ, AZ3,

Info for manual annotations of cluster AK:
•Start number 2 was manually annotated 24 times for cluster AK.
•Start number 4 was manually annotated 57 times for cluster AK.
•Start number 6 was manually annotated 3 times for cluster AK.

Info for manual annotations of cluster AZ1:
•Start number 4 was manually annotated 5 times for cluster AZ1.

Info for manual annotations of cluster AZ3:
•Start number 4 was manually annotated 2 times for cluster AZ3.

Info for manual annotations of cluster FF:
•Start number 7 was manually annotated 17 times for cluster FF.

Gene Information:

Gene: Albanese_22 Start: 18260, Stop: 19336, Start Num: 4

Candidate Starts for Albanese_22:
(Start: 4 @18260 has 64 MA's), (11, 18329), (20, 18383), (21, 18386), (24, 18407), (25, 18410), (34, 18461), (48, 18617), (55, 18689), (62, 18728), (66, 18755), (80, 18848), (83, 18875), (91, 18977), (98, 19031), (99, 19043), (110, 19118), (115, 19187), (120, 19250), (123, 19265), (128, 19316),

Gene: Aledel_18 Start: 16583, Stop: 17662, Start Num: 4
Candidate Starts for Aledel_18:
(Start: 4 @16583 has 64 MA's), (21, 16712), (25, 16736), (28, 16757), (34, 16787), (39, 16847), (55, 17015), (59, 17036), (69, 17111), (81, 17177), (91, 17303), (94, 17315), (98, 17357), (109, 17435), (110, 17444), (115, 17513), (120, 17576), (128, 17642),

Gene: AllBusiness_21 Start: 16818, Stop: 17876, Start Num: 7
Candidate Starts for AllBusiness_21:
(Start: 7 @16818 has 17 MA's), (26, 16965), (33, 17007), (36, 17040), (50, 17178), (64, 17292), (70, 17340), (100, 17589), (101, 17592), (109, 17649), (128, 17856),

Gene: AppleCider_22 Start: 18203, Stop: 19279, Start Num: 4
Candidate Starts for AppleCider_22:
(Start: 4 @18203 has 64 MA's), (11, 18272), (30, 18383), (34, 18404), (41, 18500), (51, 18575), (56, 18635), (66, 18698), (69, 18728), (80, 18791), (82, 18800), (91, 18920), (96, 18965), (98, 18974), (110, 19061), (112, 19088), (115, 19130), (123, 19208), (128, 19259),

Gene: AustinPowers_18 Start: 16584, Stop: 17663, Start Num: 4
Candidate Starts for AustinPowers_18:
(Start: 4 @16584 has 64 MA's), (21, 16713), (25, 16737), (28, 16758), (34, 16788), (39, 16848), (55, 17016), (59, 17037), (69, 17112), (81, 17178), (91, 17304), (94, 17316), (98, 17358), (109, 17436), (110, 17445), (115, 17514), (120, 17577), (128, 17643),

Gene: Beethoven_22 Start: 18140, Stop: 19216, Start Num: 4
Candidate Starts for Beethoven_22:
(Start: 4 @18140 has 64 MA's), (Start: 6 @18146 has 3 MA's), (11, 18209), (20, 18263), (21, 18266), (24, 18287), (25, 18290), (48, 18497), (55, 18569), (63, 18620), (82, 18737), (98, 18911), (109, 18989), (112, 19025), (115, 19067), (128, 19196),

Gene: Bennie_18 Start: 16595, Stop: 17674, Start Num: 2
Candidate Starts for Bennie_18:
(Start: 2 @16595 has 24 MA's), (28, 16769), (34, 16799), (44, 16910), (46, 16925), (50, 16964), (55, 17027), (69, 17123), (76, 17171), (81, 17189), (82, 17195), (91, 17315), (96, 17360), (98, 17369), (110, 17456), (115, 17525), (123, 17603), (128, 17654), (129, 17657),

Gene: BigMack_18 Start: 16583, Stop: 17662, Start Num: 2
Candidate Starts for BigMack_18:
(Start: 2 @16583 has 24 MA's), (19, 16694), (20, 16709), (21, 16712), (25, 16736), (28, 16757), (34, 16787), (38, 16826), (42, 16889), (44, 16898), (46, 16913), (50, 16952), (55, 17015), (56, 17018), (69, 17111), (76, 17159), (81, 17177), (82, 17183), (96, 17348), (98, 17357), (109, 17435), (110, 17444), (112, 17471), (115, 17513), (128, 17642), (129, 17645),

Gene: BigSherm_21 Start: 16746, Stop: 17804, Start Num: 7
Candidate Starts for BigSherm_21:
(Start: 7 @16746 has 17 MA's), (32, 16932), (33, 16935), (36, 16968), (40, 17007), (50, 17106), (64, 17220), (70, 17268), (87, 17376), (100, 17517), (101, 17520), (104, 17547), (106, 17559), (109, 17577), (111, 17610), (116, 17676),

Gene: Bodacious_18 Start: 16602, Stop: 17681, Start Num: 2
Candidate Starts for Bodacious_18:
(Start: 2 @16602 has 24 MA's), (19, 16713), (21, 16731), (25, 16755), (28, 16776), (34, 16806), (37, 16839), (38, 16845), (44, 16917), (46, 16932), (55, 17034), (57, 17040), (58, 17052), (69, 17130), (73, 17163), (81, 17196), (96, 17367), (98, 17376), (109, 17454), (110, 17463), (115, 17532), (120, 17595), (128, 17661), (129, 17664),

Gene: BrotherBLo_22 Start: 18146, Stop: 19222, Start Num: 4
Candidate Starts for BrotherBLo_22:
(Start: 4 @18146 has 64 MA's), (Start: 6 @18152 has 3 MA's), (11, 18215), (20, 18269), (21, 18272), (24, 18293), (25, 18296), (48, 18503), (55, 18575), (63, 18626), (82, 18743), (96, 18908), (98, 18917), (109, 18995), (112, 19031), (115, 19073), (128, 19202),

Gene: CallieOMalley_22 Start: 18203, Stop: 19279, Start Num: 4
Candidate Starts for CallieOMalley_22:
(Start: 4 @18203 has 64 MA's), (11, 18272), (34, 18404), (41, 18500), (51, 18575), (56, 18635), (66, 18698), (80, 18791), (82, 18800), (91, 18920), (96, 18965), (98, 18974), (110, 19061), (112, 19088), (115, 19130), (120, 19193), (123, 19208), (128, 19259),

Gene: Canowicakte_22 Start: 18238, Stop: 19314, Start Num: 4
Candidate Starts for Canowicakte_22:
(Start: 4 @18238 has 64 MA's), (11, 18307), (24, 18385), (34, 18439), (41, 18535), (51, 18610), (56, 18670), (66, 18733), (80, 18826), (82, 18835), (91, 18955), (96, 19000), (98, 19009), (110, 19096), (112, 19123), (115, 19165), (123, 19243), (128, 19294),

Gene: Carpal_22 Start: 18147, Stop: 19223, Start Num: 4
Candidate Starts for Carpal_22:
(Start: 4 @18147 has 64 MA's), (Start: 6 @18153 has 3 MA's), (11, 18216), (20, 18270), (21, 18273), (24, 18294), (25, 18297), (44, 18459), (48, 18504), (55, 18576), (63, 18627), (82, 18744), (98, 18918), (109, 18996), (112, 19032), (115, 19074), (128, 19203),

Gene: ChewChew_18 Start: 16601, Stop: 17680, Start Num: 2
Candidate Starts for ChewChew_18:
(Start: 2 @16601 has 24 MA's), (19, 16712), (21, 16730), (25, 16754), (28, 16775), (34, 16805), (37, 16838), (38, 16844), (44, 16916), (46, 16931), (55, 17033), (57, 17039), (58, 17051), (69, 17129), (73, 17162), (81, 17195), (96, 17366), (98, 17375), (109, 17453), (110, 17462), (115, 17531), (120, 17594), (128, 17660), (129, 17663),

Gene: Cholula_22 Start: 18192, Stop: 19268, Start Num: 4
Candidate Starts for Cholula_22:
(Start: 4 @18192 has 64 MA's), (Start: 6 @18198 has 3 MA's), (11, 18261), (20, 18315), (21, 18318), (24, 18339), (25, 18342), (44, 18504), (48, 18549), (55, 18621), (63, 18672), (82, 18789), (98, 18963), (109, 19041), (112, 19077), (115, 19119), (128, 19248),

Gene: Chridison_18 Start: 16584, Stop: 17663, Start Num: 4
Candidate Starts for Chridison_18:
(Start: 4 @16584 has 64 MA's), (21, 16713), (25, 16737), (28, 16758), (34, 16788), (39, 16848), (55, 17016), (59, 17037), (69, 17112), (81, 17178), (91, 17304), (94, 17316), (98, 17358), (109, 17436), (110, 17445), (115, 17514), (120, 17577), (128, 17643),

Gene: Christian_18 Start: 16602, Stop: 17681, Start Num: 2
Candidate Starts for Christian_18:

(Start: 2 @16602 has 24 MA's), (19, 16713), (21, 16731), (25, 16755), (28, 16776), (34, 16806), (37, 16839), (38, 16845), (44, 16917), (46, 16932), (55, 17034), (57, 17040), (58, 17052), (69, 17130), (73, 17163), (81, 17196), (96, 17367), (98, 17376), (109, 17454), (110, 17463), (115, 17532), (120, 17595), (128, 17661), (129, 17664),

Gene: Cole_20 Start: 16408, Stop: 17466, Start Num: 7
Candidate Starts for Cole_20:
(Start: 7 @16408 has 17 MA's), (32, 16594), (33, 16597), (36, 16630), (40, 16669), (50, 16768), (64, 16882), (70, 16930), (87, 17038), (100, 17179), (101, 17182), (104, 17209), (106, 17221), (109, 17239), (111, 17272), (116, 17338),

Gene: Crewmate_21 Start: 16598, Stop: 17668, Start Num: 4
Candidate Starts for Crewmate_21:
(Start: 4 @16598 has 64 MA's), (28, 16766), (63, 17081), (78, 17183), (100, 17378), (112, 17474), (117, 17561), (120, 17582),

Gene: CristinaYang_18 Start: 16602, Stop: 17681, Start Num: 2
Candidate Starts for CristinaYang_18:
(Start: 2 @16602 has 24 MA's), (19, 16713), (21, 16731), (25, 16755), (28, 16776), (34, 16806), (37, 16839), (38, 16845), (44, 16917), (46, 16932), (55, 17034), (57, 17040), (58, 17052), (69, 17130), (73, 17163), (81, 17196), (96, 17367), (98, 17376), (109, 17454), (110, 17463), (115, 17532), (120, 17595), (128, 17661), (129, 17664),

Gene: Daiboju_18 Start: 16598, Stop: 17677, Start Num: 4
Candidate Starts for Daiboju_18:
(Start: 4 @16598 has 64 MA's), (20, 16724), (28, 16772), (34, 16802), (42, 16904), (44, 16913), (55, 17030), (58, 17048), (59, 17051), (69, 17126), (81, 17192), (91, 17318), (98, 17372), (110, 17459), (112, 17486), (115, 17528), (120, 17591), (128, 17657),

Gene: Dino_22 Start: 18145, Stop: 19221, Start Num: 4
Candidate Starts for Dino_22:
(Start: 4 @18145 has 64 MA's), (Start: 6 @18151 has 3 MA's), (11, 18214), (20, 18268), (21, 18271), (24, 18292), (25, 18295), (44, 18457), (48, 18502), (55, 18574), (82, 18742), (98, 18916), (109, 18994), (112, 19030), (115, 19072), (128, 19201),

Gene: Dirtdigger_22 Start: 16726, Stop: 17784, Start Num: 7
Candidate Starts for Dirtdigger_22:
(Start: 7 @16726 has 17 MA's), (32, 16912), (33, 16915), (36, 16948), (40, 16987), (45, 17038), (50, 17086), (64, 17200), (87, 17356), (100, 17497), (101, 17500), (106, 17539), (109, 17557), (111, 17590),

Gene: Donatella_21 Start: 16872, Stop: 17930, Start Num: 7
Candidate Starts for Donatella_21:
(Start: 7 @16872 has 17 MA's), (26, 17019), (32, 17058), (33, 17061), (36, 17094), (40, 17133), (50, 17232), (64, 17346), (70, 17394), (100, 17643), (101, 17646), (121, 17847),

Gene: DrRobert_18 Start: 16602, Stop: 17681, Start Num: 2
Candidate Starts for DrRobert_18:
(Start: 2 @16602 has 24 MA's), (19, 16713), (21, 16731), (25, 16755), (28, 16776), (34, 16806), (37, 16839), (38, 16845), (44, 16917), (46, 16932), (55, 17034), (57, 17040), (58, 17052), (69, 17130), (73, 17163), (81, 17196), (96, 17367), (98, 17376), (109, 17454), (110, 17463), (115, 17532), (120, 17595), (128, 17661), (129, 17664),

Gene: DreamEater_20 Start: 16382, Stop: 17440, Start Num: 7
Candidate Starts for DreamEater_20:
(Start: 7 @16382 has 17 MA's), (9, 16412), (18, 16481), (22, 16505), (27, 16532), (33, 16571), (36, 16604), (50, 16742), (52, 16751), (59, 16826), (71, 16907), (77, 16940), (82, 16961), (87, 17012), (101, 17156), (106, 17195), (109, 17213), (121, 17357), (128, 17420),

Gene: DreamTeam_18 Start: 16635, Stop: 17714, Start Num: 2
Candidate Starts for DreamTeam_18:
(Start: 2 @16635 has 24 MA's), (20, 16761), (21, 16764), (25, 16788), (34, 16839), (42, 16941), (44, 16950), (51, 17010), (56, 17070), (74, 17199), (81, 17229), (91, 17355), (98, 17409), (106, 17469), (112, 17523), (123, 17643), (128, 17694), (129, 17697),

Gene: Elesar_21 Start: 16799, Stop: 17857, Start Num: 7
Candidate Starts for Elesar_21:
(Start: 7 @16799 has 17 MA's), (18, 16898), (26, 16946), (32, 16985), (33, 16988), (36, 17021), (40, 17060), (50, 17159), (64, 17273), (65, 17279), (70, 17321), (87, 17429), (100, 17570), (101, 17573), (104, 17600), (106, 17612), (107, 17618), (109, 17630), (111, 17663), (128, 17837),

Gene: EstebanJulior_18 Start: 16600, Stop: 17679, Start Num: 4
Candidate Starts for EstebanJulior_18:
(Start: 4 @16600 has 64 MA's), (5, 16603), (Start: 6 @16606 has 3 MA's), (13, 16678), (14, 16681), (20, 16726), (25, 16753), (28, 16774), (34, 16804), (41, 16900), (48, 16960), (62, 17071), (72, 17146), (80, 17191), (83, 17218), (94, 17332), (98, 17374), (109, 17452), (110, 17461), (115, 17530), (123, 17608),

Gene: Eunoia_18 Start: 16583, Stop: 17662, Start Num: 4
Candidate Starts for Eunoia_18:
(Start: 4 @16583 has 64 MA's), (21, 16712), (25, 16736), (28, 16757), (34, 16787), (39, 16847), (55, 17015), (59, 17036), (69, 17111), (81, 17177), (91, 17303), (94, 17315), (98, 17357), (109, 17435), (110, 17444), (115, 17513), (120, 17576), (128, 17642),

Gene: Fluke_22 Start: 18194, Stop: 19264, Start Num: 6
Candidate Starts for Fluke_22:
(Start: 4 @18188 has 64 MA's), (Start: 6 @18194 has 3 MA's), (11, 18257), (20, 18311), (21, 18314), (24, 18335), (25, 18338), (44, 18500), (48, 18545), (55, 18617), (63, 18668), (82, 18785), (98, 18959), (109, 19037), (110, 19046), (112, 19073), (115, 19115), (128, 19244),

Gene: Gibbzilla_20 Start: 13767, Stop: 14849, Start Num: 7
Candidate Starts for Gibbzilla_20:
(Start: 7 @13767 has 17 MA's), (16, 13845), (33, 13956), (36, 13989), (47, 14115), (64, 14241), (91, 14484), (92, 14490), (103, 14586), (105, 14595),

Gene: Gisselle_18 Start: 16635, Stop: 17714, Start Num: 2
Candidate Starts for Gisselle_18:
(Start: 2 @16635 has 24 MA's), (20, 16761), (21, 16764), (25, 16788), (34, 16839), (42, 16941), (44, 16950), (51, 17010), (56, 17070), (74, 17199), (81, 17229), (91, 17355), (98, 17409), (106, 17469), (112, 17523), (123, 17643), (128, 17694), (129, 17697),

Gene: Glenn_22 Start: 18203, Stop: 19273, Start Num: 6
Candidate Starts for Glenn_22:
(Start: 4 @18197 has 64 MA's), (Start: 6 @18203 has 3 MA's), (11, 18266), (20, 18320), (21, 18323), (24, 18344), (42, 18500), (44, 18509), (48, 18554), (55, 18626), (63, 18677), (82, 18794), (98, 18968), (109, 19046), (112, 19082), (115, 19124), (128, 19253),

Gene: GoodLuckBabe_22 Start: 16701, Stop: 17774, Start Num: 7
Candidate Starts for GoodLuckBabe_22:
(3, 16689), (Start: 7 @16701 has 17 MA's), (9, 16731), (27, 16851), (33, 16890), (36, 16923), (40, 16962), (60, 17154), (70, 17223), (93, 17424), (103, 17514), (105, 17523), (117, 17667), (119, 17682), (123, 17703),

Gene: Graynor_22 Start: 18224, Stop: 19300, Start Num: 4
Candidate Starts for Graynor_22:
(Start: 4 @18224 has 64 MA's), (11, 18293), (24, 18371), (34, 18425), (41, 18521), (51, 18596), (56, 18656), (66, 18719), (80, 18812), (82, 18821), (91, 18941), (94, 18953), (96, 18986), (98, 18995), (110, 19082), (112, 19109), (115, 19151), (123, 19229), (128, 19280),

Gene: GreenHearts_22 Start: 18307, Stop: 19383, Start Num: 4
Candidate Starts for GreenHearts_22:
(Start: 4 @18307 has 64 MA's), (11, 18376), (21, 18433), (24, 18454), (25, 18457), (34, 18508), (48, 18664), (55, 18736), (62, 18775), (66, 18802), (80, 18895), (91, 19024), (98, 19078), (99, 19090), (110, 19165), (115, 19234), (120, 19297), (123, 19312), (128, 19363),

Gene: Greenhouse_22 Start: 18231, Stop: 19307, Start Num: 4
Candidate Starts for Greenhouse_22:
(Start: 4 @18231 has 64 MA's), (11, 18300), (20, 18354), (21, 18357), (24, 18378), (25, 18381), (29, 18408), (34, 18432), (48, 18588), (55, 18660), (58, 18678), (62, 18699), (66, 18726), (80, 18819), (91, 18948), (98, 19002), (99, 19014), (110, 19089), (115, 19158), (120, 19221), (123, 19236), (128, 19287),

Gene: Guinevere_22 Start: 16732, Stop: 17805, Start Num: 7
Candidate Starts for Guinevere_22:
(3, 16720), (Start: 7 @16732 has 17 MA's), (9, 16762), (27, 16882), (33, 16921), (36, 16954), (40, 16993), (57, 17161), (60, 17185), (70, 17254), (88, 17392), (93, 17455), (103, 17545), (105, 17554), (119, 17713), (123, 17734),

Gene: Gusanita_20 Start: 16621, Stop: 17679, Start Num: 7
Candidate Starts for Gusanita_20:
(3, 16609), (Start: 7 @16621 has 17 MA's), (18, 16720), (33, 16810), (36, 16843), (40, 16882), (43, 16921), (54, 17029), (57, 17050), (59, 17065), (67, 17119), (70, 17143), (71, 17146), (97, 17368), (101, 17395), (102, 17404), (110, 17461), (111, 17485), (121, 17596), (128, 17659),

Gene: Halloweekend_20 Start: 16372, Stop: 17430, Start Num: 7
Candidate Starts for Halloweekend_20:
(Start: 7 @16372 has 17 MA's), (32, 16558), (33, 16561), (36, 16594), (40, 16633), (50, 16732), (64, 16846), (70, 16894), (87, 17002), (100, 17143), (101, 17146), (104, 17173), (106, 17185), (109, 17203), (111, 17236), (116, 17302),

Gene: HeadNerd_18 Start: 16595, Stop: 17674, Start Num: 2
Candidate Starts for HeadNerd_18:
(Start: 2 @16595 has 24 MA's), (28, 16769), (34, 16799), (46, 16925), (50, 16964), (55, 17027), (69, 17123), (76, 17171), (81, 17189), (82, 17195), (91, 17315), (96, 17360), (98, 17369), (110, 17456), (115, 17525), (123, 17603), (128, 17654), (129, 17657),

Gene: Herb_18 Start: 16598, Stop: 17677, Start Num: 4
Candidate Starts for Herb_18:

(Start: 4 @16598 has 64 MA's), (20, 16724), (28, 16772), (34, 16802), (42, 16904), (44, 16913), (55, 17030), (58, 17048), (59, 17051), (69, 17126), (81, 17192), (91, 17318), (98, 17372), (110, 17459), (112, 17486), (115, 17528), (120, 17591), (128, 17657),

Gene: Huckleberry_18 Start: 16595, Stop: 17674, Start Num: 2
Candidate Starts for Huckleberry_18:
(Start: 2 @16595 has 24 MA's), (28, 16769), (34, 16799), (46, 16925), (50, 16964), (55, 17027), (69, 17123), (76, 17171), (81, 17189), (82, 17195), (91, 17315), (96, 17360), (98, 17369), (110, 17456), (115, 17525), (123, 17603), (128, 17654), (129, 17657),

Gene: HunterDalle_18 Start: 16583, Stop: 17662, Start Num: 4
Candidate Starts for HunterDalle_18:
(Start: 4 @16583 has 64 MA's), (21, 16712), (25, 16736), (28, 16757), (34, 16787), (39, 16847), (41, 16883), (55, 17015), (59, 17036), (69, 17111), (76, 17159), (81, 17177), (91, 17303), (94, 17315), (98, 17357), (109, 17435), (110, 17444), (115, 17513), (120, 17576), (128, 17642),

Gene: Huntingdon_22 Start: 18199, Stop: 19275, Start Num: 4
Candidate Starts for Huntingdon_22:
(Start: 4 @18199 has 64 MA's), (11, 18268), (15, 18283), (19, 18307), (20, 18322), (21, 18325), (25, 18349), (31, 18382), (50, 18565), (55, 18628), (56, 18631), (57, 18634), (63, 18679), (66, 18694), (91, 18916), (98, 18970), (99, 18982), (109, 19048), (110, 19057), (115, 19126), (123, 19204), (128, 19255),

Gene: Ichiang_20 Start: 16389, Stop: 17447, Start Num: 7
Candidate Starts for Ichiang_20:
(Start: 7 @16389 has 17 MA's), (26, 16536), (33, 16578), (36, 16611), (50, 16749), (70, 16911), (100, 17160), (101, 17163), (106, 17202), (121, 17364),

Gene: Immaculata_22 Start: 18191, Stop: 19267, Start Num: 4
Candidate Starts for Immaculata_22:
(Start: 4 @18191 has 64 MA's), (Start: 6 @18197 has 3 MA's), (11, 18260), (20, 18314), (21, 18317), (24, 18338), (25, 18341), (44, 18503), (48, 18548), (55, 18620), (63, 18671), (82, 18788), (98, 18962), (109, 19040), (112, 19076), (115, 19118), (128, 19247),

Gene: IsHungry_22 Start: 16699, Stop: 17757, Start Num: 7
Candidate Starts for IsHungry_22:
(Start: 7 @16699 has 17 MA's), (33, 16888), (36, 16921), (40, 16960), (43, 16999), (70, 17221), (71, 17224), (90, 17371), (97, 17446), (101, 17473), (102, 17482), (106, 17512), (110, 17539), (111, 17563), (121, 17674), (128, 17737),

Gene: Joann_22 Start: 18211, Stop: 19287, Start Num: 4
Candidate Starts for Joann_22:
(Start: 4 @18211 has 64 MA's), (11, 18280), (21, 18337), (24, 18358), (25, 18361), (34, 18412), (48, 18568), (55, 18640), (62, 18679), (66, 18706), (80, 18799), (83, 18826), (98, 18982), (99, 18994), (110, 19069), (114, 19126), (115, 19138), (120, 19201), (123, 19216), (128, 19267),

Gene: Julie_22 Start: 16962, Stop: 18038, Start Num: 7
Candidate Starts for Julie_22:
(Start: 7 @16962 has 17 MA's), (26, 17109), (33, 17151), (36, 17184), (40, 17223), (50, 17322), (52, 17331), (64, 17436), (70, 17484), (71, 17487), (80, 17532), (88, 17622), (89, 17634), (104, 17778), (106, 17790), (123, 17967), (124, 17979), (127, 18012),

Gene: Jumboset_22 Start: 18140, Stop: 19216, Start Num: 4

Candidate Starts for Jumboset_22:
(Start: 4 @18140 has 64 MA's), (Start: 6 @18146 has 3 MA's), (11, 18209), (20, 18263), (21, 18266), (24, 18287), (25, 18290), (48, 18497), (55, 18569), (63, 18620), (82, 18737), (96, 18902), (98, 18911), (109, 18989), (112, 19025), (115, 19067), (128, 19196),

Gene: Kalizoi_22 Start: 18139, Stop: 19215, Start Num: 4
Candidate Starts for Kalizoi_22:
(Start: 4 @18139 has 64 MA's), (Start: 6 @18145 has 3 MA's), (11, 18208), (20, 18262), (21, 18265), (24, 18286), (25, 18289), (44, 18451), (48, 18496), (55, 18568), (63, 18619), (82, 18736), (98, 18910), (109, 18988), (112, 19024), (115, 19066), (128, 19195),

Gene: KeAlii_20 Start: 16165, Stop: 17235, Start Num: 4
Candidate Starts for KeAlii_20:
(Start: 4 @16165 has 64 MA's), (28, 16333), (49, 16522), (78, 16747), (82, 16762), (90, 16852), (115, 17089), (118, 17140), (123, 17167),

Gene: Kihatsu_23 Start: 17054, Stop: 18130, Start Num: 7
Candidate Starts for Kihatsu_23:
(3, 17042), (Start: 7 @17054 has 17 MA's), (9, 17084), (27, 17204), (33, 17243), (36, 17276), (40, 17315), (60, 17507), (70, 17576), (86, 17669), (88, 17714), (93, 17777), (103, 17867), (104, 17870), (105, 17876), (119, 18038), (123, 18059),

Gene: KingBob_18 Start: 16598, Stop: 17677, Start Num: 4
Candidate Starts for KingBob_18:
(Start: 4 @16598 has 64 MA's), (20, 16724), (28, 16772), (34, 16802), (42, 16904), (44, 16913), (55, 17030), (58, 17048), (59, 17051), (69, 17126), (81, 17192), (91, 17318), (98, 17372), (110, 17459), (112, 17486), (115, 17528), (120, 17591), (121, 17594), (128, 17657),

Gene: Kittykat_18 Start: 16619, Stop: 17698, Start Num: 2
Candidate Starts for Kittykat_18:
(Start: 2 @16619 has 24 MA's), (20, 16745), (21, 16748), (25, 16772), (34, 16823), (42, 16925), (44, 16934), (46, 16949), (51, 16994), (55, 17051), (56, 17054), (74, 17183), (81, 17213), (82, 17219), (91, 17339), (98, 17393), (106, 17453), (112, 17507), (123, 17627), (128, 17678), (129, 17681),

Gene: Korra_23 Start: 18145, Stop: 19221, Start Num: 4
Candidate Starts for Korra_23:
(Start: 4 @18145 has 64 MA's), (Start: 6 @18151 has 3 MA's), (11, 18214), (20, 18268), (21, 18271), (24, 18292), (25, 18295), (44, 18457), (48, 18502), (55, 18574), (82, 18742), (98, 18916), (109, 18994), (112, 19030), (115, 19072), (128, 19201),

Gene: Lakshmi_22 Start: 18236, Stop: 19312, Start Num: 4
Candidate Starts for Lakshmi_22:
(Start: 4 @18236 has 64 MA's), (11, 18305), (20, 18359), (21, 18362), (24, 18383), (25, 18386), (34, 18437), (48, 18593), (55, 18665), (62, 18704), (66, 18731), (80, 18824), (83, 18851), (91, 18953), (98, 19007), (99, 19019), (110, 19094), (115, 19163), (120, 19226), (123, 19241), (128, 19292),

Gene: Lasagna_18 Start: 16602, Stop: 17681, Start Num: 2
Candidate Starts for Lasagna_18:
(Start: 2 @16602 has 24 MA's), (10, 16647), (19, 16713), (21, 16731), (25, 16755), (28, 16776), (34, 16806), (37, 16839), (38, 16845), (44, 16917), (46, 16932), (55, 17034), (57, 17040), (69, 17130), (73, 17163), (81, 17196), (96, 17367), (98, 17376), (109, 17454), (110, 17463), (115, 17532), (128, 17661), (129, 17664),

Gene: Lennox_18 Start: 16590, Stop: 17669, Start Num: 2
Candidate Starts for Lennox_18:
(Start: 2 @16590 has 24 MA's), (19, 16701), (21, 16719), (25, 16743), (28, 16764), (34, 16794), (37, 16827), (38, 16833), (44, 16905), (46, 16920), (55, 17022), (57, 17028), (58, 17040), (69, 17118), (73, 17151), (81, 17184), (96, 17355), (98, 17364), (109, 17442), (110, 17451), (115, 17520), (120, 17583), (128, 17649), (129, 17652),

Gene: Lenoxika_22 Start: 16728, Stop: 17801, Start Num: 7
Candidate Starts for Lenoxika_22:
(3, 16716), (Start: 7 @16728 has 17 MA's), (9, 16758), (27, 16878), (33, 16917), (36, 16950), (40, 16989), (57, 17157), (60, 17181), (70, 17250), (88, 17388), (93, 17451), (103, 17541), (105, 17550), (123, 17730),

Gene: LilStuart_18 Start: 16590, Stop: 17669, Start Num: 2
Candidate Starts for LilStuart_18:
(Start: 2 @16590 has 24 MA's), (19, 16701), (21, 16719), (25, 16743), (28, 16764), (34, 16794), (37, 16827), (38, 16833), (44, 16905), (46, 16920), (55, 17022), (57, 17028), (58, 17040), (69, 17118), (73, 17151), (81, 17184), (96, 17355), (98, 17364), (109, 17442), (110, 17451), (115, 17520), (120, 17583), (128, 17649), (129, 17652),

Gene: Litotes_22 Start: 18188, Stop: 19264, Start Num: 4
Candidate Starts for Litotes_22:
(Start: 4 @18188 has 64 MA's), (11, 18257), (24, 18335), (30, 18368), (34, 18389), (41, 18485), (51, 18560), (56, 18620), (66, 18683), (80, 18776), (82, 18785), (91, 18905), (96, 18950), (98, 18959), (110, 19046), (112, 19073), (115, 19115), (123, 19193), (128, 19244),

Gene: Lucy_18 Start: 16582, Stop: 17661, Start Num: 2
Candidate Starts for Lucy_18:
(Start: 2 @16582 has 24 MA's), (10, 16627), (19, 16693), (21, 16711), (25, 16735), (28, 16756), (34, 16786), (37, 16819), (38, 16825), (44, 16897), (46, 16912), (55, 17014), (57, 17020), (58, 17032), (69, 17110), (73, 17143), (81, 17176), (96, 17347), (98, 17356), (109, 17434), (110, 17443), (115, 17512), (120, 17575), (128, 17641), (129, 17644),

Gene: Makoto_18 Start: 16603, Stop: 17682, Start Num: 2
Candidate Starts for Makoto_18:
(Start: 2 @16603 has 24 MA's), (19, 16714), (21, 16732), (25, 16756), (28, 16777), (34, 16807), (37, 16840), (38, 16846), (44, 16918), (46, 16933), (55, 17035), (57, 17041), (58, 17053), (69, 17131), (73, 17164), (81, 17197), (96, 17368), (98, 17377), (109, 17455), (115, 17533), (120, 17596), (128, 17662), (129, 17665),

Gene: MamaPearl_18 Start: 16600, Stop: 17679, Start Num: 4
Candidate Starts for MamaPearl_18:
(Start: 4 @16600 has 64 MA's), (5, 16603), (Start: 6 @16606 has 3 MA's), (13, 16678), (14, 16681), (20, 16726), (25, 16753), (28, 16774), (34, 16804), (41, 16900), (48, 16960), (62, 17071), (72, 17146), (80, 17191), (83, 17218), (94, 17332), (98, 17374), (109, 17452), (110, 17461), (115, 17530), (122, 17599), (123, 17608),

Gene: Maria1952_18 Start: 16598, Stop: 17677, Start Num: 4
Candidate Starts for Maria1952_18:
(Start: 4 @16598 has 64 MA's), (20, 16724), (28, 16772), (34, 16802), (42, 16904), (44, 16913), (55, 17030), (58, 17048), (59, 17051), (69, 17126), (81, 17192), (91, 17318), (98, 17372), (110, 17459), (112, 17486), (115, 17528), (120, 17591), (128, 17657),

Gene: MeganNoll_22 Start: 18197, Stop: 19273, Start Num: 4
Candidate Starts for MeganNoll_22:
(Start: 4 @18197 has 64 MA's), (Start: 6 @18203 has 3 MA's), (11, 18266), (20, 18320), (21, 18323), (24, 18344), (25, 18347), (48, 18554), (55, 18626), (63, 18677), (82, 18794), (96, 18959), (98, 18968), (109, 19046), (112, 19082), (115, 19124), (128, 19253),

Gene: MillySue_22 Start: 16748, Stop: 17806, Start Num: 7
Candidate Starts for MillySue_22:
(Start: 7 @16748 has 17 MA's), (26, 16895), (33, 16937), (36, 16970), (50, 17108), (70, 17270), (100, 17519), (101, 17522), (106, 17561), (109, 17579),

Gene: Misaeng_22 Start: 18281, Stop: 19357, Start Num: 4
Candidate Starts for Misaeng_22:
(Start: 4 @18281 has 64 MA's), (17, 18371), (20, 18404), (21, 18407), (24, 18428), (31, 18464), (40, 18548), (42, 18584), (49, 18641), (55, 18710), (66, 18776), (83, 18896), (91, 18998), (98, 19052), (99, 19064), (109, 19130), (110, 19139), (115, 19208), (120, 19271), (123, 19286), (128, 19337),

Gene: Moki_18 Start: 16595, Stop: 17674, Start Num: 2
Candidate Starts for Moki_18:
(Start: 2 @16595 has 24 MA's), (28, 16769), (34, 16799), (46, 16925), (50, 16964), (55, 17027), (69, 17123), (76, 17171), (81, 17189), (82, 17195), (91, 17315), (96, 17360), (98, 17369), (110, 17456), (115, 17525), (123, 17603), (128, 17654), (129, 17657),

Gene: MrBoss_22 Start: 18188, Stop: 19264, Start Num: 4
Candidate Starts for MrBoss_22:
(Start: 4 @18188 has 64 MA's), (11, 18257), (30, 18368), (34, 18389), (41, 18485), (51, 18560), (56, 18620), (66, 18683), (80, 18776), (82, 18785), (91, 18905), (96, 18950), (98, 18959), (110, 19046), (112, 19073), (115, 19115), (123, 19193), (128, 19244),

Gene: MrGloopy_22 Start: 18137, Stop: 19207, Start Num: 6
Candidate Starts for MrGloopy_22:
(Start: 4 @18131 has 64 MA's), (Start: 6 @18137 has 3 MA's), (11, 18200), (20, 18254), (21, 18257), (24, 18278), (25, 18281), (44, 18443), (48, 18488), (55, 18560), (63, 18611), (82, 18728), (96, 18893), (98, 18902), (109, 18980), (112, 19016), (115, 19058), (128, 19187),

Gene: Nancia_18 Start: 16602, Stop: 17681, Start Num: 2
Candidate Starts for Nancia_18:
(Start: 2 @16602 has 24 MA's), (19, 16713), (21, 16731), (25, 16755), (28, 16776), (34, 16806), (37, 16839), (38, 16845), (44, 16917), (46, 16932), (55, 17034), (57, 17040), (58, 17052), (69, 17130), (73, 17163), (81, 17196), (96, 17367), (98, 17376), (109, 17454), (110, 17463), (115, 17532), (120, 17595), (128, 17661), (129, 17664),

Gene: Nandita_22 Start: 16732, Stop: 17805, Start Num: 7
Candidate Starts for Nandita_22:
(3, 16720), (Start: 7 @16732 has 17 MA's), (9, 16762), (27, 16882), (33, 16921), (36, 16954), (40, 16993), (57, 17161), (60, 17185), (70, 17254), (88, 17392), (93, 17455), (103, 17545), (105, 17554), (119, 17713), (123, 17734),

Gene: Nubia_22 Start: 18196, Stop: 19272, Start Num: 4
Candidate Starts for Nubia_22:
(Start: 4 @18196 has 64 MA's), (11, 18265), (21, 18322), (24, 18343), (25, 18346), (34, 18397), (48, 18553), (55, 18625), (62, 18664), (66, 18691), (80, 18784), (83, 18811), (91, 18913), (98, 18967), (99, 18979), (110, 19054), (115, 19123), (120, 19186), (123, 19201), (128, 19252),

Gene: OMalley_18 Start: 16583, Stop: 17662, Start Num: 4
Candidate Starts for OMalley_18:
(Start: 4 @16583 has 64 MA's), (21, 16712), (25, 16736), (28, 16757), (34, 16787), (39, 16847), (55, 17015), (59, 17036), (69, 17111), (81, 17177), (91, 17303), (94, 17315), (98, 17357), (109, 17435), (110, 17444), (115, 17513), (120, 17576), (128, 17642),

Gene: ObiToo_20 Start: 16335, Stop: 17405, Start Num: 4
Candidate Starts for ObiToo_20:
(Start: 4 @16335 has 64 MA's), (28, 16503), (63, 16818), (78, 16920), (100, 17115), (112, 17211), (117, 17298), (120, 17319),

Gene: OurGirlNessie_18 Start: 16582, Stop: 17661, Start Num: 2
Candidate Starts for OurGirlNessie_18:
(Start: 2 @16582 has 24 MA's), (19, 16693), (21, 16711), (25, 16735), (28, 16756), (34, 16786), (37, 16819), (38, 16825), (44, 16897), (46, 16912), (55, 17014), (57, 17020), (58, 17032), (69, 17110), (73, 17143), (81, 17176), (96, 17347), (98, 17356), (109, 17434), (110, 17443), (115, 17512), (120, 17575), (128, 17641), (129, 17644),

Gene: Oxynfrius_22 Start: 18209, Stop: 19285, Start Num: 4
Candidate Starts for Oxynfrius_22:
(Start: 4 @18209 has 64 MA's), (11, 18278), (20, 18332), (21, 18335), (24, 18356), (25, 18359), (34, 18410), (48, 18566), (55, 18638), (62, 18677), (66, 18704), (80, 18797), (83, 18824), (91, 18926), (98, 18980), (99, 18992), (110, 19067), (115, 19136), (120, 19199), (123, 19214), (128, 19265),

Gene: PartyCup_22 Start: 18235, Stop: 19311, Start Num: 4
Candidate Starts for PartyCup_22:
(Start: 4 @18235 has 64 MA's), (11, 18304), (24, 18382), (34, 18436), (41, 18532), (51, 18607), (56, 18667), (66, 18730), (69, 18760), (80, 18823), (82, 18832), (91, 18952), (96, 18997), (98, 19006), (110, 19093), (112, 19120), (115, 19162), (123, 19240), (128, 19291),

Gene: PinkFriday_18 Start: 16619, Stop: 17698, Start Num: 4
Candidate Starts for PinkFriday_18:
(Start: 4 @16619 has 64 MA's), (8, 16637), (28, 16793), (34, 16823), (46, 16949), (51, 16994), (53, 17003), (54, 17036), (55, 17051), (59, 17072), (69, 17147), (81, 17213), (89, 17300), (98, 17393), (106, 17453), (112, 17507), (123, 17627), (126, 17651), (128, 17678),

Gene: PitaDog_18 Start: 16593, Stop: 17672, Start Num: 2
Candidate Starts for PitaDog_18:
(Start: 2 @16593 has 24 MA's), (10, 16638), (19, 16704), (21, 16722), (25, 16746), (28, 16767), (34, 16797), (37, 16830), (38, 16836), (44, 16908), (46, 16923), (55, 17025), (57, 17031), (58, 17043), (69, 17121), (73, 17154), (81, 17187), (96, 17358), (98, 17367), (109, 17445), (110, 17454), (115, 17523), (120, 17586), (128, 17652), (129, 17655),

Gene: Popper_20 Start: 16260, Stop: 17336, Start Num: 7
Candidate Starts for Popper_20:
(Start: 7 @16260 has 17 MA's), (9, 16290), (26, 16407), (33, 16449), (35, 16470), (36, 16482), (40, 16521), (64, 16734), (88, 16920), (106, 17088), (109, 17109), (112, 17145), (123, 17265), (125, 17286), (127, 17310),

Gene: Potatoes_22 Start: 18192, Stop: 19268, Start Num: 4
Candidate Starts for Potatoes_22:

(Start: 4 @18192 has 64 MA's), (Start: 6 @18198 has 3 MA's), (11, 18261), (20, 18315), (21, 18318), (24, 18339), (25, 18342), (44, 18504), (48, 18549), (55, 18621), (63, 18672), (82, 18789), (98, 18963), (109, 19041), (112, 19077), (115, 19119), (128, 19248),

Gene: Preamble_18 Start: 16596, Stop: 17675, Start Num: 2
Candidate Starts for Preamble_18:
(Start: 2 @16596 has 24 MA's), (20, 16722), (21, 16725), (25, 16749), (34, 16800), (42, 16902), (44, 16911), (46, 16926), (51, 16971), (55, 17028), (56, 17031), (74, 17160), (81, 17190), (82, 17196), (85, 17226), (91, 17316), (98, 17370), (104, 17418), (106, 17430), (112, 17484), (123, 17604), (128, 17655), (129, 17658),

Gene: Pterodactyl_18 Start: 16583, Stop: 17662, Start Num: 2
Candidate Starts for Pterodactyl_18:
(Start: 2 @16583 has 24 MA's), (19, 16694), (21, 16712), (25, 16736), (28, 16757), (34, 16787), (37, 16820), (38, 16826), (44, 16898), (46, 16913), (55, 17015), (57, 17021), (58, 17033), (69, 17111), (73, 17144), (81, 17177), (96, 17348), (98, 17357), (109, 17435), (110, 17444), (115, 17513), (120, 17576), (128, 17642), (129, 17645),

Gene: Pumancara_18 Start: 16601, Stop: 17680, Start Num: 4
Candidate Starts for Pumancara_18:
(Start: 4 @16601 has 64 MA's), (20, 16727), (28, 16775), (34, 16805), (44, 16916), (55, 17033), (58, 17051), (59, 17054), (69, 17129), (81, 17195), (91, 17321), (98, 17375), (110, 17462), (112, 17489), (115, 17531), (120, 17594), (128, 17660),

Gene: QuinnAvery_22 Start: 16746, Stop: 17804, Start Num: 7
Candidate Starts for QuinnAvery_22:
(Start: 7 @16746 has 17 MA's), (32, 16932), (33, 16935), (36, 16968), (40, 17007), (50, 17106), (64, 17220), (70, 17268), (87, 17376), (100, 17517), (101, 17520), (104, 17547), (106, 17559), (109, 17577), (111, 17610), (116, 17676),

Gene: RAP15_22 Start: 18197, Stop: 19273, Start Num: 4
Candidate Starts for RAP15_22:
(Start: 4 @18197 has 64 MA's), (Start: 6 @18203 has 3 MA's), (11, 18266), (20, 18320), (21, 18323), (24, 18344), (25, 18347), (48, 18554), (55, 18626), (63, 18677), (82, 18794), (96, 18959), (98, 18968), (109, 19046), (112, 19082), (115, 19124), (128, 19253),

Gene: RcigaStruga_22 Start: 18199, Stop: 19275, Start Num: 4
Candidate Starts for RcigaStruga_22:
(Start: 4 @18199 has 64 MA's), (11, 18268), (15, 18283), (19, 18307), (20, 18322), (21, 18325), (25, 18349), (31, 18382), (50, 18565), (55, 18628), (56, 18631), (57, 18634), (63, 18679), (66, 18694), (91, 18916), (98, 18970), (99, 18982), (109, 19048), (110, 19057), (115, 19126), (123, 19204), (128, 19255),

Gene: Reedo_20 Start: 16179, Stop: 17249, Start Num: 4
Candidate Starts for Reedo_20:
(Start: 4 @16179 has 64 MA's), (28, 16347), (59, 16626), (63, 16662), (78, 16761), (108, 17013), (117, 17145),

Gene: Riovina_18 Start: 16583, Stop: 17662, Start Num: 4
Candidate Starts for Riovina_18:
(Start: 4 @16583 has 64 MA's), (21, 16712), (25, 16736), (28, 16757), (34, 16787), (39, 16847), (55, 17015), (59, 17036), (69, 17111), (81, 17177), (91, 17303), (94, 17315), (98, 17357), (109, 17435), (110, 17444), (115, 17513), (120, 17576), (128, 17642),

Gene: Riverdale_22 Start: 18127, Stop: 19203, Start Num: 4
Candidate Starts for Riverdale_22:
(Start: 4 @18127 has 64 MA's), (Start: 6 @18133 has 3 MA's), (11, 18196), (20, 18250), (21, 18253), (24, 18274), (25, 18277), (42, 18430), (44, 18439), (48, 18484), (55, 18556), (63, 18607), (82, 18724), (98, 18898), (109, 18976), (112, 19012), (115, 19054), (128, 19183),

Gene: Rozby_22 Start: 18128, Stop: 19204, Start Num: 4
Candidate Starts for Rozby_22:
(Start: 4 @18128 has 64 MA's), (Start: 6 @18134 has 3 MA's), (11, 18197), (20, 18251), (21, 18254), (24, 18275), (25, 18278), (48, 18485), (55, 18557), (63, 18608), (82, 18725), (98, 18899), (109, 18977), (112, 19013), (115, 19055), (128, 19184),

Gene: Ryan_22 Start: 16878, Stop: 17954, Start Num: 7
Candidate Starts for Ryan_22:
(3, 16866), (Start: 7 @16878 has 17 MA's), (9, 16908), (27, 17028), (33, 17067), (36, 17100), (40, 17139), (60, 17331), (70, 17400), (88, 17538), (93, 17601), (103, 17691), (104, 17694), (105, 17700), (119, 17862),

Gene: Savage2526_22 Start: 18191, Stop: 19267, Start Num: 4
Candidate Starts for Savage2526_22:
(Start: 4 @18191 has 64 MA's), (Start: 6 @18197 has 3 MA's), (11, 18260), (20, 18314), (21, 18317), (24, 18338), (25, 18341), (48, 18548), (55, 18620), (63, 18671), (82, 18788), (96, 18953), (98, 18962), (109, 19040), (112, 19076), (115, 19118), (128, 19247),

Gene: Schism_22 Start: 16732, Stop: 17805, Start Num: 7
Candidate Starts for Schism_22:
(3, 16720), (Start: 7 @16732 has 17 MA's), (9, 16762), (27, 16882), (33, 16921), (36, 16954), (40, 16993), (57, 17161), (60, 17185), (70, 17254), (88, 17392), (93, 17455), (103, 17545), (105, 17554), (119, 17713), (123, 17734),

Gene: Scuttle_22 Start: 18196, Stop: 19272, Start Num: 4
Candidate Starts for Scuttle_22:
(Start: 4 @18196 has 64 MA's), (Start: 6 @18202 has 3 MA's), (11, 18265), (20, 18319), (21, 18322), (24, 18343), (25, 18346), (44, 18508), (48, 18553), (55, 18625), (63, 18676), (82, 18793), (98, 18967), (109, 19045), (112, 19081), (115, 19123), (128, 19252),

Gene: Sergei_18 Start: 16598, Stop: 17677, Start Num: 4
Candidate Starts for Sergei_18:
(Start: 4 @16598 has 64 MA's), (20, 16724), (28, 16772), (34, 16802), (42, 16904), (44, 16913), (55, 17030), (58, 17048), (59, 17051), (69, 17126), (81, 17192), (91, 17318), (98, 17372), (110, 17459), (112, 17486), (115, 17528), (120, 17591), (128, 17657),

Gene: Shambre1_22 Start: 18595, Stop: 19725, Start Num: 1
Candidate Starts for Shambre1_22:
(Start: 1 @18595 has 1 MA's), (23, 18757), (28, 18787), (75, 19186), (79, 19204), (82, 19216), (84, 19240), (90, 19330), (129, 19708),

Gene: Snek_20 Start: 15214, Stop: 16278, Start Num: 4
Candidate Starts for Snek_20:
(Start: 4 @15214 has 64 MA's), (28, 15382), (61, 15673), (63, 15697), (68, 15730), (78, 15796), (95, 15946), (97, 15967), (109, 16051), (112, 16087),

Gene: Supakev_18 Start: 16585, Stop: 17664, Start Num: 4
Candidate Starts for Supakev_18:
(Start: 4 @16585 has 64 MA's), (21, 16714), (25, 16738), (28, 16759), (34, 16789), (39, 16849), (41, 16885), (55, 17017), (59, 17038), (69, 17113), (81, 17179), (91, 17305), (94, 17317), (98, 17359), (109, 17437), (110, 17446), (115, 17515), (120, 17578), (128, 17644),

Gene: Suppi_22 Start: 18238, Stop: 19314, Start Num: 4
Candidate Starts for Suppi_22:
(Start: 4 @18238 has 64 MA's), (11, 18307), (24, 18385), (34, 18439), (41, 18535), (51, 18610), (56, 18670), (66, 18733), (80, 18826), (82, 18835), (91, 18955), (96, 19000), (98, 19009), (110, 19096), (112, 19123), (115, 19165), (123, 19243), (128, 19294),

Gene: TattModd_22 Start: 18190, Stop: 19266, Start Num: 4
Candidate Starts for TattModd_22:
(Start: 4 @18190 has 64 MA's), (Start: 6 @18196 has 3 MA's), (11, 18259), (20, 18313), (21, 18316), (24, 18337), (25, 18340), (44, 18502), (48, 18547), (55, 18619), (63, 18670), (82, 18787), (98, 18961), (109, 19039), (112, 19075), (115, 19117), (128, 19246),

Gene: Temper16_18 Start: 16598, Stop: 17677, Start Num: 4
Candidate Starts for Temper16_18:
(Start: 4 @16598 has 64 MA's), (20, 16724), (28, 16772), (34, 16802), (42, 16904), (44, 16913), (55, 17030), (58, 17048), (59, 17051), (69, 17126), (81, 17192), (91, 17318), (98, 17372), (110, 17459), (112, 17486), (115, 17528), (120, 17591), (128, 17657),

Gene: ToastyOats_24 Start: 17211, Stop: 18269, Start Num: 7
Candidate Starts for ToastyOats_24:
(Start: 7 @17211 has 17 MA's), (26, 17358), (33, 17400), (36, 17433), (50, 17571), (52, 17580), (70, 17733), (100, 17982), (101, 17985), (106, 18024),

Gene: Toodles_23 Start: 16957, Stop: 18015, Start Num: 7
Candidate Starts for Toodles_23:
(Start: 7 @16957 has 17 MA's), (26, 17104), (33, 17146), (36, 17179), (50, 17317), (64, 17431), (70, 17479), (100, 17728), (101, 17731), (106, 17770), (109, 17788), (128, 17995),

Gene: Tweety19_20 Start: 15213, Stop: 16277, Start Num: 4
Candidate Starts for Tweety19_20:
(Start: 4 @15213 has 64 MA's), (28, 15381), (61, 15672), (63, 15696), (68, 15729), (78, 15795), (95, 15945), (97, 15966), (109, 16050), (112, 16086),

Gene: Urla_18 Start: 16602, Stop: 17681, Start Num: 4
Candidate Starts for Urla_18:
(Start: 4 @16602 has 64 MA's), (5, 16605), (Start: 6 @16608 has 3 MA's), (13, 16680), (14, 16683), (20, 16728), (25, 16755), (28, 16776), (34, 16806), (41, 16902), (42, 16908), (48, 16962), (72, 17148), (83, 17220), (94, 17334), (98, 17376), (109, 17454), (110, 17463), (115, 17532), (123, 17610),

Gene: VResidence_20 Start: 16231, Stop: 17301, Start Num: 4
Candidate Starts for VResidence_20:
(Start: 4 @16231 has 64 MA's), (12, 16303), (15, 16315), (28, 16399), (37, 16462), (59, 16678), (63, 16714), (77, 16807), (78, 16813), (90, 16918), (97, 16984), (113, 17137), (117, 17197), (123, 17233),

Gene: Vallejo_22 Start: 18129, Stop: 19205, Start Num: 4
Candidate Starts for Vallejo_22:

(Start: 4 @18129 has 64 MA's), (Start: 6 @18135 has 3 MA's), (11, 18198), (20, 18252), (21, 18255), (24, 18276), (25, 18279), (44, 18441), (48, 18486), (55, 18558), (63, 18609), (82, 18726), (98, 18900), (109, 18978), (112, 19014), (115, 19056), (128, 19185),

Gene: Vulture_18 Start: 16583, Stop: 17662, Start Num: 4
Candidate Starts for Vulture_18:
(Start: 4 @16583 has 64 MA's), (21, 16712), (25, 16736), (28, 16757), (34, 16787), (39, 16847), (41, 16883), (55, 17015), (59, 17036), (69, 17111), (76, 17159), (81, 17177), (91, 17303), (94, 17315), (98, 17357), (109, 17435), (110, 17444), (115, 17513), (120, 17576), (128, 17642),

Gene: Wawa_22 Start: 18166, Stop: 19242, Start Num: 4
Candidate Starts for Wawa_22:
(Start: 4 @18166 has 64 MA's), (Start: 6 @18172 has 3 MA's), (11, 18235), (20, 18289), (21, 18292), (24, 18313), (25, 18316), (44, 18478), (48, 18523), (55, 18595), (63, 18646), (82, 18763), (98, 18937), (109, 19015), (112, 19051), (115, 19093), (128, 19222),

Gene: Wayne_22 Start: 18284, Stop: 19360, Start Num: 4
Candidate Starts for Wayne_22:
(Start: 4 @18284 has 64 MA's), (11, 18353), (24, 18431), (30, 18464), (34, 18485), (41, 18581), (51, 18656), (56, 18716), (66, 18779), (80, 18872), (82, 18881), (91, 19001), (96, 19046), (98, 19055), (110, 19142), (112, 19169), (115, 19211), (120, 19274), (123, 19289), (128, 19340),

Gene: WonderBoy_18 Start: 16583, Stop: 17662, Start Num: 2
Candidate Starts for WonderBoy_18:
(Start: 2 @16583 has 24 MA's), (10, 16628), (19, 16694), (21, 16712), (25, 16736), (28, 16757), (34, 16787), (37, 16820), (38, 16826), (44, 16898), (46, 16913), (55, 17015), (57, 17021), (58, 17033), (69, 17111), (73, 17144), (81, 17177), (96, 17348), (98, 17357), (109, 17435), (110, 17444), (115, 17513), (120, 17576), (128, 17642), (129, 17645),

Gene: Yonex_22 Start: 16878, Stop: 17954, Start Num: 7
Candidate Starts for Yonex_22:
(3, 16866), (Start: 7 @16878 has 17 MA's), (9, 16908), (27, 17028), (33, 17067), (36, 17100), (40, 17139), (60, 17331), (70, 17400), (88, 17538), (93, 17601), (103, 17691), (104, 17694), (105, 17700), (119, 17862),

Gene: Zaheer_22 Start: 16967, Stop: 18043, Start Num: 7
Candidate Starts for Zaheer_22:
(3, 16955), (Start: 7 @16967 has 17 MA's), (9, 16997), (27, 17117), (33, 17156), (36, 17189), (40, 17228), (60, 17420), (70, 17489), (88, 17627), (93, 17690), (103, 17780), (104, 17783), (105, 17789), (119, 17951),

Gene: Zorro_22 Start: 18145, Stop: 19221, Start Num: 4
Candidate Starts for Zorro_22:
(Start: 4 @18145 has 64 MA's), (Start: 6 @18151 has 3 MA's), (11, 18214), (20, 18268), (21, 18271), (24, 18292), (25, 18295), (44, 18457), (48, 18502), (55, 18574), (82, 18742), (98, 18916), (109, 18994), (112, 19030), (115, 19072), (128, 19201),