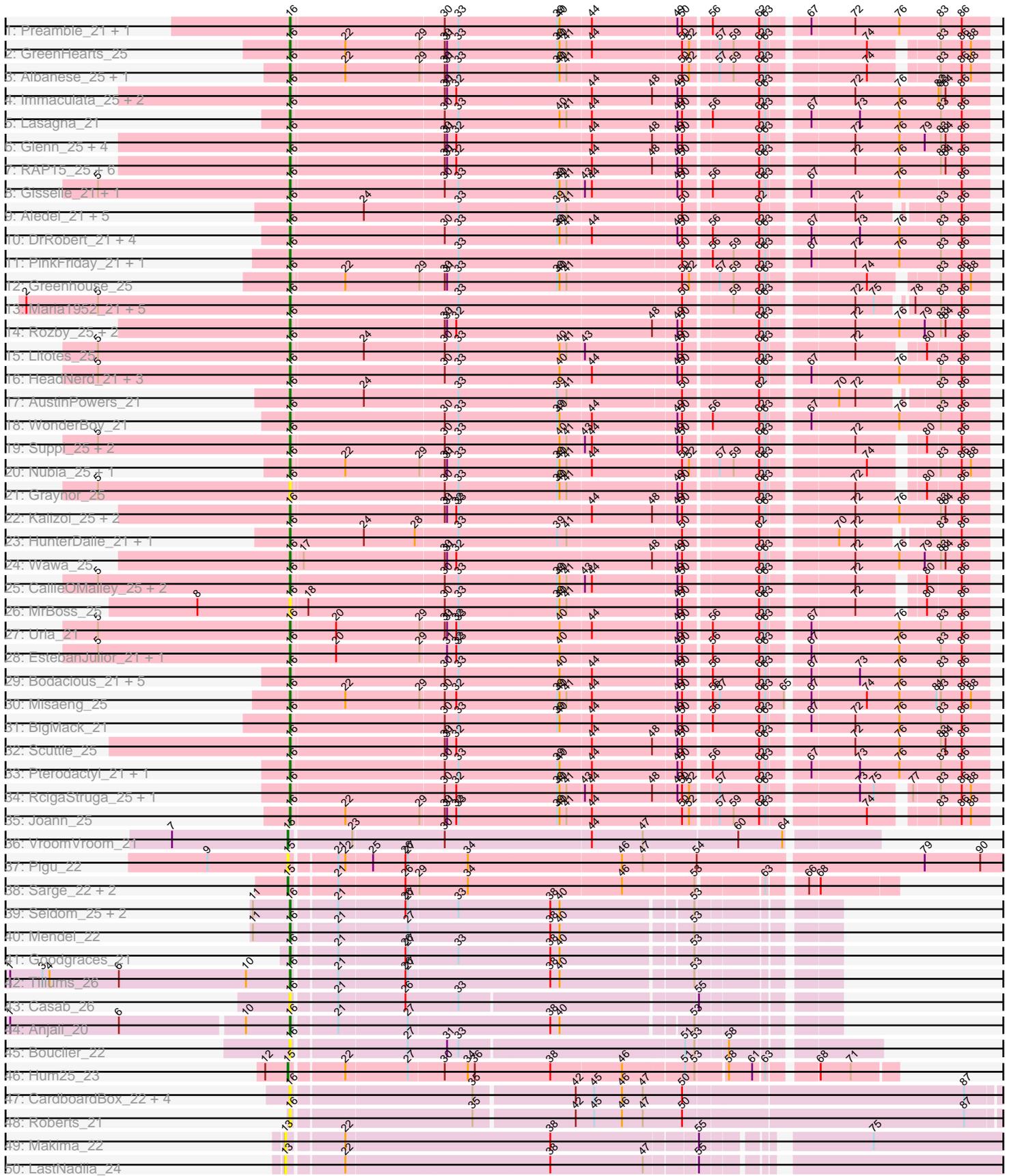


Pham 290993



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 290993 Report

This analysis was run 03/28/26 on database version 641.

Pham number 290993 has 114 members, 17 are drafts.

Phages represented in each track:

- Track 1 : Preamble_21, Kittykat_21
- Track 2 : GreenHearts_25
- Track 3 : Albanese_25, Lakshmi_25
- Track 4 : Immaculata_25, Cholula_25, Potatoes_25
- Track 5 : Lasagna_21
- Track 6 : Glenn_25, TattModd_25, Carpal_25, Fluke_25, Vallejo_25
- Track 7 : RAP15_25, Korra_26, MeganNoll_25, Savage2526_25, MrGloopy_25, Jumboset_25, BrotherBLo_25
- Track 8 : Gisselle_21, DreamTeam_21
- Track 9 : Aledel_21, Supakev_21, Riovina_21, Eunoia_21, OMalley_21, Chridison_21
- Track 10 : DrRobert_21, Lucy_21, Christian_21, PitaDog_21, OurGirlNessie_21
- Track 11 : PinkFriday_21, Pumancara_21
- Track 12 : Greenhouse_25
- Track 13 : Maria1952_21, Daiboju_21, Temper16_21, KingBob_21, Herb_21, Sergei_21
- Track 14 : Rozby_25, Beethoven_25, Riverdale_25
- Track 15 : Litotes_25
- Track 16 : HeadNerd_21, Moki_21, Bennie_21, Huckleberry_21
- Track 17 : AustinPowers_21
- Track 18 : WonderBoy_21
- Track 19 : Suppi_25, AppleCider_25, Canowicakte_25
- Track 20 : Nubia_25, Oxynfrius_25
- Track 21 : Graynor_25
- Track 22 : Kalizoi_25, Dino_25, Zorro_25
- Track 23 : HunterDalle_21, Vulture_21
- Track 24 : Wawa_25
- Track 25 : CallieOMalley_25, PartyCup_25, Wayne_25
- Track 26 : MrBoss_25
- Track 27 : Urla_21
- Track 28 : EstebanJulior_21, MamaPearl_21
- Track 29 : Bodacious_21, Nancia_21, CristinaYang_21, LilStuart_21, Lennox_21, ChewChew_21
- Track 30 : Misaeng_25
- Track 31 : BigMack_21
- Track 32 : Scuttle_25
- Track 33 : Pterodactyl_21, Makoto_21

- Track 34 : RcigaStruga_25, Huntingdon_25
- Track 35 : Joann_25
- Track 36 : VroomVroom_21
- Track 37 : Pigu_22
- Track 38 : Sarge_22, BrayBeast_22, Rooter_22
- Track 39 : Seldom_25, Dunamis_23, Swim_25
- Track 40 : Mendel_22
- Track 41 : Goodgraces_21
- Track 42 : Tillums_26
- Track 43 : Casab_26
- Track 44 : Anjali_20
- Track 45 : Bouclier_22
- Track 46 : Hum25_23
- Track 47 : CardboardBox_22, Neuville_21, ChipsNGuac_22, Gerri43_22, ChamoyPickle_22
- Track 48 : Roberts_21
- Track 49 : Makima_22
- Track 50 : LastNadiia_24
- Track 51 : TMaxx_21
- Track 52 : Audell_24
- Track 53 : TripleC_24
- Track 54 : AnnabelLee_21
- Track 55 : Agamoto_23

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

The start number called the most often in the published annotations is 16, it was called in 92 of the 97 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Albanese_25, Aledel_21, Anjali_20, AnnabelLee_21, AppleCider_25, AustinPowers_21, Beethoven_25, Bennie_21, BigMack_21, Bodacious_21, Bouclier_22, BrotherBLo_25, CallieOMalley_25, Canowicakte_25, CardboardBox_22, Carpal_25, Casab_26, ChamoyPickle_22, ChewChew_21, ChipsNGuac_22, Cholula_25, Chridison_21, Christian_21, CristinaYang_21, Daiboju_21, Dino_25, DrRobert_21, DreamTeam_21, Dunamis_23, EstebanJulior_21, Eunoia_21, Fluke_25, Gerri43_22, Gisselle_21, Glenn_25, Goodgraces_21, Graynor_25, GreenHearts_25, Greenhouse_25, HeadNerd_21, Herb_21, Huckleberry_21, HunterDalle_21, Huntingdon_25, Immaculata_25, Joann_25, Jumboset_25, Kalizoi_25, KingBob_21, Kittykat_21, Korra_26, Lakshmi_25, Lasagna_21, Lennox_21, LilStuart_21, Litotes_25, Lucy_21, Makoto_21, MamaPearl_21, Maria1952_21, MeganNoll_25, Mendel_22, Misaeng_25, Moki_21, MrBoss_25, MrGloopy_25, Nancia_21, Neuville_21, Nubia_25, OMalley_21, OurGirlNessie_21, Oxynfrius_25, PartyCup_25, PinkFriday_21, PitaDog_21, Potatoes_25, Preamble_21, Pterodactyl_21, Pumancara_21, RAP15_25, RcigaStruga_25, Riovina_21, Riverdale_25, Roberts_21, Rozby_25, Savage2526_25, Scuttle_25, Seldom_25, Sergei_21, Supakev_21, Suppi_25, Swim_25, TattModd_25, Temper16_21, Tillums_26, Urla_21, Vallejo_25, Vulture_21, Wawa_25, Wayne_25, WonderBoy_21, Zorro_25,

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

-

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

- Agamoto_23, Audell_24, BrayBeast_22, Hum25_23, LastNadiia_24, Makima_22, Pigu_22, Rooter_22, Sarge_22, TMaxx_21, TripleC_24, VroomVroom_21,

Summary by start number:

Start 13:

- Found in 3 of 114 (2.6%) of genes in pham
- Manual Annotations of this start: 1 of 97
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Audell_24 (FR), LastNadiia_24 (FR), Makima_22 (FR),

Start 14:

- Found in 3 of 114 (2.6%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Agamoto_23 (FR), TMaxx_21 (FR), TripleC_24 (FR),

Start 15:

- Found in 6 of 114 (5.3%) of genes in pham
- Manual Annotations of this start: 4 of 97
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BrayBeast_22 (FB), Hum25_23 (FQ), Pigu_22 (FB), Rooter_22 (FB), Sarge_22 (FB), VroomVroom_21 (AZ4),

Start 16:

- Found in 102 of 114 (89.5%) of genes in pham
- Manual Annotations of this start: 92 of 97
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Albanese_25 (AK), Aledel_21 (AK), Anjali_20 (FD), AnnabelLee_21 (FR), AppleCider_25 (AK), AustinPowers_21 (AK), Beethoven_25 (AK), Bennie_21 (AK), BigMack_21 (AK), Bodacious_21 (AK), Bouclier_22 (FD), BrotherBLo_25 (AK), CallieOMalley_25 (AK), Canowicakte_25 (AK), CardboardBox_22 (FR), Carpal_25 (AK), Casab_26 (FD), ChamoyPickle_22 (FR), ChewChew_21 (AK), ChipsNGuac_22 (FR), Cholula_25 (AK), Chridison_21 (AK), Christian_21 (AK), CristinaYang_21 (AK), Daiboju_21 (AK), Dino_25 (AK), DrRobert_21 (AK), DreamTeam_21 (AK), Dunamis_23 (FD), EstebanJulior_21 (AK), Eunoia_21 (AK), Fluke_25 (AK), Gerri43_22 (FR), Gisselle_21 (AK), Glenn_25 (AK), Goodgraces_21 (FD), Graynor_25 (AK), GreenHearts_25 (AK), Greenhouse_25 (AK), HeadNerd_21 (AK), Herb_21 (AK), Huckleberry_21 (AK), HunterDalle_21 (AK), Huntingdon_25 (AK), Immaculata_25 (AK), Joann_25 (AK), Jumboset_25 (AK), Kalizoi_25 (AK), KingBob_21 (AK), Kittykat_21 (AK), Korra_26 (AK), Lakshmi_25 (AK), Lasagna_21 (AK), Lennox_21 (AK), LilStuart_21 (AK), Litotes_25 (AK), Lucy_21 (AK), Makoto_21 (AK), MamaPearl_21 (AK), Maria1952_21 (AK), MeganNoll_25 (AK), Mendel_22 (FD), Misaeng_25 (AK), Moki_21 (AK), MrBoss_25 (AK), MrGloopy_25 (AK), Nancia_21 (AK), Neuville_21 (FR), Nubia_25 (AK), OMalley_21 (AK), OurGirlNessie_21 (AK), Oxynfrius_25 (AK), PartyCup_25 (AK), PinkFriday_21 (AK), PitaDog_21 (AK), Potatoes_25 (AK), Preamble_21 (AK), Pterodactyl_21 (AK),

Pumancara_21 (AK), RAP15_25 (AK), RcigaStruga_25 (AK), Riovina_21 (AK), Riverdale_25 (AK), Roberts_21 (FR), Rozby_25 (AK), Savage2526_25 (AK), Scuttle_25 (AK), Seldom_25 (FD), Sergei_21 (AK), Supakev_21 (AK), Suppi_25 (AK), Swim_25 (FD), TattModd_25 (AK), Temper16_21 (AK), Tillums_26 (FD), Urla_21 (AK), Vallejo_25 (AK), Vulture_21 (AK), Wawa_25 (AK), Wayne_25 (AK), WonderBoy_21 (AK), Zorro_25 (AK),

Summary by clusters:

There are 6 clusters represented in this pham: FQ, FR, AK, FB, FD, AZ4,

Info for manual annotations of cluster AK:

- Start number 16 was manually annotated 84 times for cluster AK.

Info for manual annotations of cluster AZ4:

- Start number 15 was manually annotated 1 time for cluster AZ4.

Info for manual annotations of cluster FB:

- Start number 15 was manually annotated 2 times for cluster FB.

Info for manual annotations of cluster FD:

- Start number 16 was manually annotated 7 times for cluster FD.

Info for manual annotations of cluster FQ:

- Start number 15 was manually annotated 1 time for cluster FQ.

Info for manual annotations of cluster FR:

- Start number 13 was manually annotated 1 time for cluster FR.
- Start number 16 was manually annotated 1 time for cluster FR.

Gene Information:

Gene: Agamoto_23 Start: 17205, Stop: 18047, Start Num: 14

Candidate Starts for Agamoto_23:

(14, 17205), (19, 17226), (30, 17391), (35, 17427), (45, 17577), (47, 17640), (55, 17703), (69, 17835),

Gene: Albanese_25 Start: 20058, Stop: 20894, Start Num: 16

Candidate Starts for Albanese_25:

(Start: 16 @20058 has 92 MA's), (22, 20124), (29, 20220), (30, 20250), (31, 20253), (33, 20268), (39, 20394), (40, 20397), (41, 20406), (50, 20550), (52, 20559), (57, 20589), (59, 20607), (62, 20640), (63, 20646), (74, 20760), (83, 20832), (86, 20859), (88, 20871),

Gene: Aledel_21 Start: 18421, Stop: 19260, Start Num: 16

Candidate Starts for Aledel_21:

(Start: 16 @18421 has 92 MA's), (24, 18517), (33, 18637), (39, 18763), (41, 18775), (50, 18916), (62, 19006), (72, 19111), (83, 19198), (86, 19225),

Gene: Anjali_20 Start: 15722, Stop: 16366, Start Num: 16

Candidate Starts for Anjali_20:

(1, 15368), (6, 15509), (10, 15665), (Start: 16 @15722 has 92 MA's), (21, 15773), (27, 15860), (38, 16040), (40, 16052), (53, 16211),

Gene: AnnabelLee_21 Start: 14177, Stop: 15061, Start Num: 16

Candidate Starts for AnnabelLee_21:

(Start: 16 @14177 has 92 MA's), (35, 14399), (42, 14525), (45, 14549), (46, 14585), (47, 14612), (50, 14663), (87, 15017),

Gene: AppleCider_25 Start: 20046, Stop: 20882, Start Num: 16

Candidate Starts for AppleCider_25:

(5, 19797), (Start: 16 @20046 has 92 MA's), (30, 20238), (33, 20256), (40, 20385), (41, 20394), (43, 20415), (44, 20424), (49, 20532), (50, 20538), (62, 20628), (63, 20634), (72, 20733), (80, 20805), (86, 20847),

Gene: Audell_24 Start: 17501, Stop: 18355, Start Num: 13

Candidate Starts for Audell_24:

(Start: 13 @17501 has 1 MA's), (22, 17567), (26, 17642), (38, 17825), (47, 17945), (55, 18005),

Gene: AustinPowers_21 Start: 18422, Stop: 19261, Start Num: 16

Candidate Starts for AustinPowers_21:

(Start: 16 @18422 has 92 MA's), (24, 18518), (33, 18638), (39, 18764), (41, 18776), (50, 18917), (62, 19007), (70, 19091), (72, 19112), (83, 19199), (86, 19226),

Gene: Beethoven_25 Start: 19983, Stop: 20840, Start Num: 16

Candidate Starts for Beethoven_25:

(Start: 16 @19983 has 92 MA's), (30, 20175), (31, 20178), (32, 20190), (48, 20439), (49, 20469), (50, 20475), (62, 20565), (63, 20571), (72, 20670), (76, 20727), (79, 20760), (83, 20778), (84, 20784), (86, 20805),

Gene: Bennie_21 Start: 18441, Stop: 19298, Start Num: 16

Candidate Starts for Bennie_21:

(5, 18192), (Start: 16 @18441 has 92 MA's), (30, 18633), (33, 18651), (40, 18780), (44, 18819), (49, 18927), (50, 18933), (62, 19023), (63, 19029), (67, 19074), (76, 19185), (83, 19236), (86, 19263),

Gene: BigMack_21 Start: 18430, Stop: 19293, Start Num: 16

Candidate Starts for BigMack_21:

(Start: 16 @18430 has 92 MA's), (30, 18625), (33, 18643), (39, 18769), (40, 18772), (44, 18811), (49, 18919), (50, 18925), (56, 18955), (62, 19015), (63, 19021), (67, 19066), (72, 19120), (76, 19177), (83, 19231), (86, 19258),

Gene: Bodacious_21 Start: 18443, Stop: 19306, Start Num: 16

Candidate Starts for Bodacious_21:

(Start: 16 @18443 has 92 MA's), (30, 18638), (33, 18656), (40, 18785), (44, 18824), (49, 18932), (50, 18938), (56, 18968), (62, 19028), (63, 19034), (67, 19079), (73, 19139), (76, 19190), (83, 19244), (86, 19271),

Gene: Bouclier_22 Start: 15957, Stop: 16664, Start Num: 16

Candidate Starts for Bouclier_22:

(Start: 16 @15957 has 92 MA's), (27, 16095), (31, 16146), (33, 16161), (51, 16443), (53, 16455), (58, 16491),

Gene: BrayBeast_22 Start: 17377, Stop: 18099, Start Num: 15

Candidate Starts for BrayBeast_22:

(Start: 15 @17377 has 4 MA's), (21, 17431), (26, 17515), (29, 17530), (34, 17593), (46, 17788), (53, 17875), (63, 17950), (66, 17989), (68, 18001),

Gene: BrotherBLo_25 Start: 19989, Stop: 20846, Start Num: 16

Candidate Starts for BrotherBLo_25:

(Start: 16 @19989 has 92 MA's), (30, 20181), (31, 20184), (32, 20196), (44, 20367), (48, 20445), (49, 20475), (50, 20481), (62, 20571), (63, 20577), (72, 20676), (76, 20733), (83, 20784), (84, 20790), (86, 20811),

Gene: CallieOMalley_25 Start: 20046, Stop: 20882, Start Num: 16

Candidate Starts for CallieOMalley_25:

(5, 19797), (Start: 16 @20046 has 92 MA's), (30, 20238), (33, 20256), (39, 20382), (40, 20385), (41, 20394), (43, 20415), (44, 20424), (49, 20532), (50, 20538), (62, 20628), (63, 20634), (72, 20733), (80, 20805), (86, 20847),

Gene: Canowicakte_25 Start: 20081, Stop: 20917, Start Num: 16

Candidate Starts for Canowicakte_25:

(5, 19832), (Start: 16 @20081 has 92 MA's), (30, 20273), (33, 20291), (40, 20420), (41, 20429), (43, 20450), (44, 20459), (49, 20567), (50, 20573), (62, 20663), (63, 20669), (72, 20768), (80, 20840), (86, 20882),

Gene: CardboardBox_22 Start: 14177, Stop: 15061, Start Num: 16

Candidate Starts for CardboardBox_22:

(Start: 16 @14177 has 92 MA's), (35, 14399), (42, 14525), (45, 14549), (46, 14585), (47, 14612), (50, 14663), (87, 15017),

Gene: Carpal_25 Start: 19990, Stop: 20847, Start Num: 16

Candidate Starts for Carpal_25:

(Start: 16 @19990 has 92 MA's), (30, 20182), (31, 20185), (32, 20197), (44, 20368), (48, 20446), (49, 20476), (50, 20482), (62, 20572), (63, 20578), (72, 20677), (76, 20734), (79, 20767), (83, 20785), (84, 20791), (86, 20812),

Gene: Casab_26 Start: 16380, Stop: 17024, Start Num: 16

Candidate Starts for Casab_26:

(Start: 16 @16380 has 92 MA's), (21, 16431), (26, 16515), (33, 16584), (55, 16872),

Gene: ChamoyPickle_22 Start: 14177, Stop: 15061, Start Num: 16

Candidate Starts for ChamoyPickle_22:

(Start: 16 @14177 has 92 MA's), (35, 14399), (42, 14525), (45, 14549), (46, 14585), (47, 14612), (50, 14663), (87, 15017),

Gene: ChewChew_21 Start: 18442, Stop: 19305, Start Num: 16

Candidate Starts for ChewChew_21:

(Start: 16 @18442 has 92 MA's), (30, 18637), (33, 18655), (40, 18784), (44, 18823), (49, 18931), (50, 18937), (56, 18967), (62, 19027), (63, 19033), (67, 19078), (73, 19138), (76, 19189), (83, 19243), (86, 19270),

Gene: ChipsNGuac_22 Start: 14177, Stop: 15061, Start Num: 16

Candidate Starts for ChipsNGuac_22:

(Start: 16 @14177 has 92 MA's), (35, 14399), (42, 14525), (45, 14549), (46, 14585), (47, 14612), (50, 14663), (87, 15017),

Gene: Cholula_25 Start: 20035, Stop: 20892, Start Num: 16

Candidate Starts for Cholula_25:

(Start: 16 @20035 has 92 MA's), (30, 20227), (31, 20230), (32, 20242), (44, 20413), (48, 20491), (49, 20521), (50, 20527), (62, 20617), (63, 20623), (72, 20722), (76, 20779), (82, 20827), (83, 20830), (84, 20836), (86, 20857),

Gene: Chridison_21 Start: 18422, Stop: 19261, Start Num: 16

Candidate Starts for Chridison_21:

(Start: 16 @18422 has 92 MA's), (24, 18518), (33, 18638), (39, 18764), (41, 18776), (50, 18917), (62, 19007), (72, 19112), (83, 19199), (86, 19226),

Gene: Christian_21 Start: 18443, Stop: 19306, Start Num: 16

Candidate Starts for Christian_21:

(Start: 16 @18443 has 92 MA's), (30, 18638), (33, 18656), (39, 18782), (40, 18785), (41, 18794), (44, 18824), (49, 18932), (50, 18938), (56, 18968), (62, 19028), (63, 19034), (67, 19079), (73, 19139), (76, 19190), (83, 19244), (86, 19271),

Gene: CristinaYang_21 Start: 18443, Stop: 19306, Start Num: 16

Candidate Starts for CristinaYang_21:

(Start: 16 @18443 has 92 MA's), (30, 18638), (33, 18656), (40, 18785), (44, 18824), (49, 18932), (50, 18938), (56, 18968), (62, 19028), (63, 19034), (67, 19079), (73, 19139), (76, 19190), (83, 19244), (86, 19271),

Gene: Daiboju_21 Start: 18436, Stop: 19278, Start Num: 16

Candidate Starts for Daiboju_21:

(2, 18094), (5, 18187), (Start: 16 @18436 has 92 MA's), (33, 18652), (50, 18931), (59, 18988), (62, 19021), (63, 19027), (72, 19126), (75, 19150), (78, 19183), (83, 19216), (86, 19243),

Gene: Dino_25 Start: 19988, Stop: 20845, Start Num: 16

Candidate Starts for Dino_25:

(Start: 16 @19988 has 92 MA's), (30, 20180), (31, 20183), (32, 20195), (33, 20198), (44, 20366), (48, 20444), (49, 20474), (50, 20480), (62, 20570), (63, 20576), (72, 20675), (76, 20732), (83, 20783), (84, 20789), (86, 20810),

Gene: DrRobert_21 Start: 18443, Stop: 19306, Start Num: 16

Candidate Starts for DrRobert_21:

(Start: 16 @18443 has 92 MA's), (30, 18638), (33, 18656), (39, 18782), (40, 18785), (41, 18794), (44, 18824), (49, 18932), (50, 18938), (56, 18968), (62, 19028), (63, 19034), (67, 19079), (73, 19139), (76, 19190), (83, 19244), (86, 19271),

Gene: DreamTeam_21 Start: 18481, Stop: 19338, Start Num: 16

Candidate Starts for DreamTeam_21:

(5, 18232), (Start: 16 @18481 has 92 MA's), (30, 18673), (33, 18691), (39, 18817), (40, 18820), (41, 18829), (43, 18850), (44, 18859), (49, 18967), (50, 18973), (56, 19003), (62, 19063), (63, 19069), (67, 19114), (76, 19225), (86, 19303),

Gene: Dunamis_23 Start: 15879, Stop: 16523, Start Num: 16

Candidate Starts for Dunamis_23:

(11, 15831), (Start: 16 @15879 has 92 MA's), (21, 15930), (26, 16014), (27, 16017), (33, 16080), (38, 16197), (40, 16209), (53, 16368),

Gene: EstebanJulior_21 Start: 18446, Stop: 19306, Start Num: 16

Candidate Starts for EstebanJulior_21:

(5, 18197), (Start: 16 @18446 has 92 MA's), (20, 18500), (29, 18608), (31, 18641), (32, 18653), (33, 18656), (40, 18785), (49, 18932), (50, 18938), (56, 18968), (62, 19028), (63, 19034), (67, 19079), (76,

19190), (83, 19244), (86, 19271),

Gene: Eunoia_21 Start: 18421, Stop: 19260, Start Num: 16

Candidate Starts for Eunoia_21:

(Start: 16 @18421 has 92 MA's), (24, 18517), (33, 18637), (39, 18763), (41, 18775), (50, 18916), (62, 19006), (72, 19111), (83, 19198), (86, 19225),

Gene: Fluke_25 Start: 20031, Stop: 20888, Start Num: 16

Candidate Starts for Fluke_25:

(Start: 16 @20031 has 92 MA's), (30, 20223), (31, 20226), (32, 20238), (44, 20409), (48, 20487), (49, 20517), (50, 20523), (62, 20613), (63, 20619), (72, 20718), (76, 20775), (79, 20808), (83, 20826), (84, 20832), (86, 20853),

Gene: Gerri43_22 Start: 14177, Stop: 15061, Start Num: 16

Candidate Starts for Gerri43_22:

(Start: 16 @14177 has 92 MA's), (35, 14399), (42, 14525), (45, 14549), (46, 14585), (47, 14612), (50, 14663), (87, 15017),

Gene: Gisselle_21 Start: 18481, Stop: 19338, Start Num: 16

Candidate Starts for Gisselle_21:

(5, 18232), (Start: 16 @18481 has 92 MA's), (30, 18673), (33, 18691), (39, 18817), (40, 18820), (41, 18829), (43, 18850), (44, 18859), (49, 18967), (50, 18973), (56, 19003), (62, 19063), (63, 19069), (67, 19114), (76, 19225), (86, 19303),

Gene: Glenn_25 Start: 20040, Stop: 20897, Start Num: 16

Candidate Starts for Glenn_25:

(Start: 16 @20040 has 92 MA's), (30, 20232), (31, 20235), (32, 20247), (44, 20418), (48, 20496), (49, 20526), (50, 20532), (62, 20622), (63, 20628), (72, 20727), (76, 20784), (79, 20817), (83, 20835), (84, 20841), (86, 20862),

Gene: Goodgraces_21 Start: 15936, Stop: 16580, Start Num: 16

Candidate Starts for Goodgraces_21:

(Start: 16 @15936 has 92 MA's), (21, 15987), (26, 16071), (27, 16074), (33, 16137), (38, 16254), (40, 16266), (53, 16425),

Gene: Graynor_25 Start: 20067, Stop: 20903, Start Num: 16

Candidate Starts for Graynor_25:

(5, 19818), (Start: 16 @20067 has 92 MA's), (30, 20259), (33, 20277), (39, 20403), (40, 20406), (41, 20415), (49, 20553), (50, 20559), (62, 20649), (63, 20655), (72, 20754), (80, 20826), (86, 20868),

Gene: GreenHearts_25 Start: 20150, Stop: 20986, Start Num: 16

Candidate Starts for GreenHearts_25:

(Start: 16 @20150 has 92 MA's), (22, 20216), (29, 20312), (30, 20342), (31, 20345), (33, 20360), (39, 20486), (40, 20489), (41, 20498), (44, 20528), (50, 20642), (52, 20651), (57, 20681), (59, 20699), (62, 20732), (63, 20738), (74, 20852), (83, 20924), (86, 20951), (88, 20963),

Gene: Greenhouse_25 Start: 20074, Stop: 20910, Start Num: 16

Candidate Starts for Greenhouse_25:

(Start: 16 @20074 has 92 MA's), (22, 20140), (29, 20236), (30, 20266), (31, 20269), (33, 20284), (39, 20410), (40, 20413), (41, 20422), (50, 20566), (52, 20575), (57, 20605), (59, 20623), (62, 20656), (63, 20662), (74, 20776), (83, 20848), (86, 20875), (88, 20887),

Gene: HeadNerd_21 Start: 18441, Stop: 19298, Start Num: 16

Candidate Starts for HeadNerd_21:

(5, 18192), (Start: 16 @18441 has 92 MA's), (30, 18633), (33, 18651), (40, 18780), (44, 18819), (49, 18927), (50, 18933), (62, 19023), (63, 19029), (67, 19074), (76, 19185), (83, 19236), (86, 19263),

Gene: Herb_21 Start: 18436, Stop: 19278, Start Num: 16

Candidate Starts for Herb_21:

(2, 18094), (5, 18187), (Start: 16 @18436 has 92 MA's), (33, 18652), (50, 18931), (59, 18988), (62, 19021), (63, 19027), (72, 19126), (75, 19150), (78, 19183), (83, 19216), (86, 19243),

Gene: Huckleberry_21 Start: 18441, Stop: 19298, Start Num: 16

Candidate Starts for Huckleberry_21:

(5, 18192), (Start: 16 @18441 has 92 MA's), (30, 18633), (33, 18651), (40, 18780), (44, 18819), (49, 18927), (50, 18933), (62, 19023), (63, 19029), (67, 19074), (76, 19185), (83, 19236), (86, 19263),

Gene: Hum25_23 Start: 17016, Stop: 17738, Start Num: 15

Candidate Starts for Hum25_23:

(12, 16989), (Start: 15 @17016 has 4 MA's), (22, 17079), (27, 17157), (30, 17202), (34, 17232), (36, 17241), (38, 17337), (46, 17427), (51, 17502), (53, 17514), (58, 17550), (61, 17580), (63, 17592), (68, 17643), (71, 17682),

Gene: HunterDalle_21 Start: 18421, Stop: 19260, Start Num: 16

Candidate Starts for HunterDalle_21:

(Start: 16 @18421 has 92 MA's), (24, 18517), (28, 18583), (33, 18637), (39, 18763), (41, 18775), (50, 18916), (62, 19006), (70, 19090), (72, 19111), (83, 19198), (86, 19225),

Gene: Huntingdon_25 Start: 20042, Stop: 20878, Start Num: 16

Candidate Starts for Huntingdon_25:

(Start: 16 @20042 has 92 MA's), (30, 20234), (32, 20249), (39, 20378), (40, 20381), (41, 20390), (43, 20411), (44, 20420), (48, 20498), (49, 20528), (50, 20534), (52, 20543), (57, 20573), (62, 20624), (63, 20630), (73, 20735), (75, 20753), (77, 20786), (83, 20816), (86, 20843), (88, 20855),

Gene: Immaculata_25 Start: 20034, Stop: 20891, Start Num: 16

Candidate Starts for Immaculata_25:

(Start: 16 @20034 has 92 MA's), (30, 20226), (31, 20229), (32, 20241), (44, 20412), (48, 20490), (49, 20520), (50, 20526), (62, 20616), (63, 20622), (72, 20721), (76, 20778), (82, 20826), (83, 20829), (84, 20835), (86, 20856),

Gene: Joann_25 Start: 20008, Stop: 20844, Start Num: 16

Candidate Starts for Joann_25:

(Start: 16 @20008 has 92 MA's), (22, 20074), (29, 20170), (30, 20200), (31, 20203), (32, 20215), (33, 20218), (39, 20344), (40, 20347), (41, 20356), (44, 20386), (50, 20500), (52, 20509), (57, 20539), (59, 20557), (62, 20590), (63, 20596), (74, 20710), (83, 20782), (86, 20809), (88, 20821),

Gene: Jumboset_25 Start: 19983, Stop: 20840, Start Num: 16

Candidate Starts for Jumboset_25:

(Start: 16 @19983 has 92 MA's), (30, 20175), (31, 20178), (32, 20190), (44, 20361), (48, 20439), (49, 20469), (50, 20475), (62, 20565), (63, 20571), (72, 20670), (76, 20727), (83, 20778), (84, 20784), (86, 20805),

Gene: Kalizoi_25 Start: 19982, Stop: 20839, Start Num: 16

Candidate Starts for Kalizoi_25:

(Start: 16 @19982 has 92 MA's), (30, 20174), (31, 20177), (32, 20189), (33, 20192), (44, 20360), (48, 20438), (49, 20468), (50, 20474), (62, 20564), (63, 20570), (72, 20669), (76, 20726), (83, 20777), (84,

20783), (86, 20804),

Gene: KingBob_21 Start: 18436, Stop: 19278, Start Num: 16

Candidate Starts for KingBob_21:

(2, 18094), (5, 18187), (Start: 16 @18436 has 92 MA's), (33, 18652), (50, 18931), (59, 18988), (62, 19021), (63, 19027), (72, 19126), (75, 19150), (78, 19183), (83, 19216), (86, 19243),

Gene: Kittykat_21 Start: 18465, Stop: 19322, Start Num: 16

Candidate Starts for Kittykat_21:

(Start: 16 @18465 has 92 MA's), (30, 18657), (33, 18675), (39, 18801), (40, 18804), (44, 18843), (49, 18951), (50, 18957), (56, 18987), (62, 19047), (63, 19053), (67, 19098), (72, 19152), (76, 19209), (83, 19260), (86, 19287),

Gene: Korra_26 Start: 19988, Stop: 20845, Start Num: 16

Candidate Starts for Korra_26:

(Start: 16 @19988 has 92 MA's), (30, 20180), (31, 20183), (32, 20195), (44, 20366), (48, 20444), (49, 20474), (50, 20480), (62, 20570), (63, 20576), (72, 20675), (76, 20732), (83, 20783), (84, 20789), (86, 20810),

Gene: Lakshmi_25 Start: 20034, Stop: 20870, Start Num: 16

Candidate Starts for Lakshmi_25:

(Start: 16 @20034 has 92 MA's), (22, 20100), (29, 20196), (30, 20226), (31, 20229), (33, 20244), (39, 20370), (40, 20373), (41, 20382), (50, 20526), (52, 20535), (57, 20565), (59, 20583), (62, 20616), (63, 20622), (74, 20736), (83, 20808), (86, 20835), (88, 20847),

Gene: Lasagna_21 Start: 18443, Stop: 19306, Start Num: 16

Candidate Starts for Lasagna_21:

(Start: 16 @18443 has 92 MA's), (30, 18638), (33, 18656), (40, 18785), (41, 18794), (44, 18824), (49, 18932), (50, 18938), (56, 18968), (62, 19028), (63, 19034), (67, 19079), (73, 19139), (76, 19190), (83, 19244), (86, 19271),

Gene: LastNadiia_24 Start: 16453, Stop: 17307, Start Num: 13

Candidate Starts for LastNadiia_24:

(Start: 13 @16453 has 1 MA's), (22, 16519), (38, 16777), (47, 16897), (55, 16957),

Gene: Lennox_21 Start: 18431, Stop: 19294, Start Num: 16

Candidate Starts for Lennox_21:

(Start: 16 @18431 has 92 MA's), (30, 18626), (33, 18644), (40, 18773), (44, 18812), (49, 18920), (50, 18926), (56, 18956), (62, 19016), (63, 19022), (67, 19067), (73, 19127), (76, 19178), (83, 19232), (86, 19259),

Gene: LilStuart_21 Start: 18431, Stop: 19294, Start Num: 16

Candidate Starts for LilStuart_21:

(Start: 16 @18431 has 92 MA's), (30, 18626), (33, 18644), (40, 18773), (44, 18812), (49, 18920), (50, 18926), (56, 18956), (62, 19016), (63, 19022), (67, 19067), (73, 19127), (76, 19178), (83, 19232), (86, 19259),

Gene: Litotes_25 Start: 20031, Stop: 20867, Start Num: 16

Candidate Starts for Litotes_25:

(5, 19782), (Start: 16 @20031 has 92 MA's), (24, 20121), (30, 20223), (33, 20241), (40, 20370), (41, 20379), (43, 20400), (49, 20517), (50, 20523), (62, 20613), (63, 20619), (72, 20718), (80, 20790), (86, 20832),

Gene: Lucy_21 Start: 18423, Stop: 19286, Start Num: 16

Candidate Starts for Lucy_21:

(Start: 16 @18423 has 92 MA's), (30, 18618), (33, 18636), (39, 18762), (40, 18765), (41, 18774), (44, 18804), (49, 18912), (50, 18918), (56, 18948), (62, 19008), (63, 19014), (67, 19059), (73, 19119), (76, 19170), (83, 19224), (86, 19251),

Gene: Makima_22 Start: 15536, Stop: 16390, Start Num: 13

Candidate Starts for Makima_22:

(Start: 13 @15536 has 1 MA's), (22, 15602), (38, 15860), (55, 16040), (75, 16220),

Gene: Makoto_21 Start: 18443, Stop: 19306, Start Num: 16

Candidate Starts for Makoto_21:

(Start: 16 @18443 has 92 MA's), (30, 18638), (33, 18656), (39, 18782), (40, 18785), (44, 18824), (49, 18932), (50, 18938), (56, 18968), (62, 19028), (63, 19034), (67, 19079), (73, 19139), (76, 19190), (83, 19244), (86, 19271),

Gene: MamaPearl_21 Start: 18446, Stop: 19306, Start Num: 16

Candidate Starts for MamaPearl_21:

(5, 18197), (Start: 16 @18446 has 92 MA's), (20, 18500), (29, 18608), (31, 18641), (32, 18653), (33, 18656), (40, 18785), (49, 18932), (50, 18938), (56, 18968), (62, 19028), (63, 19034), (67, 19079), (76, 19190), (83, 19244), (86, 19271),

Gene: Maria1952_21 Start: 18436, Stop: 19278, Start Num: 16

Candidate Starts for Maria1952_21:

(2, 18094), (5, 18187), (Start: 16 @18436 has 92 MA's), (33, 18652), (50, 18931), (59, 18988), (62, 19021), (63, 19027), (72, 19126), (75, 19150), (78, 19183), (83, 19216), (86, 19243),

Gene: MeganNoll_25 Start: 20040, Stop: 20897, Start Num: 16

Candidate Starts for MeganNoll_25:

(Start: 16 @20040 has 92 MA's), (30, 20232), (31, 20235), (32, 20247), (44, 20418), (48, 20496), (49, 20526), (50, 20532), (62, 20622), (63, 20628), (72, 20727), (76, 20784), (83, 20835), (84, 20841), (86, 20862),

Gene: Mendel_22 Start: 15637, Stop: 16281, Start Num: 16

Candidate Starts for Mendel_22:

(11, 15589), (Start: 16 @15637 has 92 MA's), (21, 15688), (27, 15775), (38, 15955), (40, 15967), (53, 16126),

Gene: Misaeng_25 Start: 20124, Stop: 20981, Start Num: 16

Candidate Starts for Misaeng_25:

(Start: 16 @20124 has 92 MA's), (22, 20190), (29, 20286), (30, 20316), (32, 20331), (39, 20460), (40, 20463), (41, 20472), (44, 20502), (49, 20610), (50, 20616), (56, 20646), (57, 20655), (62, 20706), (63, 20712), (65, 20733), (67, 20757), (74, 20826), (76, 20868), (81, 20916), (83, 20919), (86, 20946), (88, 20958),

Gene: Moki_21 Start: 18441, Stop: 19298, Start Num: 16

Candidate Starts for Moki_21:

(5, 18192), (Start: 16 @18441 has 92 MA's), (30, 18633), (33, 18651), (40, 18780), (44, 18819), (49, 18927), (50, 18933), (62, 19023), (63, 19029), (67, 19074), (76, 19185), (83, 19236), (86, 19263),

Gene: MrBoss_25 Start: 20031, Stop: 20867, Start Num: 16

Candidate Starts for MrBoss_25:

(8, 19911), (Start: 16 @20031 has 92 MA's), (18, 20049), (30, 20223), (33, 20241), (39, 20367), (40, 20370), (41, 20379), (49, 20517), (50, 20523), (62, 20613), (63, 20619), (72, 20718), (80, 20790), (86, 20832),

Gene: MrGloopy_25 Start: 19974, Stop: 20831, Start Num: 16

Candidate Starts for MrGloopy_25:

(Start: 16 @19974 has 92 MA's), (30, 20166), (31, 20169), (32, 20181), (44, 20352), (48, 20430), (49, 20460), (50, 20466), (62, 20556), (63, 20562), (72, 20661), (76, 20718), (83, 20769), (84, 20775), (86, 20796),

Gene: Nancia_21 Start: 18443, Stop: 19306, Start Num: 16

Candidate Starts for Nancia_21:

(Start: 16 @18443 has 92 MA's), (30, 18638), (33, 18656), (40, 18785), (44, 18824), (49, 18932), (50, 18938), (56, 18968), (62, 19028), (63, 19034), (67, 19079), (73, 19139), (76, 19190), (83, 19244), (86, 19271),

Gene: Neuville_21 Start: 14177, Stop: 15061, Start Num: 16

Candidate Starts for Neuville_21:

(Start: 16 @14177 has 92 MA's), (35, 14399), (42, 14525), (45, 14549), (46, 14585), (47, 14612), (50, 14663), (87, 15017),

Gene: Nubia_25 Start: 19994, Stop: 20830, Start Num: 16

Candidate Starts for Nubia_25:

(Start: 16 @19994 has 92 MA's), (22, 20060), (29, 20156), (30, 20186), (31, 20189), (33, 20204), (39, 20330), (40, 20333), (41, 20342), (44, 20372), (50, 20486), (52, 20495), (57, 20525), (59, 20543), (62, 20576), (63, 20582), (74, 20696), (83, 20768), (86, 20795), (88, 20807),

Gene: OMalley_21 Start: 18421, Stop: 19260, Start Num: 16

Candidate Starts for OMalley_21:

(Start: 16 @18421 has 92 MA's), (24, 18517), (33, 18637), (39, 18763), (41, 18775), (50, 18916), (62, 19006), (72, 19111), (83, 19198), (86, 19225),

Gene: OurGirlNessie_21 Start: 18423, Stop: 19286, Start Num: 16

Candidate Starts for OurGirlNessie_21:

(Start: 16 @18423 has 92 MA's), (30, 18618), (33, 18636), (39, 18762), (40, 18765), (41, 18774), (44, 18804), (49, 18912), (50, 18918), (56, 18948), (62, 19008), (63, 19014), (67, 19059), (73, 19119), (76, 19170), (83, 19224), (86, 19251),

Gene: Oxynfrius_25 Start: 20007, Stop: 20843, Start Num: 16

Candidate Starts for Oxynfrius_25:

(Start: 16 @20007 has 92 MA's), (22, 20073), (29, 20169), (30, 20199), (31, 20202), (33, 20217), (39, 20343), (40, 20346), (41, 20355), (44, 20385), (50, 20499), (52, 20508), (57, 20538), (59, 20556), (62, 20589), (63, 20595), (74, 20709), (83, 20781), (86, 20808), (88, 20820),

Gene: PartyCup_25 Start: 20078, Stop: 20914, Start Num: 16

Candidate Starts for PartyCup_25:

(5, 19829), (Start: 16 @20078 has 92 MA's), (30, 20270), (33, 20288), (39, 20414), (40, 20417), (41, 20426), (43, 20447), (44, 20456), (49, 20564), (50, 20570), (62, 20660), (63, 20666), (72, 20765), (80, 20837), (86, 20879),

Gene: Pigu_22 Start: 17033, Stop: 17926, Start Num: 15

Candidate Starts for Pigu_22:

(9, 16931), (Start: 15 @17033 has 4 MA's), (21, 17087), (22, 17096), (25, 17129), (26, 17171), (27, 17174), (34, 17249), (46, 17444), (47, 17471), (54, 17537), (79, 17822), (90, 17894),

Gene: PinkFriday_21 Start: 18457, Stop: 19320, Start Num: 16

Candidate Starts for PinkFriday_21:

(Start: 16 @18457 has 92 MA's), (33, 18673), (50, 18952), (56, 18982), (59, 19009), (62, 19042), (63, 19048), (67, 19093), (72, 19147), (76, 19204), (83, 19258), (86, 19285),

Gene: PitaDog_21 Start: 18434, Stop: 19297, Start Num: 16

Candidate Starts for PitaDog_21:

(Start: 16 @18434 has 92 MA's), (30, 18629), (33, 18647), (39, 18773), (40, 18776), (41, 18785), (44, 18815), (49, 18923), (50, 18929), (56, 18959), (62, 19019), (63, 19025), (67, 19070), (73, 19130), (76, 19181), (83, 19235), (86, 19262),

Gene: Potatoes_25 Start: 20035, Stop: 20892, Start Num: 16

Candidate Starts for Potatoes_25:

(Start: 16 @20035 has 92 MA's), (30, 20227), (31, 20230), (32, 20242), (44, 20413), (48, 20491), (49, 20521), (50, 20527), (62, 20617), (63, 20623), (72, 20722), (76, 20779), (82, 20827), (83, 20830), (84, 20836), (86, 20857),

Gene: Preamble_21 Start: 18442, Stop: 19299, Start Num: 16

Candidate Starts for Preamble_21:

(Start: 16 @18442 has 92 MA's), (30, 18634), (33, 18652), (39, 18778), (40, 18781), (44, 18820), (49, 18928), (50, 18934), (56, 18964), (62, 19024), (63, 19030), (67, 19075), (72, 19129), (76, 19186), (83, 19237), (86, 19264),

Gene: Pterodactyl_21 Start: 18424, Stop: 19287, Start Num: 16

Candidate Starts for Pterodactyl_21:

(Start: 16 @18424 has 92 MA's), (30, 18619), (33, 18637), (39, 18763), (40, 18766), (44, 18805), (49, 18913), (50, 18919), (56, 18949), (62, 19009), (63, 19015), (67, 19060), (73, 19120), (76, 19171), (83, 19225), (86, 19252),

Gene: Pumancara_21 Start: 18439, Stop: 19302, Start Num: 16

Candidate Starts for Pumancara_21:

(Start: 16 @18439 has 92 MA's), (33, 18655), (50, 18934), (56, 18964), (59, 18991), (62, 19024), (63, 19030), (67, 19075), (72, 19129), (76, 19186), (83, 19240), (86, 19267),

Gene: RAP15_25 Start: 20040, Stop: 20897, Start Num: 16

Candidate Starts for RAP15_25:

(Start: 16 @20040 has 92 MA's), (30, 20232), (31, 20235), (32, 20247), (44, 20418), (48, 20496), (49, 20526), (50, 20532), (62, 20622), (63, 20628), (72, 20727), (76, 20784), (83, 20835), (84, 20841), (86, 20862),

Gene: RcigaStruga_25 Start: 20042, Stop: 20878, Start Num: 16

Candidate Starts for RcigaStruga_25:

(Start: 16 @20042 has 92 MA's), (30, 20234), (32, 20249), (39, 20378), (40, 20381), (41, 20390), (43, 20411), (44, 20420), (48, 20498), (49, 20528), (50, 20534), (52, 20543), (57, 20573), (62, 20624), (63, 20630), (73, 20735), (75, 20753), (77, 20786), (83, 20816), (86, 20843), (88, 20855),

Gene: Riovina_21 Start: 18421, Stop: 19260, Start Num: 16

Candidate Starts for Riovina_21:

(Start: 16 @18421 has 92 MA's), (24, 18517), (33, 18637), (39, 18763), (41, 18775), (50, 18916), (62, 19006), (72, 19111), (83, 19198), (86, 19225),

Gene: Riverdale_25 Start: 19970, Stop: 20827, Start Num: 16

Candidate Starts for Riverdale_25:

(Start: 16 @19970 has 92 MA's), (30, 20162), (31, 20165), (32, 20177), (48, 20426), (49, 20456), (50, 20462), (62, 20552), (63, 20558), (72, 20657), (76, 20714), (79, 20747), (83, 20765), (84, 20771), (86, 20792),

Gene: Roberts_21 Start: 14177, Stop: 15061, Start Num: 16

Candidate Starts for Roberts_21:

(Start: 16 @14177 has 92 MA's), (35, 14399), (42, 14525), (45, 14549), (46, 14585), (47, 14612), (50, 14663), (87, 15017),

Gene: Rooter_22 Start: 16912, Stop: 17634, Start Num: 15

Candidate Starts for Rooter_22:

(Start: 15 @16912 has 4 MA's), (21, 16966), (26, 17050), (29, 17065), (34, 17128), (46, 17323), (53, 17410), (63, 17485), (66, 17524), (68, 17536),

Gene: Rozby_25 Start: 19971, Stop: 20828, Start Num: 16

Candidate Starts for Rozby_25:

(Start: 16 @19971 has 92 MA's), (30, 20163), (31, 20166), (32, 20178), (48, 20427), (49, 20457), (50, 20463), (62, 20553), (63, 20559), (72, 20658), (76, 20715), (79, 20748), (83, 20766), (84, 20772), (86, 20793),

Gene: Sarge_22 Start: 17291, Stop: 18013, Start Num: 15

Candidate Starts for Sarge_22:

(Start: 15 @17291 has 4 MA's), (21, 17345), (26, 17429), (29, 17444), (34, 17507), (46, 17702), (53, 17789), (63, 17864), (66, 17903), (68, 17915),

Gene: Savage2526_25 Start: 20034, Stop: 20891, Start Num: 16

Candidate Starts for Savage2526_25:

(Start: 16 @20034 has 92 MA's), (30, 20226), (31, 20229), (32, 20241), (44, 20412), (48, 20490), (49, 20520), (50, 20526), (62, 20616), (63, 20622), (72, 20721), (76, 20778), (83, 20829), (84, 20835), (86, 20856),

Gene: Scuttle_25 Start: 20039, Stop: 20896, Start Num: 16

Candidate Starts for Scuttle_25:

(Start: 16 @20039 has 92 MA's), (30, 20231), (31, 20234), (32, 20246), (44, 20417), (48, 20495), (49, 20525), (50, 20531), (62, 20621), (63, 20627), (72, 20726), (76, 20783), (83, 20834), (84, 20840), (86, 20861),

Gene: Seldom_25 Start: 16263, Stop: 16907, Start Num: 16

Candidate Starts for Seldom_25:

(11, 16215), (Start: 16 @16263 has 92 MA's), (21, 16314), (26, 16398), (27, 16401), (33, 16464), (38, 16581), (40, 16593), (53, 16752),

Gene: Sergei_21 Start: 18436, Stop: 19278, Start Num: 16

Candidate Starts for Sergei_21:

(2, 18094), (5, 18187), (Start: 16 @18436 has 92 MA's), (33, 18652), (50, 18931), (59, 18988), (62, 19021), (63, 19027), (72, 19126), (75, 19150), (78, 19183), (83, 19216), (86, 19243),

Gene: Supakev_21 Start: 18423, Stop: 19262, Start Num: 16

Candidate Starts for Supakev_21:

(Start: 16 @18423 has 92 MA's), (24, 18519), (33, 18639), (39, 18765), (41, 18777), (50, 18918), (62, 19008), (72, 19113), (83, 19200), (86, 19227),

Gene: Suppi_25 Start: 20081, Stop: 20917, Start Num: 16

Candidate Starts for Suppi_25:

(5, 19832), (Start: 16 @20081 has 92 MA's), (30, 20273), (33, 20291), (40, 20420), (41, 20429), (43, 20450), (44, 20459), (49, 20567), (50, 20573), (62, 20663), (63, 20669), (72, 20768), (80, 20840), (86, 20882),

Gene: Swim_25 Start: 16136, Stop: 16780, Start Num: 16

Candidate Starts for Swim_25:

(11, 16088), (Start: 16 @16136 has 92 MA's), (21, 16187), (26, 16271), (27, 16274), (33, 16337), (38, 16454), (40, 16466), (53, 16625),

Gene: TMaxx_21 Start: 14021, Stop: 14869, Start Num: 14

Candidate Starts for TMaxx_21:

(14, 14021), (19, 14042), (30, 14210), (35, 14246), (37, 14291), (38, 14339), (45, 14396), (47, 14459), (55, 14525), (85, 14813), (89, 14834),

Gene: TattModd_25 Start: 20033, Stop: 20890, Start Num: 16

Candidate Starts for TattModd_25:

(Start: 16 @20033 has 92 MA's), (30, 20225), (31, 20228), (32, 20240), (44, 20411), (48, 20489), (49, 20519), (50, 20525), (62, 20615), (63, 20621), (72, 20720), (76, 20777), (79, 20810), (83, 20828), (84, 20834), (86, 20855),

Gene: Temper16_21 Start: 18436, Stop: 19278, Start Num: 16

Candidate Starts for Temper16_21:

(2, 18094), (5, 18187), (Start: 16 @18436 has 92 MA's), (33, 18652), (50, 18931), (59, 18988), (62, 19021), (63, 19027), (72, 19126), (75, 19150), (78, 19183), (83, 19216), (86, 19243),

Gene: Tillums_26 Start: 16278, Stop: 16925, Start Num: 16

Candidate Starts for Tillums_26:

(1, 15915), (3, 15957), (4, 15966), (6, 16056), (10, 16221), (Start: 16 @16278 has 92 MA's), (21, 16329), (26, 16413), (27, 16416), (38, 16596), (40, 16608), (53, 16770),

Gene: TripleC_24 Start: 17518, Stop: 18363, Start Num: 14

Candidate Starts for TripleC_24:

(14, 17518), (19, 17539), (35, 17740), (45, 17890), (47, 17953), (55, 18019),

Gene: Urla_21 Start: 18448, Stop: 19308, Start Num: 16

Candidate Starts for Urla_21:

(5, 18199), (Start: 16 @18448 has 92 MA's), (20, 18502), (29, 18610), (30, 18640), (31, 18643), (32, 18655), (33, 18658), (40, 18787), (44, 18826), (49, 18934), (50, 18940), (56, 18970), (62, 19030), (63, 19036), (67, 19081), (76, 19192), (83, 19246), (86, 19273),

Gene: Vallejo_25 Start: 19972, Stop: 20829, Start Num: 16

Candidate Starts for Vallejo_25:

(Start: 16 @19972 has 92 MA's), (30, 20164), (31, 20167), (32, 20179), (44, 20350), (48, 20428), (49, 20458), (50, 20464), (62, 20554), (63, 20560), (72, 20659), (76, 20716), (79, 20749), (83, 20767), (84, 20773), (86, 20794),

Gene: VroomVroom_21 Start: 17771, Stop: 18499, Start Num: 15

Candidate Starts for VroomVroom_21:

(7, 17621), (Start: 15 @17771 has 4 MA's), (23, 17846), (30, 17960), (44, 18146), (47, 18212), (60, 18332), (64, 18389),

Gene: Vulture_21 Start: 18421, Stop: 19260, Start Num: 16

Candidate Starts for Vulture_21:

(Start: 16 @18421 has 92 MA's), (24, 18517), (28, 18583), (33, 18637), (39, 18763), (41, 18775), (50, 18916), (62, 19006), (70, 19090), (72, 19111), (83, 19198), (86, 19225),

Gene: Wawa_25 Start: 20009, Stop: 20866, Start Num: 16

Candidate Starts for Wawa_25:

(Start: 16 @20009 has 92 MA's), (17, 20021), (30, 20201), (31, 20204), (32, 20216), (48, 20465), (49, 20495), (50, 20501), (62, 20591), (63, 20597), (72, 20696), (76, 20753), (79, 20786), (83, 20804), (84, 20810), (86, 20831),

Gene: Wayne_25 Start: 20127, Stop: 20963, Start Num: 16

Candidate Starts for Wayne_25:

(5, 19878), (Start: 16 @20127 has 92 MA's), (30, 20319), (33, 20337), (39, 20463), (40, 20466), (41, 20475), (43, 20496), (44, 20505), (49, 20613), (50, 20619), (62, 20709), (63, 20715), (72, 20814), (80, 20886), (86, 20928),

Gene: WonderBoy_21 Start: 18424, Stop: 19287, Start Num: 16

Candidate Starts for WonderBoy_21:

(Start: 16 @18424 has 92 MA's), (30, 18619), (33, 18637), (39, 18763), (40, 18766), (44, 18805), (49, 18913), (50, 18919), (56, 18949), (62, 19009), (63, 19015), (67, 19060), (76, 19171), (83, 19225), (86, 19252),

Gene: Zorro_25 Start: 19988, Stop: 20845, Start Num: 16

Candidate Starts for Zorro_25:

(Start: 16 @19988 has 92 MA's), (30, 20180), (31, 20183), (32, 20195), (33, 20198), (44, 20366), (48, 20444), (49, 20474), (50, 20480), (62, 20570), (63, 20576), (72, 20675), (76, 20732), (83, 20783), (84, 20789), (86, 20810),