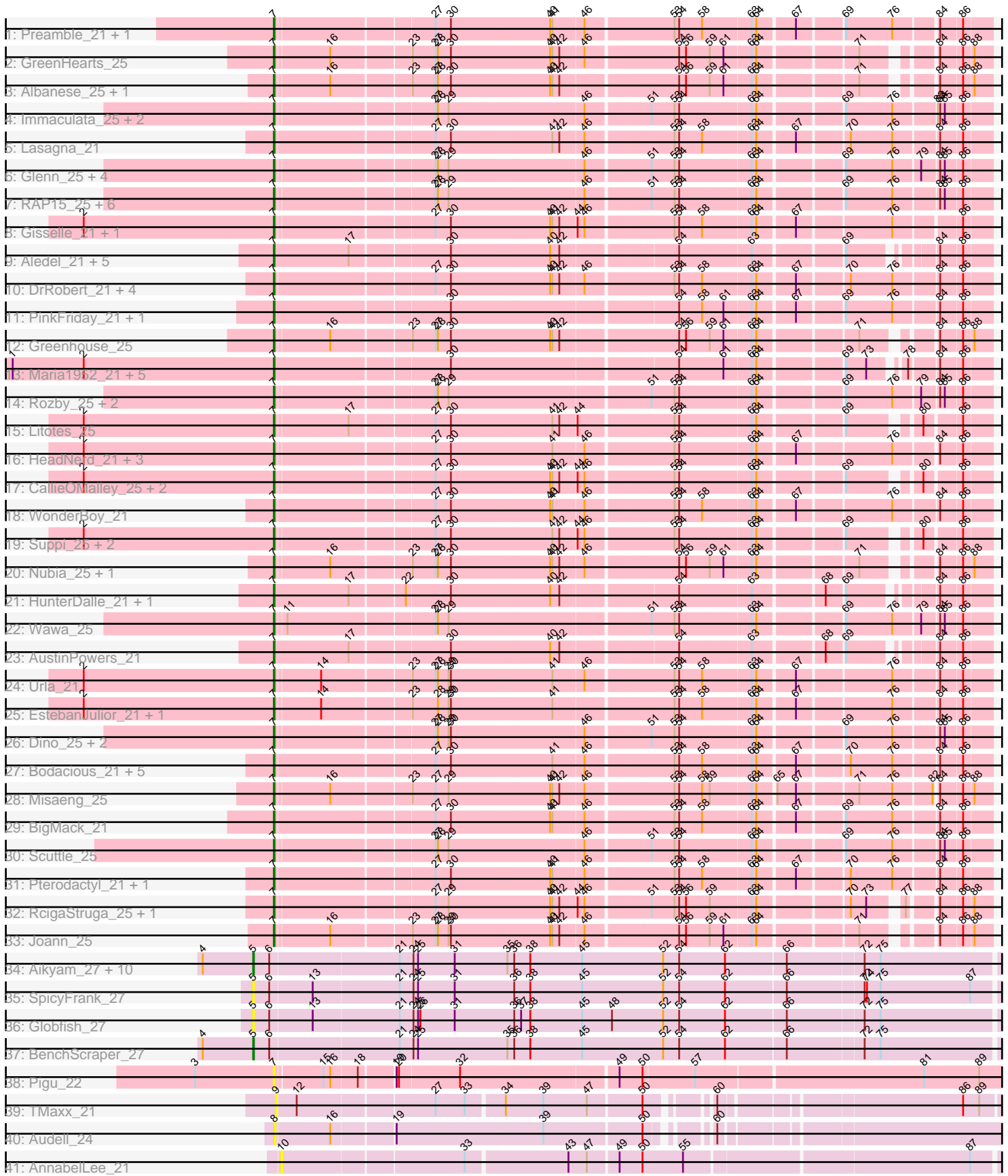


Pham 200136



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 200136 Report

This analysis was run 01/18/25 on database version 583.

Pham number 200136 has 102 members, 14 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, Riverdale_25, Beethoven_25
- Track 15 : Litotes_25
- Track 16 : HeadNerd_21, Moki_21, Bennie_21, Huckleberry_21
- Track 17 : CallieOMalley_25, PartyCup_25, Wayne_25
- Track 18 : WonderBoy_21
- Track 19 : Suppi_25, AppleCider_25, Canowicakte_25
- Track 20 : Nubia_25, Oxynfrius_25
- Track 21 : HunterDalle_21, Vulture_21
- Track 22 : Wawa_25
- Track 23 : AustinPowers_21
- Track 24 : Urla_21
- Track 25 : EstebanJulior_21, MamaPearl_21
- Track 26 : Dino_25, Zorro_25, Kalizoi_25
- Track 27 : Bodacious_21, Nancia_21, CristinaYang_21, LilStuart_21, Lennox_21, ChewChew_21
- Track 28 : Misaeng_25
- Track 29 : BigMack_21
- Track 30 : Scuttle_25
- Track 31 : Pterodactyl_21, Makoto_21
- Track 32 : RcigaStruga_25, Huntingdon_25
- Track 33 : Joann_25

- Track 34 : Aikyam_27, CookieBear_28, RadFad_27, Richie_27, Auxilium_27, MaterMagnus_27, BlueShadow_28, Hillester_27, Windest_28, MidnightRain_27, YoungHarleezy_27
- Track 35 : SpicyFrank_27
- Track 36 : Globfish_27
- Track 37 : BenchScraper_27
- Track 38 : Pigu_22
- Track 39 : TMaxx_21
- Track 40 : Audell_24
- Track 41 : AnnabelLee_21

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

The start number called the most often in the published annotations is 7, it was called in 83 of the 88 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Albanese_25, Aledel_21, AppleCider_25, AustinPowers_21, Beethoven_25, Bennie_21, BigMack_21, Bodacious_21, BrotherBLo_25, CallieOMalley_25, Canowicakte_25, Carpal_25, ChewChew_21, Cholula_25, Chridison_21, Christian_21, CristinaYang_21, Daiboju_21, Dino_25, DrRobert_21, DreamTeam_21, EstebanJulior_21, Eunoia_21, Fluke_25, Gisselle_21, Glenn_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, Misaeng_25, Moki_21, MrGloopy_25, Nancia_21, Nubia_25, OMalley_21, OurGirlNessie_21, Oxyntrius_25, PartyCup_25, Pigu_22, PinkFriday_21, PitaDog_21, Potatoes_25, Preamble_21, Pterodactyl_21, Pumancara_21, RAP15_25, RcigaStruga_25, Riovina_21, Riverdale_25, Rozby_25, Savage2526_25, Scuttle_25, Sergei_21, Supakev_21, Suppi_25, TattModd_25, Temper16_21, 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:

- Aikyam_27, AnnabelLee_21, Audell_24, Auxilium_27, BenchScraper_27, BlueShadow_28, CookieBear_28, Globfish_27, Hillester_27, MaterMagnus_27, MidnightRain_27, RadFad_27, Richie_27, SpicyFrank_27, TMaxx_21, Windest_28, YoungHarleezy_27,

Summary by start number:

Start 5:

- Found in 14 of 102 (13.7%) of genes in pham
- Manual Annotations of this start: 5 of 88
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aikyam_27 (AY), Auxilium_27 (AY), BenchScraper_27 (AY), BlueShadow_28 (AY), CookieBear_28 (AY), Globfish_27

(AY), Hillester_27 (AY), MaterMagnus_27 (AY), MidnightRain_27 (AY), RadFad_27 (AY), Richie_27 (AY), SpicyFrank_27 (AY), Windest_28 (AY), YoungHarleezy_27 (AY),

Start 7:

- Found in 85 of 102 (83.3%) of genes in pham
- Manual Annotations of this start: 83 of 88
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Albanese_25 (AK), Aledel_21 (AK), AppleCider_25 (AK), AustinPowers_21 (AK), Beethoven_25 (AK), Bennie_21 (AK), BigMack_21 (AK), Bodacious_21 (AK), BrotherBLo_25 (AK), CallieOMalley_25 (AK), Canowicakte_25 (AK), Carpal_25 (AK), ChewChew_21 (AK), Cholula_25 (AK), Chridison_21 (AK), Christian_21 (AK), CristinaYang_21 (AK), Daiboju_21 (AK), Dino_25 (AK), DrRobert_21 (AK), DreamTeam_21 (AK), EstebanJulior_21 (AK), Eunoia_21 (AK), Fluke_25 (AK), Gisselle_21 (AK), Glenn_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), Misaeng_25 (AK), Moki_21 (AK), MrGloopy_25 (AK), Nancia_21 (AK), Nubia_25 (AK), OMalley_21 (AK), OurGirlNessie_21 (AK), Oxynfrius_25 (AK), PartyCup_25 (AK), Pigu_22 (FB), 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), Rozby_25 (AK), Savage2526_25 (AK), Scuttle_25 (AK), Sergei_21 (AK), Supakev_21 (AK), Suppi_25 (AK), TattModd_25 (AK), Temper16_21 (AK), Urla_21 (AK), Vallejo_25 (AK), Vulture_21 (AK), Wawa_25 (AK), Wayne_25 (AK), WonderBoy_21 (AK), Zorro_25 (AK),

Start 8:

- Found in 1 of 102 (1.0%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Audell_24 (FR),

Start 9:

- Found in 1 of 102 (1.0%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: TMaxx_21 (FR),

Start 10:

- Found in 1 of 102 (1.0%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AnnabelLee_21 (FR),

Summary by clusters:

There are 4 clusters represented in this pham: AY, FR, AK, FB,

Info for manual annotations of cluster AK:

•Start number 7 was manually annotated 83 times for cluster AK.

Info for manual annotations of cluster AY:

•Start number 5 was manually annotated 5 times for cluster AY.

Gene Information:

Gene: Aikyam_27 Start: 19476, Stop: 20438, Start Num: 5

Candidate Starts for Aikyam_27:

(4, 19410), (Start: 5 @19476 has 5 MA's), (6, 19497), (21, 19662), (24, 19680), (25, 19686), (31, 19734), (35, 19803), (36, 19812), (38, 19833), (45, 19899), (52, 20004), (54, 20025), (62, 20085), (66, 20160), (72, 20256), (75, 20277),

Gene: Albanese_25 Start: 20058, Stop: 20894, Start Num: 7

Candidate Starts for Albanese_25:

(Start: 7 @20058 has 83 MA's), (16, 20124), (23, 20220), (27, 20250), (28, 20253), (30, 20268), (40, 20394), (41, 20397), (42, 20406), (54, 20550), (56, 20559), (59, 20589), (61, 20607), (63, 20640), (64, 20646), (71, 20760), (84, 20832), (86, 20859), (88, 20871),

Gene: Aledel_21 Start: 18421, Stop: 19260, Start Num: 7

Candidate Starts for Aledel_21:

(Start: 7 @18421 has 83 MA's), (17, 18517), (30, 18637), (40, 18763), (42, 18775), (54, 18916), (63, 19006), (69, 19111), (84, 19198), (86, 19225),

Gene: AnnabelLee_21 Start: 14177, Stop: 15061, Start Num: 10

Candidate Starts for AnnabelLee_21:

(10, 14177), (33, 14399), (43, 14525), (47, 14549), (49, 14585), (50, 14612), (55, 14663), (87, 15017),

Gene: AppleCider_25 Start: 20046, Stop: 20882, Start Num: 7

Candidate Starts for AppleCider_25:

(2, 19797), (Start: 7 @20046 has 83 MA's), (27, 20238), (30, 20256), (41, 20385), (42, 20394), (44, 20415), (46, 20424), (53, 20532), (54, 20538), (63, 20628), (64, 20634), (69, 20733), (80, 20805), (86, 20847),

Gene: Audell_24 Start: 17501, Stop: 18355, Start Num: 8

Candidate Starts for Audell_24:

(8, 17501), (16, 17567), (19, 17642), (39, 17825), (50, 17945), (60, 18005),

Gene: AustinPowers_21 Start: 18422, Stop: 19261, Start Num: 7

Candidate Starts for AustinPowers_21:

(Start: 7 @18422 has 83 MA's), (17, 18518), (30, 18638), (40, 18764), (42, 18776), (54, 18917), (63, 19007), (68, 19091), (69, 19112), (84, 19199), (86, 19226),

Gene: Auxilium_27 Start: 19466, Stop: 20428, Start Num: 5

Candidate Starts for Auxilium_27:

(4, 19400), (Start: 5 @19466 has 5 MA's), (6, 19487), (21, 19652), (24, 19670), (25, 19676), (31, 19724), (35, 19793), (36, 19802), (38, 19823), (45, 19889), (52, 19994), (54, 20015), (62, 20075), (66, 20150), (72, 20246), (75, 20267),

Gene: Beethoven_25 Start: 19983, Stop: 20840, Start Num: 7

Candidate Starts for Beethoven_25:

(Start: 7 @19983 has 83 MA's), (27, 20175), (28, 20178), (29, 20190), (51, 20439), (53, 20469), (54, 20475), (63, 20565), (64, 20571), (69, 20670), (76, 20727), (79, 20760), (84, 20778), (85, 20784), (86, 20805),

Gene: BenchScraper_27 Start: 19481, Stop: 20443, Start Num: 5

Candidate Starts for BenchScraper_27:

(4, 19415), (Start: 5 @19481 has 5 MA's), (6, 19502), (21, 19667), (24, 19685), (25, 19691), (35, 19808), (36, 19817), (38, 19838), (45, 19904), (52, 20009), (54, 20030), (62, 20090), (66, 20165), (72, 20261), (75, 20282),

Gene: Bennie_21 Start: 18441, Stop: 19298, Start Num: 7

Candidate Starts for Bennie_21:

(2, 18192), (Start: 7 @18441 has 83 MA's), (27, 18633), (30, 18651), (41, 18780), (46, 18819), (53, 18927), (54, 18933), (63, 19023), (64, 19029), (67, 19074), (76, 19185), (84, 19236), (86, 19263),

Gene: BigMack_21 Start: 18430, Stop: 19293, Start Num: 7

Candidate Starts for BigMack_21:

(Start: 7 @18430 has 83 MA's), (27, 18625), (30, 18643), (40, 18769), (41, 18772), (46, 18811), (53, 18919), (54, 18925), (58, 18955), (63, 19015), (64, 19021), (67, 19066), (69, 19120), (76, 19177), (84, 19231), (86, 19258),

Gene: BlueShadow_28 Start: 19466, Stop: 20428, Start Num: 5

Candidate Starts for BlueShadow_28:

(4, 19400), (Start: 5 @19466 has 5 MA's), (6, 19487), (21, 19652), (24, 19670), (25, 19676), (31, 19724), (35, 19793), (36, 19802), (38, 19823), (45, 19889), (52, 19994), (54, 20015), (62, 20075), (66, 20150), (72, 20246), (75, 20267),

Gene: Bodacious_21 Start: 18443, Stop: 19306, Start Num: 7

Candidate Starts for Bodacious_21:

(Start: 7 @18443 has 83 MA's), (27, 18638), (30, 18656), (41, 18785), (46, 18824), (53, 18932), (54, 18938), (58, 18968), (63, 19028), (64, 19034), (67, 19079), (70, 19139), (76, 19190), (84, 19244), (86, 19271),

Gene: BrotherBLo_25 Start: 19989, Stop: 20846, Start Num: 7

Candidate Starts for BrotherBLo_25:

(Start: 7 @19989 has 83 MA's), (27, 20181), (28, 20184), (29, 20196), (46, 20367), (51, 20445), (53, 20475), (54, 20481), (63, 20571), (64, 20577), (69, 20676), (76, 20733), (84, 20784), (85, 20790), (86, 20811),

Gene: CallieOMalley_25 Start: 20046, Stop: 20882, Start Num: 7

Candidate Starts for CallieOMalley_25:

(2, 19797), (Start: 7 @20046 has 83 MA's), (27, 20238), (30, 20256), (40, 20382), (41, 20385), (42, 20394), (44, 20415), (46, 20424), (53, 20532), (54, 20538), (63, 20628), (64, 20634), (69, 20733), (80, 20805), (86, 20847),

Gene: Canowicakte_25 Start: 20081, Stop: 20917, Start Num: 7

Candidate Starts for Canowicakte_25:

(2, 19832), (Start: 7 @20081 has 83 MA's), (27, 20273), (30, 20291), (41, 20420), (42, 20429), (44, 20450), (46, 20459), (53, 20567), (54, 20573), (63, 20663), (64, 20669), (69, 20768), (80, 20840), (86, 20882),

Gene: Carpal_25 Start: 19990, Stop: 20847, Start Num: 7

Candidate Starts for Carpal_25:

(Start: 7 @19990 has 83 MA's), (27, 20182), (28, 20185), (29, 20197), (46, 20368), (51, 20446), (53, 20476), (54, 20482), (63, 20572), (64, 20578), (69, 20677), (76, 20734), (79, 20767), (84, 20785), (85, 20791), (86, 20812),

Gene: ChewChew_21 Start: 18442, Stop: 19305, Start Num: 7

Candidate Starts for ChewChew_21:

(Start: 7 @18442 has 83 MA's), (27, 18637), (30, 18655), (41, 18784), (46, 18823), (53, 18931), (54, 18937), (58, 18967), (63, 19027), (64, 19033), (67, 19078), (70, 19138), (76, 19189), (84, 19243), (86, 19270),

Gene: Cholula_25 Start: 20035, Stop: 20892, Start Num: 7

Candidate Starts for Cholula_25:

(Start: 7 @20035 has 83 MA's), (27, 20227), (28, 20230), (29, 20242), (46, 20413), (51, 20491), (53, 20521), (54, 20527), (63, 20617), (64, 20623), (69, 20722), (76, 20779), (83, 20827), (84, 20830), (85, 20836), (86, 20857),

Gene: Chridison_21 Start: 18422, Stop: 19261, Start Num: 7

Candidate Starts for Chridison_21:

(Start: 7 @18422 has 83 MA's), (17, 18518), (30, 18638), (40, 18764), (42, 18776), (54, 18917), (63, 19007), (69, 19112), (84, 19199), (86, 19226),

Gene: Christian_21 Start: 18443, Stop: 19306, Start Num: 7

Candidate Starts for Christian_21:

(Start: 7 @18443 has 83 MA's), (27, 18638), (30, 18656), (40, 18782), (41, 18785), (42, 18794), (46, 18824), (53, 18932), (54, 18938), (58, 18968), (63, 19028), (64, 19034), (67, 19079), (70, 19139), (76, 19190), (84, 19244), (86, 19271),

Gene: CookieBear_28 Start: 19466, Stop: 20428, Start Num: 5

Candidate Starts for CookieBear_28:

(4, 19400), (Start: 5 @19466 has 5 MA's), (6, 19487), (21, 19652), (24, 19670), (25, 19676), (31, 19724), (35, 19793), (36, 19802), (38, 19823), (45, 19889), (52, 19994), (54, 20015), (62, 20075), (66, 20150), (72, 20246), (75, 20267),

Gene: CristinaYang_21 Start: 18443, Stop: 19306, Start Num: 7

Candidate Starts for CristinaYang_21:

(Start: 7 @18443 has 83 MA's), (27, 18638), (30, 18656), (41, 18785), (46, 18824), (53, 18932), (54, 18938), (58, 18968), (63, 19028), (64, 19034), (67, 19079), (70, 19139), (76, 19190), (84, 19244), (86, 19271),

Gene: Daiboju_21 Start: 18436, Stop: 19278, Start Num: 7

Candidate Starts for Daiboju_21:

(1, 18094), (2, 18187), (Start: 7 @18436 has 83 MA's), (30, 18652), (54, 18931), (61, 18988), (63, 19021), (64, 19027), (69, 19126), (73, 19150), (78, 19183), (84, 19216), (86, 19243),

Gene: Dino_25 Start: 19988, Stop: 20845, Start Num: 7

Candidate Starts for Dino_25:

(Start: 7 @19988 has 83 MA's), (27, 20180), (28, 20183), (29, 20195), (30, 20198), (46, 20366), (51, 20444), (53, 20474), (54, 20480), (63, 20570), (64, 20576), (69, 20675), (76, 20732), (84, 20783), (85, 20789), (86, 20810),

Gene: DrRobert_21 Start: 18443, Stop: 19306, Start Num: 7

Candidate Starts for DrRobert_21:

(Start: 7 @18443 has 83 MA's), (27, 18638), (30, 18656), (40, 18782), (41, 18785), (42, 18794), (46, 18824), (53, 18932), (54, 18938), (58, 18968), (63, 19028), (64, 19034), (67, 19079), (70, 19139), (76, 19190), (84, 19244), (86, 19271),

Gene: DreamTeam_21 Start: 18481, Stop: 19338, Start Num: 7

Candidate Starts for DreamTeam_21:

(2, 18232), (Start: 7 @18481 has 83 MA's), (27, 18673), (30, 18691), (40, 18817), (41, 18820), (42, 18829), (44, 18850), (46, 18859), (53, 18967), (54, 18973), (58, 19003), (63, 19063), (64, 19069), (67, 19114), (76, 19225), (86, 19303),

Gene: EstebanJulior_21 Start: 18446, Stop: 19306, Start Num: 7

Candidate Starts for EstebanJulior_21:

(2, 18197), (Start: 7 @18446 has 83 MA's), (14, 18500), (23, 18608), (28, 18641), (29, 18653), (30, 18656), (41, 18785), (53, 18932), (54, 18938), (58, 18968), (63, 19028), (64, 19034), (67, 19079), (76, 19190), (84, 19244), (86, 19271),

Gene: Eunoia_21 Start: 18421, Stop: 19260, Start Num: 7

Candidate Starts for Eunoia_21:

(Start: 7 @18421 has 83 MA's), (17, 18517), (30, 18637), (40, 18763), (42, 18775), (54, 18916), (63, 19006), (69, 19111), (84, 19198), (86, 19225),

Gene: Fluke_25 Start: 20031, Stop: 20888, Start Num: 7

Candidate Starts for Fluke_25:

(Start: 7 @20031 has 83 MA's), (27, 20223), (28, 20226), (29, 20238), (46, 20409), (51, 20487), (53, 20517), (54, 20523), (63, 20613), (64, 20619), (69, 20718), (76, 20775), (79, 20808), (84, 20826), (85, 20832), (86, 20853),

Gene: Gisselle_21 Start: 18481, Stop: 19338, Start Num: 7

Candidate Starts for Gisselle_21:

(2, 18232), (Start: 7 @18481 has 83 MA's), (27, 18673), (30, 18691), (40, 18817), (41, 18820), (42, 18829), (44, 18850), (46, 18859), (53, 18967), (54, 18973), (58, 19003), (63, 19063), (64, 19069), (67, 19114), (76, 19225), (86, 19303),

Gene: Glenn_25 Start: 20040, Stop: 20897, Start Num: 7

Candidate Starts for Glenn_25:

(Start: 7 @20040 has 83 MA's), (27, 20232), (28, 20235), (29, 20247), (46, 20418), (51, 20496), (53, 20526), (54, 20532), (63, 20622), (64, 20628), (69, 20727), (76, 20784), (79, 20817), (84, 20835), (85, 20841), (86, 20862),

Gene: Globfish_27 Start: 19700, Stop: 20662, Start Num: 5

Candidate Starts for Globfish_27:

(Start: 5 @19700 has 5 MA's), (6, 19721), (13, 19775), (21, 19886), (24, 19904), (25, 19910), (26, 19913), (31, 19958), (36, 20036), (37, 20045), (38, 20057), (45, 20123), (48, 20162), (52, 20228), (54, 20249), (62, 20309), (66, 20384), (72, 20480), (75, 20501),

Gene: GreenHearts_25 Start: 20150, Stop: 20986, Start Num: 7

Candidate Starts for GreenHearts_25:

(Start: 7 @20150 has 83 MA's), (16, 20216), (23, 20312), (27, 20342), (28, 20345), (30, 20360), (40, 20486), (41, 20489), (42, 20498), (46, 20528), (54, 20642), (56, 20651), (59, 20681), (61, 20699), (63, 20732), (64, 20738), (71, 20852), (84, 20924), (86, 20951), (88, 20963),

Gene: Greenhouse_25 Start: 20074, Stop: 20910, Start Num: 7

Candidate Starts for Greenhouse_25:

(Start: 7 @20074 has 83 MA's), (16, 20140), (23, 20236), (27, 20266), (28, 20269), (30, 20284), (40, 20410), (41, 20413), (42, 20422), (54, 20566), (56, 20575), (59, 20605), (61, 20623), (63, 20656), (64, 20662), (71, 20776), (84, 20848), (86, 20875), (88, 20887),

Gene: HeadNerd_21 Start: 18441, Stop: 19298, Start Num: 7

Candidate Starts for HeadNerd_21:

(2, 18192), (Start: 7 @18441 has 83 MA's), (27, 18633), (30, 18651), (41, 18780), (46, 18819), (53, 18927), (54, 18933), (63, 19023), (64, 19029), (67, 19074), (76, 19185), (84, 19236), (86, 19263),

Gene: Herb_21 Start: 18436, Stop: 19278, Start Num: 7

Candidate Starts for Herb_21:

(1, 18094), (2, 18187), (Start: 7 @18436 has 83 MA's), (30, 18652), (54, 18931), (61, 18988), (63, 19021), (64, 19027), (69, 19126), (73, 19150), (78, 19183), (84, 19216), (86, 19243),

Gene: Hillester_27 Start: 19466, Stop: 20428, Start Num: 5

Candidate Starts for Hillester_27:

(4, 19400), (Start: 5 @19466 has 5 MA's), (6, 19487), (21, 19652), (24, 19670), (25, 19676), (31, 19724), (35, 19793), (36, 19802), (38, 19823), (45, 19889), (52, 19994), (54, 20015), (62, 20075), (66, 20150), (72, 20246), (75, 20267),

Gene: Huckleberry_21 Start: 18441, Stop: 19298, Start Num: 7

Candidate Starts for Huckleberry_21:

(2, 18192), (Start: 7 @18441 has 83 MA's), (27, 18633), (30, 18651), (41, 18780), (46, 18819), (53, 18927), (54, 18933), (63, 19023), (64, 19029), (67, 19074), (76, 19185), (84, 19236), (86, 19263),

Gene: HunterDalle_21 Start: 18421, Stop: 19260, Start Num: 7

Candidate Starts for HunterDalle_21:

(Start: 7 @18421 has 83 MA's), (17, 18517), (22, 18583), (30, 18637), (40, 18763), (42, 18775), (54, 18916), (63, 19006), (68, 19090), (69, 19111), (84, 19198), (86, 19225),

Gene: Huntingdon_25 Start: 20042, Stop: 20878, Start Num: 7

Candidate Starts for Huntingdon_25:

(Start: 7 @20042 has 83 MA's), (27, 20234), (29, 20249), (40, 20378), (41, 20381), (42, 20390), (44, 20411), (46, 20420), (51, 20498), (53, 20528), (54, 20534), (56, 20543), (59, 20573), (63, 20624), (64, 20630), (70, 20735), (73, 20753), (77, 20786), (84, 20816), (86, 20843), (88, 20855),

Gene: Immaculata_25 Start: 20034, Stop: 20891, Start Num: 7

Candidate Starts for Immaculata_25:

(Start: 7 @20034 has 83 MA's), (27, 20226), (28, 20229), (29, 20241), (46, 20412), (51, 20490), (53, 20520), (54, 20526), (63, 20616), (64, 20622), (69, 20721), (76, 20778), (83, 20826), (84, 20829), (85, 20835), (86, 20856),

Gene: Joann_25 Start: 20008, Stop: 20844, Start Num: 7

Candidate Starts for Joann_25:

(Start: 7 @20008 has 83 MA's), (16, 20074), (23, 20170), (27, 20200), (28, 20203), (29, 20215), (30, 20218), (40, 20344), (41, 20347), (42, 20356), (46, 20386), (54, 20500), (56, 20509), (59, 20539), (61, 20557), (63, 20590), (64, 20596), (71, 20710), (84, 20782), (86, 20809), (88, 20821),

Gene: Jumboset_25 Start: 19983, Stop: 20840, Start Num: 7

Candidate Starts for Jumboset_25:

(Start: 7 @19983 has 83 MA's), (27, 20175), (28, 20178), (29, 20190), (46, 20361), (51, 20439), (53, 20469), (54, 20475), (63, 20565), (64, 20571), (69, 20670), (76, 20727), (84, 20778), (85, 20784), (86,

20805),

Gene: Kalizoi_25 Start: 19982, Stop: 20839, Start Num: 7

Candidate Starts for Kalizoi_25:

(Start: 7 @19982 has 83 MA's), (27, 20174), (28, 20177), (29, 20189), (30, 20192), (46, 20360), (51, 20438), (53, 20468), (54, 20474), (63, 20564), (64, 20570), (69, 20669), (76, 20726), (84, 20777), (85, 20783), (86, 20804),

Gene: KingBob_21 Start: 18436, Stop: 19278, Start Num: 7

Candidate Starts for KingBob_21:

(1, 18094), (2, 18187), (Start: 7 @18436 has 83 MA's), (30, 18652), (54, 18931), (61, 18988), (63, 19021), (64, 19027), (69, 19126), (73, 19150), (78, 19183), (84, 19216), (86, 19243),

Gene: Kittykat_21 Start: 18465, Stop: 19322, Start Num: 7

Candidate Starts for Kittykat_21:

(Start: 7 @18465 has 83 MA's), (27, 18657), (30, 18675), (40, 18801), (41, 18804), (46, 18843), (53, 18951), (54, 18957), (58, 18987), (63, 19047), (64, 19053), (67, 19098), (69, 19152), (76, 19209), (84, 19260), (86, 19287),

Gene: Korra_26 Start: 19988, Stop: 20845, Start Num: 7

Candidate Starts for Korra_26:

(Start: 7 @19988 has 83 MA's), (27, 20180), (28, 20183), (29, 20195), (46, 20366), (51, 20444), (53, 20474), (54, 20480), (63, 20570), (64, 20576), (69, 20675), (76, 20732), (84, 20783), (85, 20789), (86, 20810),

Gene: Lakshmi_25 Start: 20034, Stop: 20870, Start Num: 7

Candidate Starts for Lakshmi_25:

(Start: 7 @20034 has 83 MA's), (16, 20100), (23, 20196), (27, 20226), (28, 20229), (30, 20244), (40, 20370), (41, 20373), (42, 20382), (54, 20526), (56, 20535), (59, 20565), (61, 20583), (63, 20616), (64, 20622), (71, 20736), (84, 20808), (86, 20835), (88, 20847),

Gene: Lasagna_21 Start: 18443, Stop: 19306, Start Num: 7

Candidate Starts for Lasagna_21:

(Start: 7 @18443 has 83 MA's), (27, 18638), (30, 18656), (41, 18785), (42, 18794), (46, 18824), (53, 18932), (54, 18938), (58, 18968), (63, 19028), (64, 19034), (67, 19079), (70, 19139), (76, 19190), (84, 19244), (86, 19271),

Gene: Lennox_21 Start: 18431, Stop: 19294, Start Num: 7

Candidate Starts for Lennox_21:

(Start: 7 @18431 has 83 MA's), (27, 18626), (30, 18644), (41, 18773), (46, 18812), (53, 18920), (54, 18926), (58, 18956), (63, 19016), (64, 19022), (67, 19067), (70, 19127), (76, 19178), (84, 19232), (86, 19259),

Gene: LilStuart_21 Start: 18431, Stop: 19294, Start Num: 7

Candidate Starts for LilStuart_21:

(Start: 7 @18431 has 83 MA's), (27, 18626), (30, 18644), (41, 18773), (46, 18812), (53, 18920), (54, 18926), (58, 18956), (63, 19016), (64, 19022), (67, 19067), (70, 19127), (76, 19178), (84, 19232), (86, 19259),

Gene: Litotes_25 Start: 20031, Stop: 20867, Start Num: 7

Candidate Starts for Litotes_25:

(2, 19782), (Start: 7 @20031 has 83 MA's), (17, 20121), (27, 20223), (30, 20241), (41, 20370), (42, 20379), (44, 20400), (53, 20517), (54, 20523), (63, 20613), (64, 20619), (69, 20718), (80, 20790), (86,

20832),

Gene: Lucy_21 Start: 18423, Stop: 19286, Start Num: 7

Candidate Starts for Lucy_21:

(Start: 7 @18423 has 83 MA's), (27, 18618), (30, 18636), (40, 18762), (41, 18765), (42, 18774), (46, 18804), (53, 18912), (54, 18918), (58, 18948), (63, 19008), (64, 19014), (67, 19059), (70, 19119), (76, 19170), (84, 19224), (86, 19251),

Gene: Makoto_21 Start: 18443, Stop: 19306, Start Num: 7

Candidate Starts for Makoto_21:

(Start: 7 @18443 has 83 MA's), (27, 18638), (30, 18656), (40, 18782), (41, 18785), (46, 18824), (53, 18932), (54, 18938), (58, 18968), (63, 19028), (64, 19034), (67, 19079), (70, 19139), (76, 19190), (84, 19244), (86, 19271),

Gene: MamaPearl_21 Start: 18446, Stop: 19306, Start Num: 7

Candidate Starts for MamaPearl_21:

(2, 18197), (Start: 7 @18446 has 83 MA's), (14, 18500), (23, 18608), (28, 18641), (29, 18653), (30, 18656), (41, 18785), (53, 18932), (54, 18938), (58, 18968), (63, 19028), (64, 19034), (67, 19079), (76, 19190), (84, 19244), (86, 19271),

Gene: Maria1952_21 Start: 18436, Stop: 19278, Start Num: 7

Candidate Starts for Maria1952_21:

(1, 18094), (2, 18187), (Start: 7 @18436 has 83 MA's), (30, 18652), (54, 18931), (61, 18988), (63, 19021), (64, 19027), (69, 19126), (73, 19150), (78, 19183), (84, 19216), (86, 19243),

Gene: MaterMagnus_27 Start: 19476, Stop: 20438, Start Num: 5

Candidate Starts for MaterMagnus_27:

(4, 19410), (Start: 5 @19476 has 5 MA's), (6, 19497), (21, 19662), (24, 19680), (25, 19686), (31, 19734), (35, 19803), (36, 19812), (38, 19833), (45, 19899), (52, 20004), (54, 20025), (62, 20085), (66, 20160), (72, 20256), (75, 20277),

Gene: MeganNoll_25 Start: 20040, Stop: 20897, Start Num: 7

Candidate Starts for MeganNoll_25:

(Start: 7 @20040 has 83 MA's), (27, 20232), (28, 20235), (29, 20247), (46, 20418), (51, 20496), (53, 20526), (54, 20532), (63, 20622), (64, 20628), (69, 20727), (76, 20784), (84, 20835), (85, 20841), (86, 20862),

Gene: MidnightRain_27 Start: 19465, Stop: 20427, Start Num: 5

Candidate Starts for MidnightRain_27:

(4, 19399), (Start: 5 @19465 has 5 MA's), (6, 19486), (21, 19651), (24, 19669), (25, 19675), (31, 19723), (35, 19792), (36, 19801), (38, 19822), (45, 19888), (52, 19993), (54, 20014), (62, 20074), (66, 20149), (72, 20245), (75, 20266),

Gene: Misaeng_25 Start: 20124, Stop: 20981, Start Num: 7

Candidate Starts for Misaeng_25:

(Start: 7 @20124 has 83 MA's), (16, 20190), (23, 20286), (27, 20316), (29, 20331), (40, 20460), (41, 20463), (42, 20472), (46, 20502), (53, 20610), (54, 20616), (58, 20646), (59, 20655), (63, 20706), (64, 20712), (65, 20733), (67, 20757), (71, 20826), (76, 20868), (82, 20916), (84, 20919), (86, 20946), (88, 20958),

Gene: Moki_21 Start: 18441, Stop: 19298, Start Num: 7

Candidate Starts for Moki_21:

(2, 18192), (Start: 7 @18441 has 83 MA's), (27, 18633), (30, 18651), (41, 18780), (46, 18819), (53, 18927), (54, 18933), (63, 19023), (64, 19029), (67, 19074), (76, 19185), (84, 19236), (86, 19263),

Gene: MrGloopy_25 Start: 19974, Stop: 20831, Start Num: 7

Candidate Starts for MrGloopy_25:

(Start: 7 @19974 has 83 MA's), (27, 20166), (28, 20169), (29, 20181), (46, 20352), (51, 20430), (53, 20460), (54, 20466), (63, 20556), (64, 20562), (69, 20661), (76, 20718), (84, 20769), (85, 20775), (86, 20796),

Gene: Nancia_21 Start: 18443, Stop: 19306, Start Num: 7

Candidate Starts for Nancia_21:

(Start: 7 @18443 has 83 MA's), (27, 18638), (30, 18656), (41, 18785), (46, 18824), (53, 18932), (54, 18938), (58, 18968), (63, 19028), (64, 19034), (67, 19079), (70, 19139), (76, 19190), (84, 19244), (86, 19271),

Gene: Nubia_25 Start: 19994, Stop: 20830, Start Num: 7

Candidate Starts for Nubia_25:

(Start: 7 @19994 has 83 MA's), (16, 20060), (23, 20156), (27, 20186), (28, 20189), (30, 20204), (40, 20330), (41, 20333), (42, 20342), (46, 20372), (54, 20486), (56, 20495), (59, 20525), (61, 20543), (63, 20576), (64, 20582), (71, 20696), (84, 20768), (86, 20795), (88, 20807),

Gene: OMalley_21 Start: 18421, Stop: 19260, Start Num: 7

Candidate Starts for OMalley_21:

(Start: 7 @18421 has 83 MA's), (17, 18517), (30, 18637), (40, 18763), (42, 18775), (54, 18916), (63, 19006), (69, 19111), (84, 19198), (86, 19225),

Gene: OurGirlNessie_21 Start: 18423, Stop: 19286, Start Num: 7

Candidate Starts for OurGirlNessie_21:

(Start: 7 @18423 has 83 MA's), (27, 18618), (30, 18636), (40, 18762), (41, 18765), (42, 18774), (46, 18804), (53, 18912), (54, 18918), (58, 18948), (63, 19008), (64, 19014), (67, 19059), (70, 19119), (76, 19170), (84, 19224), (86, 19251),

Gene: Oxynfrius_25 Start: 20007, Stop: 20843, Start Num: 7

Candidate Starts for Oxynfrius_25:

(Start: 7 @20007 has 83 MA's), (16, 20073), (23, 20169), (27, 20199), (28, 20202), (30, 20217), (40, 20343), (41, 20346), (42, 20355), (46, 20385), (54, 20499), (56, 20508), (59, 20538), (61, 20556), (63, 20589), (64, 20595), (71, 20709), (84, 20781), (86, 20808), (88, 20820),

Gene: PartyCup_25 Start: 20078, Stop: 20914, Start Num: 7

Candidate Starts for PartyCup_25:

(2, 19829), (Start: 7 @20078 has 83 MA's), (27, 20270), (30, 20288), (40, 20414), (41, 20417), (42, 20426), (44, 20447), (46, 20456), (53, 20564), (54, 20570), (63, 20660), (64, 20666), (69, 20765), (80, 20837), (86, 20879),

Gene: Pigu_22 Start: 17033, Stop: 17926, Start Num: 7

Candidate Starts for Pigu_22:

(3, 16931), (Start: 7 @17033 has 83 MA's), (15, 17087), (16, 17096), (18, 17129), (19, 17171), (20, 17174), (32, 17249), (49, 17444), (50, 17471), (57, 17537), (81, 17822), (89, 17894),

Gene: PinkFriday_21 Start: 18457, Stop: 19320, Start Num: 7

Candidate Starts for PinkFriday_21:

(Start: 7 @18457 has 83 MA's), (30, 18673), (54, 18952), (58, 18982), (61, 19009), (63, 19042), (64, 19048), (67, 19093), (69, 19147), (76, 19204), (84, 19258), (86, 19285),

Gene: PitaDog_21 Start: 18434, Stop: 19297, Start Num: 7

Candidate Starts for PitaDog_21:

(Start: 7 @18434 has 83 MA's), (27, 18629), (30, 18647), (40, 18773), (41, 18776), (42, 18785), (46, 18815), (53, 18923), (54, 18929), (58, 18959), (63, 19019), (64, 19025), (67, 19070), (70, 19130), (76, 19181), (84, 19235), (86, 19262),

Gene: Potatoes_25 Start: 20035, Stop: 20892, Start Num: 7

Candidate Starts for Potatoes_25:

(Start: 7 @20035 has 83 MA's), (27, 20227), (28, 20230), (29, 20242), (46, 20413), (51, 20491), (53, 20521), (54, 20527), (63, 20617), (64, 20623), (69, 20722), (76, 20779), (83, 20827), (84, 20830), (85, 20836), (86, 20857),

Gene: Preamble_21 Start: 18442, Stop: 19299, Start Num: 7

Candidate Starts for Preamble_21:

(Start: 7 @18442 has 83 MA's), (27, 18634), (30, 18652), (40, 18778), (41, 18781), (46, 18820), (53, 18928), (54, 18934), (58, 18964), (63, 19024), (64, 19030), (67, 19075), (69, 19129), (76, 19186), (84, 19237), (86, 19264),

Gene: Pterodactyl_21 Start: 18424, Stop: 19287, Start Num: 7

Candidate Starts for Pterodactyl_21:

(Start: 7 @18424 has 83 MA's), (27, 18619), (30, 18637), (40, 18763), (41, 18766), (46, 18805), (53, 18913), (54, 18919), (58, 18949), (63, 19009), (64, 19015), (67, 19060), (70, 19120), (76, 19171), (84, 19225), (86, 19252),

Gene: Pumancara_21 Start: 18439, Stop: 19302, Start Num: 7

Candidate Starts for Pumancara_21:

(Start: 7 @18439 has 83 MA's), (30, 18655), (54, 18934), (58, 18964), (61, 18991), (63, 19024), (64, 19030), (67, 19075), (69, 19129), (76, 19186), (84, 19240), (86, 19267),

Gene: RAP15_25 Start: 20040, Stop: 20897, Start Num: 7

Candidate Starts for RAP15_25:

(Start: 7 @20040 has 83 MA's), (27, 20232), (28, 20235), (29, 20247), (46, 20418), (51, 20496), (53, 20526), (54, 20532), (63, 20622), (64, 20628), (69, 20727), (76, 20784), (84, 20835), (85, 20841), (86, 20862),

Gene: RadFad_27 Start: 19466, Stop: 20428, Start Num: 5

Candidate Starts for RadFad_27:

(4, 19400), (Start: 5 @19466 has 5 MA's), (6, 19487), (21, 19652), (24, 19670), (25, 19676), (31, 19724), (35, 19793), (36, 19802), (38, 19823), (45, 19889), (52, 19994), (54, 20015), (62, 20075), (66, 20150), (72, 20246), (75, 20267),

Gene: RcigaStruga_25 Start: 20042, Stop: 20878, Start Num: 7

Candidate Starts for RcigaStruga_25:

(Start: 7 @20042 has 83 MA's), (27, 20234), (29, 20249), (40, 20378), (41, 20381), (42, 20390), (44, 20411), (46, 20420), (51, 20498), (53, 20528), (54, 20534), (56, 20543), (59, 20573), (63, 20624), (64, 20630), (70, 20735), (73, 20753), (77, 20786), (84, 20816), (86, 20843), (88, 20855),

Gene: Richie_27 Start: 19481, Stop: 20443, Start Num: 5

Candidate Starts for Richie_27:

(4, 19415), (Start: 5 @19481 has 5 MA's), (6, 19502), (21, 19667), (24, 19685), (25, 19691), (31, 19739), (35, 19808), (36, 19817), (38, 19838), (45, 19904), (52, 20009), (54, 20030), (62, 20090), (66, 20165), (72, 20261), (75, 20282),

Gene: Riovina_21 Start: 18421, Stop: 19260, Start Num: 7

Candidate Starts for Riovina_21:

(Start: 7 @18421 has 83 MA's), (17, 18517), (30, 18637), (40, 18763), (42, 18775), (54, 18916), (63, 19006), (69, 19111), (84, 19198), (86, 19225),

Gene: Riverdale_25 Start: 19970, Stop: 20827, Start Num: 7

Candidate Starts for Riverdale_25:

(Start: 7 @19970 has 83 MA's), (27, 20162), (28, 20165), (29, 20177), (51, 20426), (53, 20456), (54, 20462), (63, 20552), (64, 20558), (69, 20657), (76, 20714), (79, 20747), (84, 20765), (85, 20771), (86, 20792),

Gene: Rozby_25 Start: 19971, Stop: 20828, Start Num: 7

Candidate Starts for Rozby_25:

(Start: 7 @19971 has 83 MA's), (27, 20163), (28, 20166), (29, 20178), (51, 20427), (53, 20457), (54, 20463), (63, 20553), (64, 20559), (69, 20658), (76, 20715), (79, 20748), (84, 20766), (85, 20772), (86, 20793),

Gene: Savage2526_25 Start: 20034, Stop: 20891, Start Num: 7

Candidate Starts for Savage2526_25:

(Start: 7 @20034 has 83 MA's), (27, 20226), (28, 20229), (29, 20241), (46, 20412), (51, 20490), (53, 20520), (54, 20526), (63, 20616), (64, 20622), (69, 20721), (76, 20778), (84, 20829), (85, 20835), (86, 20856),

Gene: Scuttle_25 Start: 20039, Stop: 20896, Start Num: 7

Candidate Starts for Scuttle_25:

(Start: 7 @20039 has 83 MA's), (27, 20231), (28, 20234), (29, 20246), (46, 20417), (51, 20495), (53, 20525), (54, 20531), (63, 20621), (64, 20627), (69, 20726), (76, 20783), (84, 20834), (85, 20840), (86, 20861),

Gene: Sergei_21 Start: 18436, Stop: 19278, Start Num: 7

Candidate Starts for Sergei_21:

(1, 18094), (2, 18187), (Start: 7 @18436 has 83 MA's), (30, 18652), (54, 18931), (61, 18988), (63, 19021), (64, 19027), (69, 19126), (73, 19150), (78, 19183), (84, 19216), (86, 19243),

Gene: SpicyFrank_27 Start: 19701, Stop: 20663, Start Num: 5

Candidate Starts for SpicyFrank_27:

(Start: 5 @19701 has 5 MA's), (6, 19722), (13, 19776), (21, 19887), (24, 19905), (25, 19911), (31, 19959), (36, 20037), (38, 20058), (45, 20124), (52, 20229), (54, 20250), (62, 20310), (66, 20385), (72, 20481), (74, 20484), (75, 20502), (87, 20619),

Gene: Supakev_21 Start: 18423, Stop: 19262, Start Num: 7

Candidate Starts for Supakev_21:

(Start: 7 @18423 has 83 MA's), (17, 18519), (30, 18639), (40, 18765), (42, 18777), (54, 18918), (63, 19008), (69, 19113), (84, 19200), (86, 19227),

Gene: Suppi_25 Start: 20081, Stop: 20917, Start Num: 7

Candidate Starts for Suppi_25:

(2, 19832), (Start: 7 @20081 has 83 MA's), (27, 20273), (30, 20291), (41, 20420), (42, 20429), (44, 20450), (46, 20459), (53, 20567), (54, 20573), (63, 20663), (64, 20669), (69, 20768), (80, 20840), (86, 20882),

Gene: TMaxx_21 Start: 14021, Stop: 14869, Start Num: 9

Candidate Starts for TMaxx_21:

(9, 14021), (12, 14042), (27, 14210), (33, 14246), (34, 14291), (39, 14339), (47, 14396), (50, 14459), (60, 14525), (86, 14813), (89, 14834),

Gene: TattModd_25 Start: 20033, Stop: 20890, Start Num: 7

Candidate Starts for TattModd_25:

(Start: 7 @20033 has 83 MA's), (27, 20225), (28, 20228), (29, 20240), (46, 20411), (51, 20489), (53, 20519), (54, 20525), (63, 20615), (64, 20621), (69, 20720), (76, 20777), (79, 20810), (84, 20828), (85, 20834), (86, 20855),

Gene: Temper16_21 Start: 18436, Stop: 19278, Start Num: 7

Candidate Starts for Temper16_21:

(1, 18094), (2, 18187), (Start: 7 @18436 has 83 MA's), (30, 18652), (54, 18931), (61, 18988), (63, 19021), (64, 19027), (69, 19126), (73, 19150), (78, 19183), (84, 19216), (86, 19243),

Gene: Urla_21 Start: 18448, Stop: 19308, Start Num: 7

Candidate Starts for Urla_21:

(2, 18199), (Start: 7 @18448 has 83 MA's), (14, 18502), (23, 18610), (27, 18640), (28, 18643), (29, 18655), (30, 18658), (41, 18787), (46, 18826), (53, 18934), (54, 18940), (58, 18970), (63, 19030), (64, 19036), (67, 19081), (76, 19192), (84, 19246), (86, 19273),

Gene: Vallejo_25 Start: 19972, Stop: 20829, Start Num: 7

Candidate Starts for Vallejo_25:

(Start: 7 @19972 has 83 MA's), (27, 20164), (28, 20167), (29, 20179), (46, 20350), (51, 20428), (53, 20458), (54, 20464), (63, 20554), (64, 20560), (69, 20659), (76, 20716), (79, 20749), (84, 20767), (85, 20773), (86, 20794),

Gene: Vulture_21 Start: 18421, Stop: 19260, Start Num: 7

Candidate Starts for Vulture_21:

(Start: 7 @18421 has 83 MA's), (17, 18517), (22, 18583), (30, 18637), (40, 18763), (42, 18775), (54, 18916), (63, 19006), (68, 19090), (69, 19111), (84, 19198), (86, 19225),

Gene: Wawa_25 Start: 20009, Stop: 20866, Start Num: 7

Candidate Starts for Wawa_25:

(Start: 7 @20009 has 83 MA's), (11, 20021), (27, 20201), (28, 20204), (29, 20216), (51, 20465), (53, 20495), (54, 20501), (63, 20591), (64, 20597), (69, 20696), (76, 20753), (79, 20786), (84, 20804), (85, 20810), (86, 20831),

Gene: Wayne_25 Start: 20127, Stop: 20963, Start Num: 7

Candidate Starts for Wayne_25:

(2, 19878), (Start: 7 @20127 has 83 MA's), (27, 20319), (30, 20337), (40, 20463), (41, 20466), (42, 20475), (44, 20496), (46, 20505), (53, 20613), (54, 20619), (63, 20709), (64, 20715), (69, 20814), (80, 20886), (86, 20928),

Gene: Windest_28 Start: 19531, Stop: 20493, Start Num: 5

Candidate Starts for Windest_28:

(4, 19465), (Start: 5 @19531 has 5 MA's), (6, 19552), (21, 19717), (24, 19735), (25, 19741), (31, 19789), (35, 19858), (36, 19867), (38, 19888), (45, 19954), (52, 20059), (54, 20080), (62, 20140), (66, 20215), (72, 20311), (75, 20332),

Gene: WonderBoy_21 Start: 18424, Stop: 19287, Start Num: 7

Candidate Starts for WonderBoy_21:

(Start: 7 @18424 has 83 MA's), (27, 18619), (30, 18637), (40, 18763), (41, 18766), (46, 18805), (53, 18913), (54, 18919), (58, 18949), (63, 19009), (64, 19015), (67, 19060), (76, 19171), (84, 19225), (86, 19252),

Gene: YoungHarleezy_27 Start: 19479, Stop: 20441, Start Num: 5

Candidate Starts for YoungHarleezy_27:

(4, 19413), (Start: 5 @19479 has 5 MA's), (6, 19500), (21, 19665), (24, 19683), (25, 19689), (31, 19737), (35, 19806), (36, 19815), (38, 19836), (45, 19902), (52, 20007), (54, 20028), (62, 20088), (66, 20163), (72, 20259), (75, 20280),

Gene: Zorro_25 Start: 19988, Stop: 20845, Start Num: 7

Candidate Starts for Zorro_25:

(Start: 7 @19988 has 83 MA's), (27, 20180), (28, 20183), (29, 20195), (30, 20198), (46, 20366), (51, 20444), (53, 20474), (54, 20480), (63, 20570), (64, 20576), (69, 20675), (76, 20732), (84, 20783), (85, 20789), (86, 20810),