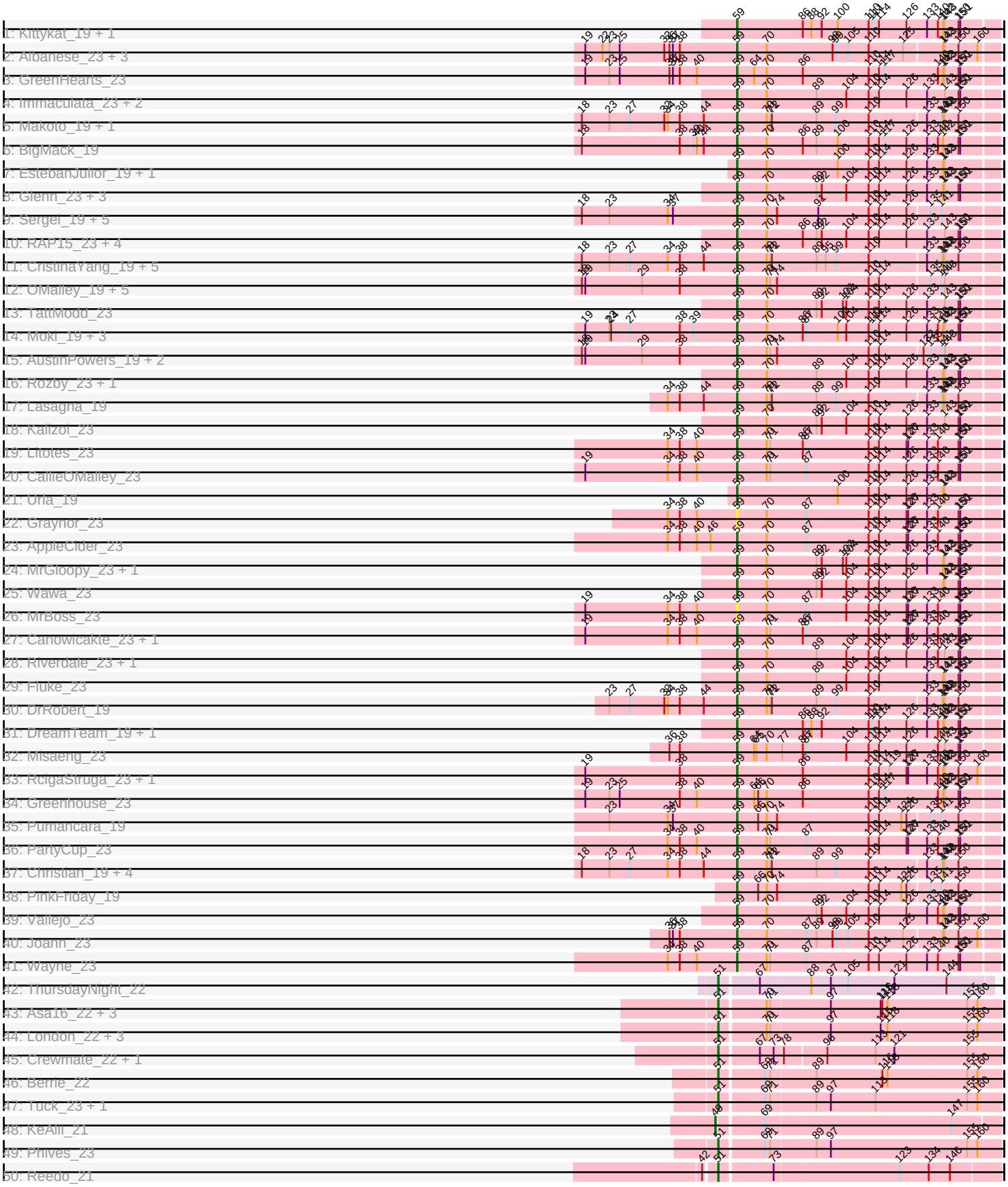
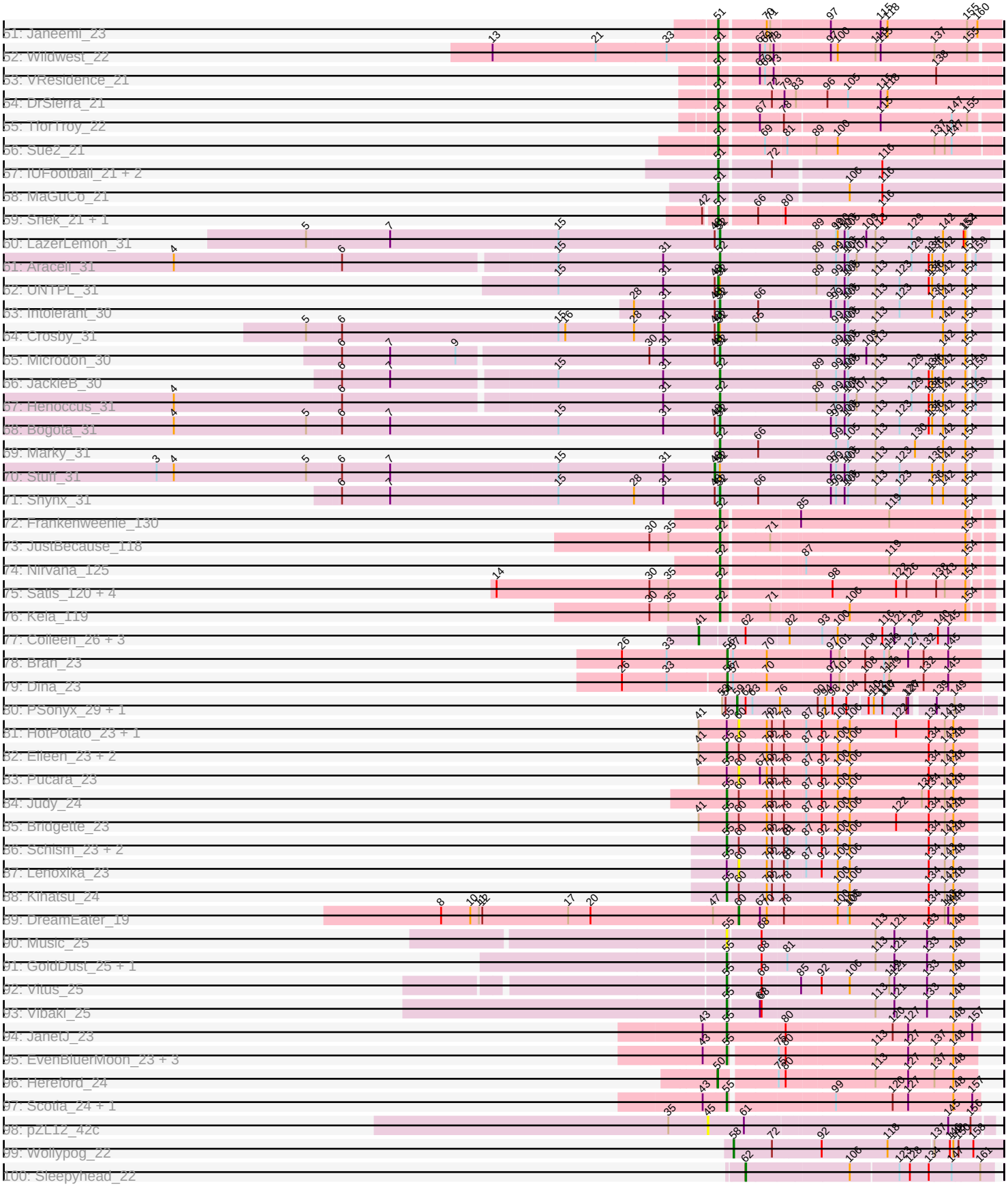
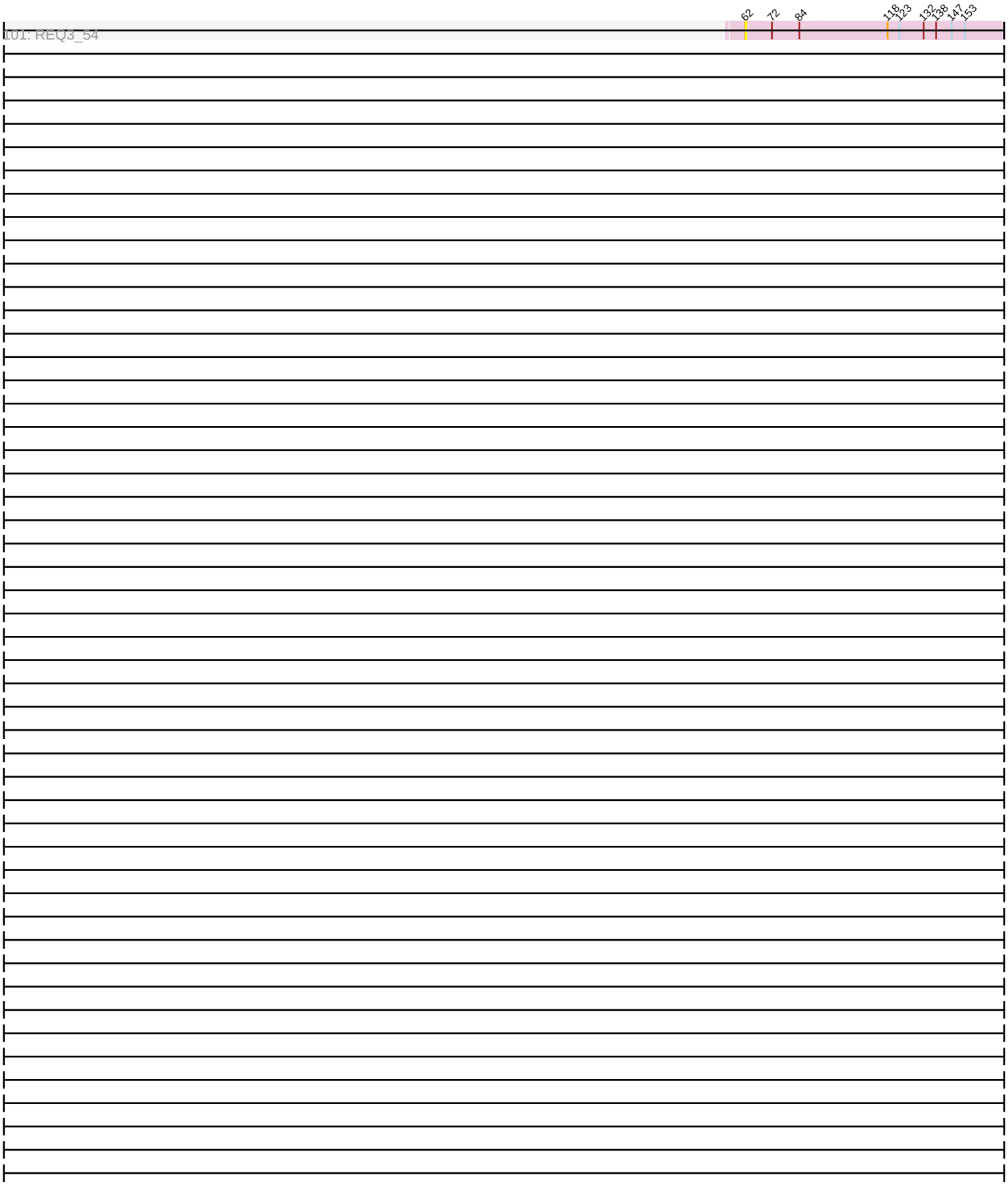
Zoomed Pham 347300



Zoomed Pham 347300



Zoomed Pham 347300



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 347300 Report

This analysis was run 11/14/26 on database version 672.

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

Pham number 347300 has 175 members, 14 are drafts.

Phages represented in each track:
- Track 1 : Kittykat_19, Preamble_19
- Track 2 : Albanese_23, Lakshmi_23, Oxynfrius_23, Nubia_23
- Track 3 : GreenHearts_23
- Track 4 : Immaculata_23, Cholula_23, Potatoes_23
- Track 5 : Makoto_19, OurGirlNessie_19
- Track 6 : BigMack_19
- Track 7 : EstebanJulior_19, MamaPearl_19
- Track 8 : Glenn_23, Korra_24, Dino_23, Zorro_23
- Track 9 : Sergei_19, Herb_19, Temper16_19, KingBob_19, Maria1952_19, Daiboju_19
- Track 10 : RAP15_23, MeganNoll_23, Savage2526_23, Jumboset_23, BrotherBLo_23
- Track 11 : CristinaYang_19, LilStuart_19, PitaDog_19, Bodacious_19, ChewChew_19, Nancia_19
- Track 12 : OMalley_19, Eunoia_19, Aledel_19, Chridison_19, Riovina_19, Supakev_19
- Track 13 : TattModd_23
- Track 14 : Moki_19, Huckleberry_19, HeadNerd_19, Bennie_19
- Track 15 : AustinPowers_19, HunterDalle_19, Vulture_19
- Track 16 : Rozby_23, Scuttle_23
- Track 17 : Lasagna_19
- Track 18 : Kalizoi_23
- Track 19 : Litotes_23
- Track 20 : CallieOMalley_23
- Track 21 : Urla_19
- Track 22 : Graynor_23
- Track 23 : AppleCider_23
- Track 24 : MrGloopy_23, Carpal_23
- Track 25 : Wawa_23
- Track 26 : MrBoss_23
- Track 27 : Canowicakte_23, Suppi_23
- Track 28 : Riverdale_23, Beethoven_23
- Track 29 : Fluke_23

• Track 30 : DrRobert_19
• Track 31 : DreamTeam_19, Gisselle_19
• Track 32 : Misaeng_23
• Track 33 : RcigaStruga_23, Huntingdon_23
• Track 34 : Greenhouse_23
• Track 35 : Pumancara_19
• Track 36 : PartyCup_23
• Track 37 : Christian_19, Lucy_19, Lennox_19, Pterodactyl_19, WonderBoy_19
• Track 38 : PinkFriday_19
• Track 39 : Vallejo_23
• Track 40 : Joann_23
• Track 41 : Wayne_23
• Track 42 : ThursdayNight_22
• Track 43 : Asa16_22, Niobe_22, Skelbel_23, Jstan_23
• Track 44 : London_22, Subaru_22, Elezi_22, Eraser_22
• Track 45 : Crewmate_22, ObiToo_21
• Track 46 : Berrie_22
• Track 47 : Tuck_23, Community_22
• Track 48 : KeAlii_21
• Track 49 : Phives_23
• Track 50 : Reedo_21
• Track 51 : Janeemi_23
• Track 52 : Wildwest_22
• Track 53 : VResidence_21
• Track 54 : DrSierra_21
• Track 55 : TforTroy_22
• Track 56 : Sue2_21
• Track 57 : IUFootball_21, Liebe_21, Maureen_21
• Track 58 : MaGuCo_21
• Track 59 : Snek_21, Tweety19_21
• Track 60 : LazerLemon_31
• Track 61 : Araceli_31
• Track 62 : UNTPL_31
• Track 63 : Intolerant_30
• Track 64 : Crosby_31
• Track 65 : Microdon_30
• Track 66 : JackieB_30
• Track 67 : Henoccus_31
• Track 68 : Bogota_31
• Track 69 : Marky_31
• Track 70 : Stuff_31
• Track 71 : Shynx_31
• Track 72 : Frankenweenie_130
• Track 73 : JustBecause_118
• Track 74 : Nirvana_125
• Track 75 : Satis_120, Quantum_119, Sarkar_120, EhyElimayoE_121, Kradal_120
• Track 76 : Kela_119
• Track 77 : Colleen_26, TouchMeNot_26, Poushou_26, Arianna_26
• Track 78 : Bran_23
• Track 79 : Dina_23
• Track 80 : PSonyx_29, Taotie_26
• Track 81 : HotPotato_23, LilyBell_23
• Track 82 : Eileen_23, Peas_23, Karkharias_23

• Track 83 : Pucara_23
• Track 84 : Judy_24
• Track 85 : Bridgette_23
• Track 86 : Schism_23, Guinevere_23, Nandita_23
• Track 87 : Lenoxika_23
• Track 88 : Kihatsu_24
• Track 89 : DreamEater_19
• Track 90 : Music_25
• Track 91 : GoldDust_25, Gooberta_25
• Track 92 : Vitus_25
• Track 93 : Vibaki_25
• Track 94 : JanetJ_23
• Track 95 : EvenBluerMoon_23, Morrey_34, Aoka_23, PrairieDogTown_23
• Track 96 : Hereford_24
• Track 97 : Scotia_24, NoSwimming_24
• Track 98 : pZL12_42c
• Track 99 : Wollypog_22
• Track 100 : Sleepyhead_22
• Track 101 : REQ3_54

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

The start number called the most often in the published annotations is 59, it was called in 85 of the 161 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Albanese_23, Aledel_19, AppleCider_23, AustinPowers_19, Beethoven_23, Bennie_19, BigMack_19, Bodacious_19, BrotherBLo_23, CallieOMalley_23, Canowicakte_23, Carpal_23, ChewChew_19, Cholula_23, Chridison_19, Christian_19, CristinaYang_19, Daiboju_19, Dino_23, DrRobert_19, DreamTeam_19, EstebanJulior_19, Eunoia_19, Fluke_23, Gisselle_19, Glenn_23, Graynor_23, GreenHearts_23, Greenhouse_23, HeadNerd_19, Herb_19, Huckleberry_19, HunterDalle_19, Huntingdon_23, Immaculata_23, Joann_23, Jumboset_23, Kalizoi_23, KingBob_19, Kittykat_19, Korra_24, Lakshmi_23, Lasagna_19, Lennox_19, LilStuart_19, Litotes_23, Lucy_19, Makoto_19, MamaPearl_19, Maria1952_19, MeganNoll_23, Misaeng_23, Moki_19, MrBoss_23, MrGloopy_23, Nancia_19, Nubia_23, OMalley_19, OurGirlNessie_19, Oxynfrius_23, PSonyx_29, PartyCup_23, PinkFriday_19, PitaDog_19, Potatoes_23, Preamble_19, Pterodactyl_19, Pumancara_19, RAP15_23, RcigaStruga_23, Riovina_19, Riverdale_23, Rozby_23, Savage2526_23, Scuttle_23, Sergei_19, Supakev_19, Suppi_23, Taotie_26, TattModd_23, Temper16_19, Urla_19, Vallejo_23, Vulture_19, Wawa_23, Wayne_23, WonderBoy_19, Zorro_23,

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

Genes that do not have the "Most Annotated" start:
• Aoka_23, Araceli_31, Arianna_26, Asa16_22, Berrie_22, Bogota_31, Bran_23, Bridgette_23, Colleen_26, Community_22, Crewmate_22, Crosby_31, Dina_23, DrSierra_21, DreamEater_19, EhyElimayoE_121, Eileen_23, Elezi_22, Eraser_22,

EvenBluerMoon_23, Frankenweenie_130, GoldDust_25, Gooberta_25, Guinevere_23, Henoccus_31, Hereford_24, HotPotato_23, IUFootball_21, Intolerant_30, JackieB_30, Janeemi_23, JanetJ_23, Jstan_23, Judy_24, JustBecause_118, Karkharias_23, KeAlii_21, Kela_119, Kihatsu_24, Kradal_120, LazerLemon_31, Lenoxika_23, Liebe_21, LilyBell_23, London_22, MaGuCo_21, Marky_31, Maureen_21, Microdon_30, Morrey_34, Music_25, Nandita_23, Niobe_22, Nirvana_125, NoSwimming_24, ObiToo_21, Peas_23, Phives_23, Poushou_26, PrairieDogTown_23, Pucara_23, Quantum_119, REQ3_54, Reedo_21, Sarkar_120, Satis_120, Schism_23, Scotia_24, Shynx_31, Skelbel_23, Sleepyhead_22, Snek_21, Stuff_31, Subaru_22, Sue2_21, TforTroy_22, ThursdayNight_22, TouchMeNot_26, Tuck_23, Tweety19_21, UNTPL_31, VResidence_21, Vibaki_25, Vitus_25, Wildwest_22, Wollypog_22, pZL12_42c,

Summary by start number:

Start 41:
• Found in 11 of 175 (6.3%) of genes in pham
• Manual Annotations of this start: 4 of 161
• Called 36.4% of time when present
• Phage (with cluster) where this start called: Arianna_26 (EO), Colleen_26 (EO), Poushou_26 (EO), TouchMeNot_26 (EO),

Start 45:
• Found in 1 of 175 (0.6%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: pZL12_42c (singleton),

Start 48:
• Found in 8 of 175 (4.6%) of genes in pham
• Manual Annotations of this start: 1 of 161
• Called 12.5% of time when present
• Phage (with cluster) where this start called: Stuff_31 (BH),

Start 49:
• Found in 1 of 175 (0.6%) of genes in pham
• Manual Annotations of this start: 1 of 161
• Called 100.0% of time when present
• Phage (with cluster) where this start called: KeAlii_21 (AZ1),

Start 50:
• Found in 1 of 175 (0.6%) of genes in pham
• Manual Annotations of this start: 1 of 161
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Hereford_24 (FO),

Start 51:
• Found in 36 of 175 (20.6%) of genes in pham
• Manual Annotations of this start: 27 of 161
• Called 83.3% of time when present
• Phage (with cluster) where this start called: Asa16_22 (AZ1), Berrie_22 (AZ1), Community_22 (AZ1), Crewmate_22 (AZ1), Crosby_31 (BH), DrSierra_21 (AZ1), Elezi_22 (AZ1), Eraser_22 (AZ1), IUFootball_21 (AZ2), Janeemi_23 (AZ1), Jstan_23

(AZ1), Liebe_21 (AZ2), London_22 (AZ1), MaGuCo_21 (AZ2), Maureen_21 (AZ2), Niobe_22 (AZ1), ObiToo_21 (AZ1), Phives_23 (AZ1), Reedo_21 (AZ1), Skelbel_23 (AZ1), Snek_21 (AZ3), Subaru_22 (AZ1), Sue2_21 (AZ1), TforTroy_22 (AZ1), ThursdayNight_22 (AZ), Tuck_23 (AZ1), Tweety19_21 (AZ3), UNTPL_31 (BH), VResidence_21 (AZ1), Wildwest_22 (AZ1),

Start 52:
• Found in 21 of 175 (12.0%) of genes in pham
• Manual Annotations of this start: 18 of 161
• Called 85.7% of time when present
• Phage (with cluster) where this start called: Araceli_31 (BH), Bogota_31 (BH), EhyElimayoE_121 (BM), Frankenweenie_130 (BM), Henoccus_31 (BH), Intolerant_30 (BH), JackieB_30 (BH), JustBecause_118 (BM), Kela_119 (BM), Kradal_120 (BM), LazerLemon_31 (BH), Marky_31 (BH), Microdon_30 (BH), Nirvana_125 (BM), Quantum_119 (BM), Sarkar_120 (BM), Satis_120 (BM), Shynx_31 (BH),

Start 55:
• Found in 25 of 175 (14.3%) of genes in pham
• Manual Annotations of this start: 19 of 161
• Called 84.0% of time when present
• Phage (with cluster) where this start called: Aoka_23 (FO), Bridgette_23 (FA), Eileen_23 (FA), EvenBluerMoon_23 (FO), GoldDust_25 (FL), Gooberta_25 (FL), Guinevere_23 (FF), JanetJ_23 (FO), Judy_24 (FA), Karkharias_23 (FA), Kihatsu_24 (FF), Morrey_34 (FO), Music_25 (FL), Nandita_23 (FF), NoSwimming_24 (FO), Peas_23 (FA), PrairieDogTown_23 (FO), Schism_23 (FF), Scotia_24 (FO), Vibaki_25 (FL), Vitus_25 (FL),

Start 56:
• Found in 2 of 175 (1.1%) of genes in pham
• Manual Annotations of this start: 2 of 161
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bran_23 (EP), Dina_23 (EP),

Start 58:
• Found in 1 of 175 (0.6%) of genes in pham
• Manual Annotations of this start: 1 of 161
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Wollypog_22 (singleton),

Start 59:
• Found in 88 of 175 (50.3%) of genes in pham
• Manual Annotations of this start: 85 of 161
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Albanese_23 (AK), Aledel_19 (AK), AppleCider_23 (AK), AustinPowers_19 (AK), Beethoven_23 (AK), Bennie_19 (AK), BigMack_19 (AK), Bodacious_19 (AK), BrotherBLo_23 (AK), CallieOMalley_23 (AK), Canowicakte_23 (AK), Carpal_23 (AK), ChewChew_19 (AK), Cholula_23 (AK), Chridison_19 (AK), Christian_19 (AK), CristinaYang_19 (AK), Daiboju_19 (AK), Dino_23 (AK), DrRobert_19 (AK), DreamTeam_19 (AK), EstebanJulior_19 (AK), Eunoia_19 (AK), Fluke_23 (AK), Gisselle_19 (AK), Glenn_23 (AK), Graynor_23 (AK), GreenHearts_23 (AK), Greenhouse_23 (AK), HeadNerd_19 (AK), Herb_19 (AK), Huckleberry_19 (AK), HunterDalle_19 (AK), Huntingdon_23 (AK), Immaculata_23

(AK), Joann_23 (AK), Jumboset_23 (AK), Kalizoi_23 (AK), KingBob_19 (AK), Kittykat_19 (AK), Korra_24 (AK), Lakshmi_23 (AK), Lasagna_19 (AK), Lennox_19 (AK), LilStuart_19 (AK), Litotes_23 (AK), Lucy_19 (AK), Makoto_19 (AK), MamaPearl_19 (AK), Maria1952_19 (AK), MeganNoll_23 (AK), Misaeng_23 (AK), Moki_19 (AK), MrBoss_23 (AK), MrGloopy_23 (AK), Nancia_19 (AK), Nubia_23 (AK), OMalley_19 (AK), OurGirlNessie_19 (AK), Oxynfrius_23 (AK), PSonyx_29 (EQ), PartyCup_23 (AK), PinkFriday_19 (AK), PitaDog_19 (AK), Potatoes_23 (AK), Preamble_19 (AK), Pterodactyl_19 (AK), Pumancara_19 (AK), RAP15_23 (AK), RcigaStruga_23 (AK), Riovina_19 (AK), Riverdale_23 (AK), Rozby_23 (AK), Savage2526_23 (AK), Scuttle_23 (AK), Sergei_19 (AK), Supakev_19 (AK), Suppi_23 (AK), Taotie_26 (EQ), TattModd_23 (AK), Temper16_19 (AK), Urla_19 (AK), Vallejo_23 (AK), Vulture_19 (AK), Wawa_23 (AK), Wayne_23 (AK), WonderBoy_19 (AK), Zorro_23 (AK),

Start 60:
• Found in 14 of 175 (8.0%) of genes in pham
• Manual Annotations of this start: 1 of 161
• Called 35.7% of time when present
• Phage (with cluster) where this start called: DreamEater_19 (FJ), HotPotato_23 (FA), Lenoxika_23 (FF), LilyBell_23 (FA), Pucara_23 (FA),

Start 62:
• Found in 8 of 175 (4.6%) of genes in pham
• Manual Annotations of this start: 1 of 161
• Called 25.0% of time when present
• Phage (with cluster) where this start called: REQ3_54 (singleton), Sleepyhead_22 (singleton),

Summary by clusters:

There are 16 clusters represented in this pham: singleton, AZ, EQ, BM, AK, BH, EO, FA, FJ, FF, AZ1, AZ2, AZ3, FL, EP, FO,

Info for manual annotations of cluster AK:
•Start number 59 was manually annotated 84 times for cluster AK.

Info for manual annotations of cluster AZ:
•Start number 51 was manually annotated 1 time for cluster AZ.

Info for manual annotations of cluster AZ1:
•Start number 49 was manually annotated 1 time for cluster AZ1.
•Start number 51 was manually annotated 18 times for cluster AZ1.

Info for manual annotations of cluster AZ2:
•Start number 51 was manually annotated 4 times for cluster AZ2.

Info for manual annotations of cluster AZ3:
•Start number 51 was manually annotated 2 times for cluster AZ3.

Info for manual annotations of cluster BH:
•Start number 48 was manually annotated 1 time for cluster BH.
•Start number 51 was manually annotated 2 times for cluster BH.
•Start number 52 was manually annotated 9 times for cluster BH.

Info for manual annotations of cluster BM:
•Start number 52 was manually annotated 9 times for cluster BM.

Info for manual annotations of cluster EO:
•Start number 41 was manually annotated 4 times for cluster EO.

Info for manual annotations of cluster EP:
•Start number 56 was manually annotated 2 times for cluster EP.

Info for manual annotations of cluster EQ:
•Start number 59 was manually annotated 1 time for cluster EQ.

Info for manual annotations of cluster FA:
•Start number 55 was manually annotated 5 times for cluster FA.

Info for manual annotations of cluster FF:
•Start number 55 was manually annotated 4 times for cluster FF.

Info for manual annotations of cluster FJ:
•Start number 60 was manually annotated 1 time for cluster FJ.

Info for manual annotations of cluster FL:
•Start number 55 was manually annotated 4 times for cluster FL.

Info for manual annotations of cluster FO:
•Start number 50 was manually annotated 1 time for cluster FO.
•Start number 55 was manually annotated 6 times for cluster FO.

Gene Information:

Gene: Albanese_23 Start: 19329, Stop: 19769, Start Num: 59
Candidate Starts for Albanese_23:
(19, 19065), (22, 19095), (23, 19107), (25, 19125), (32, 19203), (36, 19212), (37, 19218), (38, 19230), (Start: 59 @19329 has 85 MA's), (70, 19380), (98, 19494), (99, 19500), (105, 19521), (110, 19557), (125, 19617), (142, 19680), (143, 19683), (150, 19707), (160, 19740),

Gene: Aledel_19 Start: 17655, Stop: 18098, Start Num: 59
Candidate Starts for Aledel_19:
(18, 17385), (19, 17391), (29, 17490), (38, 17556), (Start: 59 @17655 has 85 MA's), (70, 17706), (71, 17712), (74, 17724), (110, 17883), (114, 17901), (135, 17985), (141, 18003), (143, 18009),

Gene: Aoka_23 Start: 21429, Stop: 21839, Start Num: 55
Candidate Starts for Aoka_23:
(43, 21387), (Start: 55 @21429 has 19 MA's), (75, 21504), (80, 21516), (113, 21663), (127, 21720), (137, 21765), (148, 21798),

Gene: AppleCider_23 Start: 19272, Stop: 19721, Start Num: 59
Candidate Starts for AppleCider_23:
(34, 19152), (38, 19173), (40, 19203), (46, 19227), (Start: 59 @19272 has 85 MA's), (70, 19323), (87, 19392), (110, 19500), (114, 19518), (126, 19566), (127, 19569), (133, 19602), (140, 19620), (150,

19656), (151, 19659),

Gene: Araceli_31 Start: 26097, Stop: 26549, Start Num: 52
Candidate Starts for Araceli_31:
(1, 24528), (2, 24540), (4, 25173), (6, 25461), (15, 25818), (31, 25998), (Start: 52 @26097 has 18 MA's), (89, 26259), (99, 26292), (103, 26307), (105, 26313), (107, 26328), (113, 26358), (129, 26421), (134, 26451), (136, 26457), (142, 26475), (154, 26514), (159, 26523),

Gene: Arianna_26 Start: 24491, Stop: 24949, Start Num: 41
Candidate Starts for Arianna_26:
(Start: 41 @24491 has 4 MA's), (Start: 62 @24554 has 1 MA's), (82, 24626), (93, 24680), (100, 24707), (116, 24785), (121, 24806), (129, 24836), (140, 24878), (145, 24893),

Gene: Asa16_22 Start: 19280, Stop: 19747, Start Num: 51
Candidate Starts for Asa16_22:
(Start: 51 @19280 has 27 MA's), (70, 19355), (71, 19361), (97, 19457), (115, 19544), (116, 19547), (118, 19556), (155, 19694), (160, 19709),

Gene: AustinPowers_19 Start: 17656, Stop: 18099, Start Num: 59
Candidate Starts for AustinPowers_19:
(18, 17386), (19, 17392), (29, 17491), (38, 17557), (Start: 59 @17656 has 85 MA's), (70, 17707), (71, 17713), (74, 17725), (110, 17884), (114, 17902), (132, 17974), (135, 17986), (141, 18004), (143, 18010),

Gene: Beethoven_23 Start: 19209, Stop: 19658, Start Num: 59
Candidate Starts for Beethoven_23:
(Start: 59 @19209 has 85 MA's), (70, 19260), (89, 19347), (104, 19398), (110, 19437), (114, 19455), (126, 19503), (133, 19539), (140, 19557), (143, 19569), (150, 19593), (151, 19596),

Gene: Bennie_19 Start: 17667, Stop: 18116, Start Num: 59
Candidate Starts for Bennie_19:
(19, 17403), (23, 17445), (24, 17448), (27, 17481), (38, 17568), (39, 17592), (Start: 59 @17667 has 85 MA's), (70, 17718), (86, 17781), (87, 17787), (100, 17841), (104, 17856), (110, 17895), (111, 17901), (114, 17913), (126, 17961), (133, 17997), (140, 18015), (142, 18024), (143, 18027), (150, 18051), (151, 18054),

Gene: Berrie_22 Start: 19835, Stop: 20302, Start Num: 51
Candidate Starts for Berrie_22:
(Start: 51 @19835 has 27 MA's), (69, 19907), (71, 19916), (89, 19988), (116, 20102), (118, 20111), (155, 20249), (160, 20264),

Gene: BigMack_19 Start: 17655, Stop: 18104, Start Num: 59
Candidate Starts for BigMack_19:
(18, 17385), (38, 17556), (39, 17580), (40, 17586), (44, 17598), (Start: 59 @17655 has 85 MA's), (70, 17706), (86, 17769), (89, 17793), (100, 17829), (110, 17883), (114, 17901), (117, 17910), (126, 17949), (133, 17985), (140, 18003), (142, 18012), (150, 18039), (151, 18042),

Gene: Bodacious_19 Start: 17674, Stop: 18117, Start Num: 59
Candidate Starts for Bodacious_19:
(18, 17404), (23, 17452), (27, 17488), (34, 17554), (38, 17575), (44, 17617), (Start: 59 @17674 has 85 MA's), (70, 17725), (71, 17731), (72, 17734), (89, 17812), (95, 17827), (99, 17845), (110, 17902), (133, 17998), (141, 18022), (142, 18025), (143, 18028), (150, 18052),

Gene: Bogota_31 Start: 26235, Stop: 26687, Start Num: 52
Candidate Starts for Bogota_31:
(1, 24645), (4, 25290), (5, 25521), (6, 25578), (7, 25662), (15, 25953), (31, 26136), (Start: 48 @26226 has 1 MA's), (Start: 51 @26232 has 27 MA's), (Start: 52 @26235 has 18 MA's), (97, 26421), (99, 26430), (103, 26445), (105, 26451), (113, 26496), (123, 26538), (134, 26589), (136, 26595), (142, 26613), (154, 26652),

Gene: Bran_23 Start: 21645, Stop: 22058, Start Num: 56
Candidate Starts for Bran_23:
(26, 21462), (33, 21540), (Start: 56 @21645 has 2 MA's), (57, 21648), (70, 21705), (97, 21813), (101, 21828), (108, 21867), (117, 21900), (119, 21909), (127, 21942), (132, 21966), (145, 22005),

Gene: Bridgette_23 Start: 18606, Stop: 19028, Start Num: 55
Candidate Starts for Bridgette_23:
(Start: 41 @18558 has 4 MA's), (Start: 55 @18606 has 19 MA's), (Start: 60 @18624 has 1 MA's), (70, 18672), (72, 18681), (78, 18699), (87, 18735), (92, 18762), (100, 18789), (106, 18810), (122, 18888), (134, 18945), (143, 18972), (148, 18987),

Gene: BrotherBLo_23 Start: 19215, Stop: 19664, Start Num: 59
Candidate Starts for BrotherBLo_23:
(Start: 59 @19215 has 85 MA's), (70, 19266), (86, 19329), (89, 19353), (92, 19362), (104, 19404), (110, 19443), (114, 19461), (126, 19509), (133, 19545), (143, 19575), (150, 19599), (151, 19602),

Gene: CallieOMalley_23 Start: 19272, Stop: 19721, Start Num: 59
Candidate Starts for CallieOMalley_23:
(19, 19008), (34, 19152), (38, 19173), (40, 19203), (Start: 59 @19272 has 85 MA's), (70, 19323), (71, 19329), (87, 19392), (110, 19500), (114, 19518), (126, 19566), (133, 19602), (140, 19620), (150, 19656), (151, 19659),

Gene: Canowicakte_23 Start: 19307, Stop: 19756, Start Num: 59
Candidate Starts for Canowicakte_23:
(19, 19043), (34, 19187), (38, 19208), (40, 19238), (Start: 59 @19307 has 85 MA's), (70, 19358), (71, 19364), (86, 19421), (87, 19427), (110, 19535), (114, 19553), (126, 19601), (127, 19604), (133, 19637), (140, 19655), (150, 19691), (151, 19694),

Gene: Carpal_23 Start: 19216, Stop: 19665, Start Num: 59
Candidate Starts for Carpal_23:
(Start: 59 @19216 has 85 MA's), (70, 19267), (89, 19354), (92, 19363), (102, 19399), (104, 19405), (110, 19444), (114, 19462), (126, 19510), (133, 19546), (142, 19573), (143, 19576), (150, 19600), (151, 19603),

Gene: ChewChew_19 Start: 17673, Stop: 18116, Start Num: 59
Candidate Starts for ChewChew_19:
(18, 17403), (23, 17451), (27, 17487), (34, 17553), (38, 17574), (44, 17616), (Start: 59 @17673 has 85 MA's), (70, 17724), (71, 17730), (72, 17733), (89, 17811), (95, 17826), (99, 17844), (110, 17901), (133, 17997), (141, 18021), (142, 18024), (143, 18027), (150, 18051),

Gene: Cholula_23 Start: 19261, Stop: 19710, Start Num: 59
Candidate Starts for Cholula_23:
(Start: 59 @19261 has 85 MA's), (70, 19312), (89, 19399), (104, 19450), (110, 19489), (114, 19507), (126, 19555), (133, 19591), (143, 19621), (150, 19645), (151, 19648),

Gene: Chridison_19 Start: 17656, Stop: 18099, Start Num: 59

Candidate Starts for Chridison_19:
(18, 17386), (19, 17392), (29, 17491), (38, 17557), (Start: 59 @17656 has 85 MA's), (70, 17707), (71, 17713), (74, 17725), (110, 17884), (114, 17902), (135, 17986), (141, 18004), (143, 18010),

Gene: Christian_19 Start: 17674, Stop: 18117, Start Num: 59
Candidate Starts for Christian_19:
(18, 17404), (23, 17452), (27, 17488), (34, 17554), (38, 17575), (44, 17617), (Start: 59 @17674 has 85 MA's), (70, 17725), (71, 17731), (72, 17734), (89, 17812), (99, 17845), (110, 17902), (133, 17998), (141, 18022), (142, 18025), (143, 18028), (150, 18052),

Gene: Colleen_26 Start: 24491, Stop: 24949, Start Num: 41
Candidate Starts for Colleen_26:
(Start: 41 @24491 has 4 MA's), (Start: 62 @24554 has 1 MA's), (82, 24626), (93, 24680), (100, 24707), (116, 24785), (121, 24806), (129, 24836), (140, 24878), (145, 24893),

Gene: Community_22 Start: 20920, Stop: 21387, Start Num: 51
Candidate Starts for Community_22:
(Start: 51 @20920 has 27 MA's), (69, 20992), (71, 21001), (89, 21073), (97, 21097), (113, 21175), (155, 21334), (160, 21349),

Gene: Crewmate_22 Start: 17739, Stop: 18200, Start Num: 51
Candidate Starts for Crewmate_22:
(Start: 51 @17739 has 27 MA's), (67, 17802), (73, 17826), (78, 17838), (96, 17907), (113, 17991), (121, 18024), (155, 18150),

Gene: CristinaYang_19 Start: 17674, Stop: 18117, Start Num: 59
Candidate Starts for CristinaYang_19:
(18, 17404), (23, 17452), (27, 17488), (34, 17554), (38, 17575), (44, 17617), (Start: 59 @17674 has 85 MA's), (70, 17725), (71, 17731), (72, 17734), (89, 17812), (95, 17827), (99, 17845), (110, 17902), (133, 17998), (141, 18022), (142, 18025), (143, 18028), (150, 18052),

Gene: Crosby_31 Start: 26221, Stop: 26676, Start Num: 51
Candidate Starts for Crosby_31:
(5, 25510), (6, 25570), (15, 25942), (16, 25954), (28, 26074), (31, 26125), (Start: 48 @26215 has 1 MA's), (Start: 51 @26221 has 27 MA's), (Start: 52 @26224 has 18 MA's), (65, 26284), (99, 26419), (103, 26434), (105, 26440), (113, 26485), (142, 26602), (154, 26641),

Gene: Daiboju_19 Start: 17670, Stop: 18113, Start Num: 59
Candidate Starts for Daiboju_19:
(18, 17400), (23, 17448), (34, 17550), (37, 17559), (Start: 59 @17670 has 85 MA's), (70, 17721), (74, 17739), (91, 17811), (110, 17898), (114, 17916), (126, 17964), (135, 18000), (141, 18018),

Gene: Dina_23 Start: 21476, Stop: 21889, Start Num: 56
Candidate Starts for Dina_23:
(26, 21299), (33, 21377), (Start: 56 @21476 has 2 MA's), (57, 21479), (70, 21536), (97, 21644), (101, 21659), (108, 21698), (117, 21731), (119, 21740), (132, 21797), (145, 21836),

Gene: Dino_23 Start: 19214, Stop: 19663, Start Num: 59
Candidate Starts for Dino_23:
(Start: 59 @19214 has 85 MA's), (70, 19265), (89, 19352), (92, 19361), (104, 19403), (110, 19442), (114, 19460), (126, 19508), (133, 19544), (142, 19571), (143, 19574), (150, 19598), (151, 19601),

Gene: DrRobert_19 Start: 17674, Stop: 18117, Start Num: 59

Candidate Starts for DrRobert_19:
(23, 17452), (27, 17488), (32, 17548), (34, 17554), (38, 17575), (44, 17617), (Start: 59 @17674 has 85 MA's), (70, 17725), (71, 17731), (72, 17734), (89, 17812), (99, 17845), (110, 17902), (133, 17998), (141, 18022), (142, 18025), (143, 18028), (150, 18052),

Gene: DrSierra_21 Start: 17797, Stop: 18261, Start Num: 51
Candidate Starts for DrSierra_21:
(Start: 51 @17797 has 27 MA's), (72, 17881), (79, 17899), (83, 17917), (96, 17968), (105, 18004), (115, 18061), (118, 18073),

Gene: DreamEater_19 Start: 17452, Stop: 17856, Start Num: 60
Candidate Starts for DreamEater_19:
(8, 16936), (10, 16987), (11, 17002), (12, 17008), (17, 17158), (20, 17197), (47, 17410), (Start: 60 @17452 has 1 MA's), (67, 17488), (70, 17500), (78, 17527), (100, 17617), (105, 17635), (106, 17638), (134, 17773), (143, 17800), (145, 17806), (148, 17815),

Gene: DreamTeam_19 Start: 17707, Stop: 18156, Start Num: 59
Candidate Starts for DreamTeam_19:
(Start: 59 @17707 has 85 MA's), (86, 17821), (88, 17836), (92, 17854), (110, 17935), (111, 17941), (114, 17953), (126, 18001), (133, 18037), (140, 18055), (142, 18064), (143, 18067), (150, 18091), (151, 18094),

Gene: EhyElimayoE_121 Start: 79011, Stop: 79445, Start Num: 52
Candidate Starts for EhyElimayoE_121:
(14, 78627), (30, 78894), (35, 78927), (Start: 52 @79011 has 18 MA's), (98, 79185), (122, 79293), (126, 79311), (138, 79359), (143, 79374), (154, 79410),

Gene: Eileen_23 Start: 18544, Stop: 18966, Start Num: 55
Candidate Starts for Eileen_23:
(Start: 41 @18496 has 4 MA's), (Start: 55 @18544 has 19 MA's), (Start: 60 @18562 has 1 MA's), (70, 18610), (72, 18619), (78, 18637), (87, 18673), (92, 18700), (100, 18727), (106, 18748), (134, 18883), (143, 18910), (148, 18925),

Gene: Elezi_22 Start: 19281, Stop: 19748, Start Num: 51
Candidate Starts for Elezi_22:
(Start: 51 @19281 has 27 MA's), (70, 19356), (71, 19362), (97, 19458), (115, 19545), (118, 19557), (155, 19695), (160, 19710),

Gene: Eraser_22 Start: 19281, Stop: 19748, Start Num: 51
Candidate Starts for Eraser_22:
(Start: 51 @19281 has 27 MA's), (70, 19356), (71, 19362), (97, 19458), (115, 19545), (118, 19557), (155, 19695), (160, 19710),

Gene: EstebanJulior_19 Start: 17672, Stop: 18121, Start Num: 59
Candidate Starts for EstebanJulior_19:
(Start: 59 @17672 has 85 MA's), (70, 17723), (100, 17846), (110, 17900), (114, 17918), (126, 17966), (133, 18002), (142, 18029), (143, 18032),

Gene: Eunoia_19 Start: 17655, Stop: 18098, Start Num: 59
Candidate Starts for Eunoia_19:
(18, 17385), (19, 17391), (29, 17490), (38, 17556), (Start: 59 @17655 has 85 MA's), (70, 17706), (71, 17712), (74, 17724), (110, 17883), (114, 17901), (135, 17985), (141, 18003), (143, 18009),

Gene: EvenBluerMoon_23 Start: 21464, Stop: 21874, Start Num: 55
Candidate Starts for EvenBluerMoon_23:
(43, 21422), (Start: 55 @21464 has 19 MA's), (75, 21539), (80, 21551), (113, 21698), (127, 21755), (137, 21800), (148, 21833),

Gene: Fluke_23 Start: 19257, Stop: 19706, Start Num: 59
Candidate Starts for Fluke_23:
(Start: 59 @19257 has 85 MA's), (70, 19308), (89, 19395), (104, 19446), (110, 19485), (114, 19503), (133, 19587), (142, 19614), (143, 19617), (150, 19641), (151, 19644),

Gene: Frankenweenie_130 Start: 83927, Stop: 84361, Start Num: 52
Candidate Starts for Frankenweenie_130:
(Start: 52 @83927 has 18 MA's), (85, 84050), (119, 84197), (154, 84326),

Gene: Gisselle_19 Start: 17707, Stop: 18156, Start Num: 59
Candidate Starts for Gisselle_19:
(Start: 59 @17707 has 85 MA's), (86, 17821), (88, 17836), (92, 17854), (110, 17935), (111, 17941), (114, 17953), (126, 18001), (133, 18037), (140, 18055), (142, 18064), (143, 18067), (150, 18091), (151, 18094),

Gene: Glenn_23 Start: 19266, Stop: 19715, Start Num: 59
Candidate Starts for Glenn_23:
(Start: 59 @19266 has 85 MA's), (70, 19317), (89, 19404), (92, 19413), (104, 19455), (110, 19494), (114, 19512), (126, 19560), (133, 19596), (142, 19623), (143, 19626), (150, 19650), (151, 19653),

Gene: GoldDust_25 Start: 24683, Stop: 25105, Start Num: 55
Candidate Starts for GoldDust_25:
(Start: 55 @24683 has 19 MA's), (68, 24737), (81, 24779), (113, 24926), (121, 24959), (133, 25016), (148, 25061),

Gene: Gooberta_25 Start: 24682, Stop: 25104, Start Num: 55
Candidate Starts for Gooberta_25:
(Start: 55 @24682 has 19 MA's), (68, 24736), (81, 24778), (113, 24925), (121, 24958), (133, 25015), (148, 25060),

Gene: Graynor_23 Start: 19293, Stop: 19742, Start Num: 59
Candidate Starts for Graynor_23:
(34, 19173), (38, 19194), (40, 19224), (Start: 59 @19293 has 85 MA's), (70, 19344), (87, 19413), (110, 19521), (114, 19539), (126, 19587), (127, 19590), (133, 19623), (140, 19641), (150, 19677), (151, 19680),

Gene: GreenHearts_23 Start: 19376, Stop: 19825, Start Num: 59
Candidate Starts for GreenHearts_23:
(19, 19112), (23, 19154), (25, 19172), (36, 19259), (37, 19265), (38, 19277), (40, 19307), (Start: 59 @19376 has 85 MA's), (64, 19406), (70, 19427), (86, 19490), (110, 19604), (114, 19622), (117, 19631), (140, 19724), (142, 19733), (143, 19736), (150, 19760), (151, 19763),

Gene: Greenhouse_23 Start: 19300, Stop: 19749, Start Num: 59
Candidate Starts for Greenhouse_23:
(19, 19036), (23, 19078), (25, 19096), (38, 19201), (40, 19231), (Start: 59 @19300 has 85 MA's), (64, 19330), (66, 19336), (70, 19351), (86, 19414), (110, 19528), (114, 19546), (117, 19555), (140, 19648), (142, 19657), (143, 19660), (150, 19684), (151, 19687),

Gene: Guinevere_23 Start: 17798, Stop: 18220, Start Num: 55
Candidate Starts for Guinevere_23:
(Start: 55 @17798 has 19 MA's), (Start: 60 @17816 has 1 MA's), (70, 17864), (72, 17873), (78, 17891), (81, 17897), (87, 17927), (92, 17954), (100, 17981), (106, 18002), (134, 18137), (143, 18164), (148, 18179),

Gene: HeadNerd_19 Start: 17667, Stop: 18116, Start Num: 59
Candidate Starts for HeadNerd_19:
(19, 17403), (23, 17445), (24, 17448), (27, 17481), (38, 17568), (39, 17592), (Start: 59 @17667 has 85 MA's), (70, 17718), (86, 17781), (87, 17787), (100, 17841), (104, 17856), (110, 17895), (111, 17901), (114, 17913), (126, 17961), (133, 17997), (140, 18015), (142, 18024), (143, 18027), (150, 18051), (151, 18054),

Gene: Henoccus_31 Start: 26107, Stop: 26559, Start Num: 52
Candidate Starts for Henoccus_31:
(1, 24538), (2, 24550), (4, 25183), (6, 25471), (31, 26008), (Start: 52 @26107 has 18 MA's), (89, 26269), (99, 26302), (103, 26317), (105, 26323), (107, 26338), (113, 26368), (129, 26431), (134, 26461), (136, 26467), (142, 26485), (154, 26524), (159, 26533),

Gene: Herb_19 Start: 17670, Stop: 18113, Start Num: 59
Candidate Starts for Herb_19:
(18, 17400), (23, 17448), (34, 17550), (37, 17559), (Start: 59 @17670 has 85 MA's), (70, 17721), (74, 17739), (91, 17811), (110, 17898), (114, 17916), (126, 17964), (135, 18000), (141, 18018),

Gene: Hereford_24 Start: 21283, Stop: 21708, Start Num: 50
Candidate Starts for Hereford_24:
(Start: 50 @21283 has 1 MA's), (75, 21373), (80, 21385), (113, 21532), (127, 21589), (137, 21634), (148, 21667),

Gene: HotPotato_23 Start: 18568, Stop: 18972, Start Num: 60
Candidate Starts for HotPotato_23:
(Start: 41 @18502 has 4 MA's), (Start: 55 @18550 has 19 MA's), (Start: 60 @18568 has 1 MA's), (70, 18616), (72, 18625), (78, 18643), (87, 18679), (92, 18706), (100, 18733), (106, 18754), (122, 18832), (134, 18889), (143, 18916), (148, 18931),

Gene: Huckleberry_19 Start: 17667, Stop: 18116, Start Num: 59
Candidate Starts for Huckleberry_19:
(19, 17403), (23, 17445), (24, 17448), (27, 17481), (38, 17568), (39, 17592), (Start: 59 @17667 has 85 MA's), (70, 17718), (86, 17781), (87, 17787), (100, 17841), (104, 17856), (110, 17895), (111, 17901), (114, 17913), (126, 17961), (133, 17997), (140, 18015), (142, 18024), (143, 18027), (150, 18051), (151, 18054),

Gene: HunterDalle_19 Start: 17655, Stop: 18098, Start Num: 59
Candidate Starts for HunterDalle_19:
(18, 17385), (19, 17391), (29, 17490), (38, 17556), (Start: 59 @17655 has 85 MA's), (70, 17706), (71, 17712), (74, 17724), (110, 17883), (114, 17901), (132, 17973), (135, 17985), (141, 18003), (143, 18009),

Gene: Huntingdon_23 Start: 19268, Stop: 19717, Start Num: 59
Candidate Starts for Huntingdon_23:
(19, 19004), (38, 19169), (Start: 59 @19268 has 85 MA's), (86, 19382), (110, 19496), (114, 19514), (119, 19532), (126, 19562), (127, 19565), (133, 19598), (140, 19616), (142, 19625), (143, 19628), (150, 19652), (160, 19685),

Gene: IUFootball_21 Start: 18736, Stop: 19206, Start Num: 51
Candidate Starts for IUFootball_21:
(Start: 51 @18736 has 27 MA's), (72, 18820), (116, 19000),

Gene: Immaculata_23 Start: 19260, Stop: 19709, Start Num: 59
Candidate Starts for Immaculata_23:
(Start: 59 @19260 has 85 MA's), (70, 19311), (89, 19398), (104, 19449), (110, 19488), (114, 19506), (126, 19554), (133, 19590), (143, 19620), (150, 19644), (151, 19647),

Gene: Intolerant_30 Start: 26098, Stop: 26550, Start Num: 52
Candidate Starts for Intolerant_30:
(28, 25948), (31, 25999), (Start: 48 @26089 has 1 MA's), (Start: 51 @26095 has 27 MA's), (Start: 52 @26098 has 18 MA's), (66, 26161), (97, 26284), (99, 26293), (103, 26308), (105, 26314), (113, 26359), (123, 26401), (136, 26458), (142, 26476), (154, 26515),

Gene: JackieB_30 Start: 25962, Stop: 26414, Start Num: 52
Candidate Starts for JackieB_30:
(6, 25326), (7, 25410), (15, 25683), (31, 25863), (Start: 52 @25962 has 18 MA's), (89, 26124), (99, 26157), (103, 26172), (105, 26178), (113, 26223), (129, 26286), (134, 26316), (136, 26322), (142, 26340), (154, 26379), (159, 26388),

Gene: Janeemi_23 Start: 20928, Stop: 21395, Start Num: 51
Candidate Starts for Janeemi_23:
(Start: 51 @20928 has 27 MA's), (70, 21003), (71, 21009), (97, 21105), (115, 21192), (118, 21204), (155, 21342), (160, 21357),

Gene: JanetJ_23 Start: 21553, Stop: 21978, Start Num: 55
Candidate Starts for JanetJ_23:
(43, 21514), (Start: 55 @21553 has 19 MA's), (80, 21652), (120, 21829), (127, 21856), (148, 21934), (157, 21967),

Gene: Joann_23 Start: 19280, Stop: 19720, Start Num: 59
Candidate Starts for Joann_23:
(36, 19163), (37, 19169), (38, 19181), (Start: 59 @19280 has 85 MA's), (70, 19331), (87, 19400), (89, 19418), (98, 19445), (99, 19451), (105, 19472), (110, 19508), (125, 19568), (142, 19631), (143, 19634), (150, 19658), (160, 19691),

Gene: Jstan_23 Start: 19281, Stop: 19748, Start Num: 51
Candidate Starts for Jstan_23:
(Start: 51 @19281 has 27 MA's), (70, 19356), (71, 19362), (97, 19458), (115, 19545), (116, 19548), (118, 19557), (155, 19695), (160, 19710),

Gene: Judy_24 Start: 18856, Stop: 19278, Start Num: 55
Candidate Starts for Judy_24:
(Start: 55 @18856 has 19 MA's), (Start: 60 @18874 has 1 MA's), (70, 18922), (72, 18931), (78, 18949), (87, 18985), (92, 19012), (100, 19039), (106, 19060), (131, 19183), (134, 19195), (143, 19222), (148, 19237),

Gene: Jumboset_23 Start: 19209, Stop: 19658, Start Num: 59
Candidate Starts for Jumboset_23:
(Start: 59 @19209 has 85 MA's), (70, 19260), (86, 19323), (89, 19347), (92, 19356), (104, 19398), (110, 19437), (114, 19455), (126, 19503), (133, 19539), (143, 19569), (150, 19593), (151, 19596),

Gene: JustBecause_118 Start: 78079, Stop: 78513, Start Num: 52
Candidate Starts for JustBecause_118:
(30, 77962), (35, 77995), (Start: 52 @78079 has 18 MA's), (71, 78157), (154, 78478),

Gene: Kalizoi_23 Start: 19208, Stop: 19657, Start Num: 59
Candidate Starts for Kalizoi_23:
(Start: 59 @19208 has 85 MA's), (70, 19259), (89, 19346), (92, 19355), (104, 19397), (110, 19436), (114, 19454), (126, 19502), (133, 19538), (143, 19568), (150, 19592), (151, 19595),

Gene: Karkharias_23 Start: 18546, Stop: 18968, Start Num: 55
Candidate Starts for Karkharias_23:
(Start: 41 @18498 has 4 MA's), (Start: 55 @18546 has 19 MA's), (Start: 60 @18564 has 1 MA's), (70, 18612), (72, 18621), (78, 18639), (87, 18675), (92, 18702), (100, 18729), (106, 18750), (134, 18885), (143, 18912), (148, 18927),

Gene: KeAlii_21 Start: 17311, Stop: 17772, Start Num: 49
Candidate Starts for KeAlii_21:
(Start: 49 @17311 has 1 MA's), (69, 17383), (147, 17695),

Gene: Kela_119 Start: 77959, Stop: 78393, Start Num: 52
Candidate Starts for Kela_119:
(30, 77842), (35, 77875), (Start: 52 @77959 has 18 MA's), (71, 78037), (106, 78163), (154, 78358),

Gene: Kihatsu_24 Start: 18123, Stop: 18545, Start Num: 55
Candidate Starts for Kihatsu_24:
(Start: 55 @18123 has 19 MA's), (Start: 60 @18141 has 1 MA's), (70, 18189), (72, 18198), (78, 18216), (100, 18306), (106, 18327), (134, 18462), (143, 18489), (148, 18504),

Gene: KingBob_19 Start: 17670, Stop: 18113, Start Num: 59
Candidate Starts for KingBob_19:
(18, 17400), (23, 17448), (34, 17550), (37, 17559), (Start: 59 @17670 has 85 MA's), (70, 17721), (74, 17739), (91, 17811), (110, 17898), (114, 17916), (126, 17964), (135, 18000), (141, 18018),

Gene: Kittykat_19 Start: 17691, Stop: 18140, Start Num: 59
Candidate Starts for Kittykat_19:
(Start: 59 @17691 has 85 MA's), (86, 17805), (88, 17820), (92, 17838), (100, 17865), (110, 17919), (111, 17925), (114, 17937), (126, 17985), (133, 18021), (140, 18039), (142, 18048), (143, 18051), (150, 18075), (151, 18078),

Gene: Korra_24 Start: 19214, Stop: 19663, Start Num: 59
Candidate Starts for Korra_24:
(Start: 59 @19214 has 85 MA's), (70, 19265), (89, 19352), (92, 19361), (104, 19403), (110, 19442), (114, 19460), (126, 19508), (133, 19544), (142, 19571), (143, 19574), (150, 19598), (151, 19601),

Gene: Kradal_120 Start: 79008, Stop: 79442, Start Num: 52
Candidate Starts for Kradal_120:
(14, 78624), (30, 78891), (35, 78924), (Start: 52 @79008 has 18 MA's), (98, 79182), (122, 79290), (126, 79308), (138, 79356), (143, 79371), (154, 79407),

Gene: Lakshmi_23 Start: 19305, Stop: 19745, Start Num: 59
Candidate Starts for Lakshmi_23:

(19, 19041), (22, 19071), (23, 19083), (25, 19101), (32, 19179), (36, 19188), (37, 19194), (38, 19206), (Start: 59 @19305 has 85 MA's), (70, 19356), (98, 19470), (99, 19476), (105, 19497), (110, 19533), (125, 19593), (142, 19656), (143, 19659), (150, 19683), (160, 19716),

Gene: Lasagna_19 Start: 17674, Stop: 18117, Start Num: 59
Candidate Starts for Lasagna_19:
(34, 17554), (38, 17575), (44, 17617), (Start: 59 @17674 has 85 MA's), (70, 17725), (71, 17731), (72, 17734), (89, 17812), (99, 17845), (110, 17902), (133, 17998), (141, 18022), (142, 18025), (143, 18028), (150, 18052),

Gene: LazerLemon_31 Start: 26614, Stop: 27063, Start Num: 52
Candidate Starts for LazerLemon_31:
(5, 25897), (7, 26041), (15, 26332), (Start: 48 @26605 has 1 MA's), (Start: 51 @26611 has 27 MA's), (Start: 52 @26614 has 18 MA's), (89, 26776), (99, 26809), (100, 26812), (103, 26824), (105, 26830), (109, 26860), (113, 26875), (129, 26938), (142, 26992), (152, 27028), (154, 27031),

Gene: Lennox_19 Start: 17662, Stop: 18105, Start Num: 59
Candidate Starts for Lennox_19:
(18, 17392), (23, 17440), (27, 17476), (34, 17542), (38, 17563), (44, 17605), (Start: 59 @17662 has 85 MA's), (70, 17713), (71, 17719), (72, 17722), (89, 17800), (99, 17833), (110, 17890), (133, 17986), (141, 18010), (142, 18013), (143, 18016), (150, 18040),

Gene: Lenoxika_23 Start: 17812, Stop: 18216, Start Num: 60
Candidate Starts for Lenoxika_23:
(Start: 55 @17794 has 19 MA's), (Start: 60 @17812 has 1 MA's), (70, 17860), (72, 17869), (78, 17887), (81, 17893), (87, 17923), (92, 17950), (100, 17977), (106, 17998), (134, 18133), (143, 18160), (148, 18175),

Gene: Liebe_21 Start: 18736, Stop: 19206, Start Num: 51
Candidate Starts for Liebe_21:
(Start: 51 @18736 has 27 MA's), (72, 18820), (116, 19000),

Gene: LilStuart_19 Start: 17662, Stop: 18105, Start Num: 59
Candidate Starts for LilStuart_19:
(18, 17392), (23, 17440), (27, 17476), (34, 17542), (38, 17563), (44, 17605), (Start: 59 @17662 has 85 MA's), (70, 17713), (71, 17719), (72, 17722), (89, 17800), (95, 17815), (99, 17833), (110, 17890), (133, 17986), (141, 18010), (142, 18013), (143, 18016), (150, 18040),

Gene: LilyBell_23 Start: 18580, Stop: 18984, Start Num: 60
Candidate Starts for LilyBell_23:
(Start: 41 @18514 has 4 MA's), (Start: 55 @18562 has 19 MA's), (Start: 60 @18580 has 1 MA's), (70, 18628), (72, 18637), (78, 18655), (87, 18691), (92, 18718), (100, 18745), (106, 18766), (122, 18844), (134, 18901), (143, 18928), (148, 18943),

Gene: Litotes_23 Start: 19257, Stop: 19706, Start Num: 59
Candidate Starts for Litotes_23:
(34, 19137), (38, 19158), (40, 19188), (Start: 59 @19257 has 85 MA's), (70, 19308), (71, 19314), (86, 19371), (87, 19377), (110, 19485), (114, 19503), (126, 19551), (127, 19554), (133, 19587), (140, 19605), (150, 19641), (151, 19644),

Gene: London_22 Start: 19281, Stop: 19748, Start Num: 51
Candidate Starts for London_22:

(Start: 51 @19281 has 27 MA's), (70, 19356), (71, 19362), (97, 19458), (115, 19545), (118, 19557), (155, 19695), (160, 19710),

Gene: Lucy_19 Start: 17654, Stop: 18097, Start Num: 59
Candidate Starts for Lucy_19:
(18, 17384), (23, 17432), (27, 17468), (34, 17534), (38, 17555), (44, 17597), (Start: 59 @17654 has 85 MA's), (70, 17705), (71, 17711), (72, 17714), (89, 17792), (99, 17825), (110, 17882), (133, 17978), (141, 18002), (142, 18005), (143, 18008), (150, 18032),

Gene: MaGuCo_21 Start: 18669, Stop: 19139, Start Num: 51
Candidate Starts for MaGuCo_21:
(Start: 51 @18669 has 27 MA's), (106, 18876), (116, 18933),

Gene: Makoto_19 Start: 17675, Stop: 18118, Start Num: 59
Candidate Starts for Makoto_19:
(18, 17405), (23, 17453), (27, 17489), (32, 17549), (34, 17555), (38, 17576), (44, 17618), (Start: 59 @17675 has 85 MA's), (70, 17726), (71, 17732), (72, 17735), (89, 17813), (99, 17846), (110, 17903), (133, 17999), (141, 18023), (142, 18026), (143, 18029), (150, 18053),

Gene: MamaPearl_19 Start: 17672, Stop: 18121, Start Num: 59
Candidate Starts for MamaPearl_19:
(Start: 59 @17672 has 85 MA's), (70, 17723), (100, 17846), (110, 17900), (114, 17918), (126, 17966), (133, 18002), (142, 18029), (143, 18032),

Gene: Maria1952_19 Start: 17670, Stop: 18113, Start Num: 59
Candidate Starts for Maria1952_19:
(18, 17400), (23, 17448), (34, 17550), (37, 17559), (Start: 59 @17670 has 85 MA's), (70, 17721), (74, 17739), (91, 17811), (110, 17898), (114, 17916), (126, 17964), (135, 18000), (141, 18018),

Gene: Marky_31 Start: 25965, Stop: 26429, Start Num: 52
Candidate Starts for Marky_31:
(Start: 52 @25965 has 18 MA's), (66, 26028), (99, 26160), (105, 26181), (113, 26226), (130, 26295), (142, 26343), (154, 26382),

Gene: Maureen_21 Start: 18736, Stop: 19206, Start Num: 51
Candidate Starts for Maureen_21:
(Start: 51 @18736 has 27 MA's), (72, 18820), (116, 19000),

Gene: MeganNoll_23 Start: 19266, Stop: 19715, Start Num: 59
Candidate Starts for MeganNoll_23:
(Start: 59 @19266 has 85 MA's), (70, 19317), (86, 19380), (89, 19404), (92, 19413), (104, 19455), (110, 19494), (114, 19512), (126, 19560), (133, 19596), (143, 19626), (150, 19650), (151, 19653),

Gene: Microdon_30 Start: 25921, Stop: 26373, Start Num: 52
Candidate Starts for Microdon_30:
(6, 25276), (7, 25360), (9, 25474), (30, 25798), (31, 25822), (Start: 48 @25912 has 1 MA's), (Start: 51 @25918 has 27 MA's), (Start: 52 @25921 has 18 MA's), (99, 26116), (103, 26131), (105, 26137), (109, 26167), (113, 26182), (142, 26299), (154, 26338),

Gene: Misaeng_23 Start: 19350, Stop: 19799, Start Num: 59
Candidate Starts for Misaeng_23:
(36, 19233), (38, 19251), (Start: 59 @19350 has 85 MA's), (64, 19380), (65, 19383), (70, 19401), (77, 19428), (86, 19464), (87, 19470), (104, 19539), (110, 19578), (114, 19596), (126, 19644), (140,

19698), (143, 19710), (150, 19734), (151, 19737),

Gene: Moki_19 Start: 17667, Stop: 18116, Start Num: 59
Candidate Starts for Moki_19:
(19, 17403), (23, 17445), (24, 17448), (27, 17481), (38, 17568), (39, 17592), (Start: 59 @17667 has 85 MA's), (70, 17718), (86, 17781), (87, 17787), (100, 17841), (104, 17856), (110, 17895), (111, 17901), (114, 17913), (126, 17961), (133, 17997), (140, 18015), (142, 18024), (143, 18027), (150, 18051), (151, 18054),

Gene: Morrey_34 Start: 21466, Stop: 21876, Start Num: 55
Candidate Starts for Morrey_34:
(43, 21424), (Start: 55 @21466 has 19 MA's), (75, 21541), (80, 21553), (113, 21700), (127, 21757), (137, 21802), (148, 21835),

Gene: MrBoss_23 Start: 19257, Stop: 19706, Start Num: 59
Candidate Starts for MrBoss_23:
(19, 18993), (34, 19137), (38, 19158), (40, 19188), (Start: 59 @19257 has 85 MA's), (70, 19308), (87, 19377), (104, 19446), (110, 19485), (114, 19503), (126, 19551), (127, 19554), (133, 19587), (140, 19605), (150, 19641), (151, 19644),

Gene: MrGloopy_23 Start: 19200, Stop: 19649, Start Num: 59
Candidate Starts for MrGloopy_23:
(Start: 59 @19200 has 85 MA's), (70, 19251), (89, 19338), (92, 19347), (102, 19383), (104, 19389), (110, 19428), (114, 19446), (126, 19494), (133, 19530), (142, 19557), (143, 19560), (150, 19584), (151, 19587),

Gene: Music_25 Start: 24533, Stop: 24955, Start Num: 55
Candidate Starts for Music_25:
(Start: 55 @24533 has 19 MA's), (68, 24587), (113, 24776), (121, 24809), (133, 24866), (148, 24911),

Gene: Nancia_19 Start: 17674, Stop: 18117, Start Num: 59
Candidate Starts for Nancia_19:
(18, 17404), (23, 17452), (27, 17488), (34, 17554), (38, 17575), (44, 17617), (Start: 59 @17674 has 85 MA's), (70, 17725), (71, 17731), (72, 17734), (89, 17812), (95, 17827), (99, 17845), (110, 17902), (133, 17998), (141, 18022), (142, 18025), (143, 18028), (150, 18052),

Gene: Nandita_23 Start: 17798, Stop: 18220, Start Num: 55
Candidate Starts for Nandita_23:
(Start: 55 @17798 has 19 MA's), (Start: 60 @17816 has 1 MA's), (70, 17864), (72, 17873), (78, 17891), (81, 17897), (87, 17927), (92, 17954), (100, 17981), (106, 18002), (134, 18137), (143, 18164), (148, 18179),

Gene: Niobe_22 Start: 19281, Stop: 19748, Start Num: 51
Candidate Starts for Niobe_22:
(Start: 51 @19281 has 27 MA's), (70, 19356), (71, 19362), (97, 19458), (115, 19545), (116, 19548), (118, 19557), (155, 19695), (160, 19710),

Gene: Nirvana_125 Start: 82324, Stop: 82758, Start Num: 52
Candidate Starts for Nirvana_125:
(Start: 52 @82324 has 18 MA's), (87, 82453), (119, 82594), (154, 82723),

Gene: NoSwimming_24 Start: 22702, Stop: 23115, Start Num: 55
Candidate Starts for NoSwimming_24:

(43, 22663), (Start: 55 @22702 has 19 MA's), (99, 22870), (120, 22966), (127, 22993), (148, 23071), (157, 23104),

Gene: Nubia_23 Start: 19265, Stop: 19705, Start Num: 59
Candidate Starts for Nubia_23:
(19, 19001), (22, 19031), (23, 19043), (25, 19061), (32, 19139), (36, 19148), (37, 19154), (38, 19166), (Start: 59 @19265 has 85 MA's), (70, 19316), (98, 19430), (99, 19436), (105, 19457), (110, 19493), (125, 19553), (142, 19616), (143, 19619), (150, 19643), (160, 19676),

Gene: OMalley_19 Start: 17655, Stop: 18098, Start Num: 59
Candidate Starts for OMalley_19:
(18, 17385), (19, 17391), (29, 17490), (38, 17556), (Start: 59 @17655 has 85 MA's), (70, 17706), (71, 17712), (74, 17724), (110, 17883), (114, 17901), (135, 17985), (141, 18003), (143, 18009),

Gene: ObiToo_21 Start: 17476, Stop: 17937, Start Num: 51
Candidate Starts for ObiToo_21:
(Start: 51 @17476 has 27 MA's), (67, 17539), (73, 17563), (78, 17575), (96, 17644), (113, 17728), (121, 17761), (155, 17887),

Gene: OurGirlNessie_19 Start: 17654, Stop: 18097, Start Num: 59
Candidate Starts for OurGirlNessie_19:
(18, 17384), (23, 17432), (27, 17468), (32, 17528), (34, 17534), (38, 17555), (44, 17597), (Start: 59 @17654 has 85 MA's), (70, 17705), (71, 17711), (72, 17714), (89, 17792), (99, 17825), (110, 17882), (133, 17978), (141, 18002), (142, 18005), (143, 18008), (150, 18032),

Gene: Oxynfrius_23 Start: 19278, Stop: 19718, Start Num: 59
Candidate Starts for Oxynfrius_23:
(19, 19014), (22, 19044), (23, 19056), (25, 19074), (32, 19152), (36, 19161), (37, 19167), (38, 19179), (Start: 59 @19278 has 85 MA's), (70, 19329), (98, 19443), (99, 19449), (105, 19470), (110, 19506), (125, 19566), (142, 19629), (143, 19632), (150, 19656), (160, 19689),

Gene: PSonyx_29 Start: 27567, Stop: 27980, Start Num: 59
Candidate Starts for PSonyx_29:
(53, 27543), (54, 27549), (Start: 59 @27567 has 85 MA's), (Start: 62 @27582 has 1 MA's), (63, 27594), (76, 27642), (90, 27708), (94, 27720), (98, 27732), (104, 27753), (110, 27786), (112, 27795), (116, 27807), (117, 27810), (126, 27846), (127, 27849), (139, 27882), (149, 27912),

Gene: PartyCup_23 Start: 19304, Stop: 19753, Start Num: 59
Candidate Starts for PartyCup_23:
(34, 19184), (38, 19205), (40, 19235), (Start: 59 @19304 has 85 MA's), (70, 19355), (71, 19361), (87, 19424), (110, 19532), (114, 19550), (126, 19598), (127, 19601), (133, 19634), (140, 19652), (150, 19688), (151, 19691),

Gene: Peas_23 Start: 18544, Stop: 18966, Start Num: 55
Candidate Starts for Peas_23:
(Start: 41 @18496 has 4 MA's), (Start: 55 @18544 has 19 MA's), (Start: 60 @18562 has 1 MA's), (70, 18610), (72, 18619), (78, 18637), (87, 18673), (92, 18700), (100, 18727), (106, 18748), (134, 18883), (143, 18910), (148, 18925),

Gene: Phives_23 Start: 20757, Stop: 21224, Start Num: 51
Candidate Starts for Phives_23:
(Start: 51 @20757 has 27 MA's), (69, 20829), (71, 20838), (89, 20910), (97, 20934), (155, 21171), (160, 21186),

Gene: PinkFriday_19 Start: 17691, Stop: 18134, Start Num: 59
Candidate Starts for PinkFriday_19:
(Start: 59 @17691 has 85 MA's), (66, 17727), (70, 17742), (74, 17760), (110, 17919), (114, 17937), (124, 17976), (126, 17985), (135, 18021), (141, 18039), (150, 18069),

Gene: PitaDog_19 Start: 17665, Stop: 18108, Start Num: 59
Candidate Starts for PitaDog_19:
(18, 17395), (23, 17443), (27, 17479), (34, 17545), (38, 17566), (44, 17608), (Start: 59 @17665 has 85 MA's), (70, 17716), (71, 17722), (72, 17725), (89, 17803), (95, 17818), (99, 17836), (110, 17893), (133, 17989), (141, 18013), (142, 18016), (143, 18019), (150, 18043),

Gene: Potatoes_23 Start: 19261, Stop: 19710, Start Num: 59
Candidate Starts for Potatoes_23:
(Start: 59 @19261 has 85 MA's), (70, 19312), (89, 19399), (104, 19450), (110, 19489), (114, 19507), (126, 19555), (133, 19591), (143, 19621), (150, 19645), (151, 19648),

Gene: Poushou_26 Start: 24320, Stop: 24778, Start Num: 41
Candidate Starts for Poushou_26:
(Start: 41 @24320 has 4 MA's), (Start: 62 @24383 has 1 MA's), (82, 24455), (93, 24509), (100, 24536), (116, 24614), (121, 24635), (129, 24665), (140, 24707), (145, 24722),

Gene: PrairieDogTown_23 Start: 21466, Stop: 21876, Start Num: 55
Candidate Starts for PrairieDogTown_23:
(43, 21424), (Start: 55 @21466 has 19 MA's), (75, 21541), (80, 21553), (113, 21700), (127, 21757), (137, 21802), (148, 21835),

Gene: Preamble_19 Start: 17668, Stop: 18117, Start Num: 59
Candidate Starts for Preamble_19:
(Start: 59 @17668 has 85 MA's), (86, 17782), (88, 17797), (92, 17815), (100, 17842), (110, 17896), (111, 17902), (114, 17914), (126, 17962), (133, 17998), (140, 18016), (142, 18025), (143, 18028), (150, 18052), (151, 18055),

Gene: Pterodactyl_19 Start: 17655, Stop: 18098, Start Num: 59
Candidate Starts for Pterodactyl_19:
(18, 17385), (23, 17433), (27, 17469), (34, 17535), (38, 17556), (44, 17598), (Start: 59 @17655 has 85 MA's), (70, 17706), (71, 17712), (72, 17715), (89, 17793), (99, 17826), (110, 17883), (133, 17979), (141, 18003), (142, 18006), (143, 18009), (150, 18033),

Gene: Pucara_23 Start: 18561, Stop: 18965, Start Num: 60
Candidate Starts for Pucara_23:
(Start: 41 @18495 has 4 MA's), (Start: 55 @18543 has 19 MA's), (Start: 60 @18561 has 1 MA's), (67, 18597), (70, 18609), (72, 18618), (78, 18636), (87, 18672), (92, 18699), (100, 18726), (106, 18747), (134, 18882), (143, 18909), (148, 18924),

Gene: Pumancara_19 Start: 17673, Stop: 18116, Start Num: 59
Candidate Starts for Pumancara_19:
(23, 17451), (34, 17553), (37, 17562), (Start: 59 @17673 has 85 MA's), (66, 17709), (70, 17724), (74, 17742), (110, 17901), (114, 17919), (124, 17958), (126, 17967), (135, 18003), (141, 18021), (150, 18051),

Gene: Quantum_119 Start: 79008, Stop: 79442, Start Num: 52
Candidate Starts for Quantum_119:

(14, 78624), (30, 78891), (35, 78924), (Start: 52 @79008 has 18 MA's), (98, 79182), (122, 79290), (126, 79308), (138, 79356), (143, 79371), (154, 79407),

Gene: RAP15_23 Start: 19266, Stop: 19715, Start Num: 59
Candidate Starts for RAP15_23:
(Start: 59 @19266 has 85 MA's), (70, 19317), (86, 19380), (89, 19404), (92, 19413), (104, 19455), (110, 19494), (114, 19512), (126, 19560), (133, 19596), (143, 19626), (150, 19650), (151, 19653),

Gene: REQ3_54 Start: 35525, Stop: 35953, Start Num: 62
Candidate Starts for REQ3_54:
(Start: 62 @35525 has 1 MA's), (72, 35570), (84, 35615), (118, 35765), (123, 35786), (132, 35825), (138, 35846), (147, 35870), (153, 35891),

Gene: RcigaStruga_23 Start: 19268, Stop: 19717, Start Num: 59
Candidate Starts for RcigaStruga_23:
(19, 19004), (38, 19169), (Start: 59 @19268 has 85 MA's), (86, 19382), (110, 19496), (114, 19514), (119, 19532), (126, 19562), (127, 19565), (133, 19598), (140, 19616), (142, 19625), (143, 19628), (150, 19652), (160, 19685),

Gene: Reedo_21 Start: 17318, Stop: 17776, Start Num: 51
Candidate Starts for Reedo_21:
(42, 17300), (Start: 51 @17318 has 27 MA's), (73, 17405), (123, 17612), (134, 17663), (146, 17699),

Gene: Riovina_19 Start: 17655, Stop: 18098, Start Num: 59
Candidate Starts for Riovina_19:
(18, 17385), (19, 17391), (29, 17490), (38, 17556), (Start: 59 @17655 has 85 MA's), (70, 17706), (71, 17712), (74, 17724), (110, 17883), (114, 17901), (135, 17985), (141, 18003), (143, 18009),

Gene: Riverdale_23 Start: 19196, Stop: 19645, Start Num: 59
Candidate Starts for Riverdale_23:
(Start: 59 @19196 has 85 MA's), (70, 19247), (89, 19334), (104, 19385), (110, 19424), (114, 19442), (126, 19490), (133, 19526), (140, 19544), (143, 19556), (150, 19580), (151, 19583),

Gene: Rozby_23 Start: 19197, Stop: 19646, Start Num: 59
Candidate Starts for Rozby_23:
(Start: 59 @19197 has 85 MA's), (70, 19248), (89, 19335), (104, 19386), (110, 19425), (114, 19443), (126, 19491), (133, 19527), (142, 19554), (143, 19557), (150, 19581), (151, 19584),

Gene: Sarkar_120 Start: 79008, Stop: 79442, Start Num: 52
Candidate Starts for Sarkar_120:
(14, 78624), (30, 78891), (35, 78924), (Start: 52 @79008 has 18 MA's), (98, 79182), (122, 79290), (126, 79308), (138, 79356), (143, 79371), (154, 79407),

Gene: Satis_120 Start: 79004, Stop: 79438, Start Num: 52
Candidate Starts for Satis_120:
(14, 78620), (30, 78887), (35, 78920), (Start: 52 @79004 has 18 MA's), (98, 79178), (122, 79286), (126, 79304), (138, 79352), (143, 79367), (154, 79403),

Gene: Savage2526_23 Start: 19260, Stop: 19709, Start Num: 59
Candidate Starts for Savage2526_23:
(Start: 59 @19260 has 85 MA's), (70, 19311), (86, 19374), (89, 19398), (92, 19407), (104, 19449), (110, 19488), (114, 19506), (126, 19554), (133, 19590), (143, 19620), (150, 19644), (151, 19647),

Gene: Schism_23 Start: 17798, Stop: 18220, Start Num: 55
Candidate Starts for Schism_23:
(Start: 55 @17798 has 19 MA's), (Start: 60 @17816 has 1 MA's), (70, 17864), (72, 17873), (78, 17891), (81, 17897), (87, 17927), (92, 17954), (100, 17981), (106, 18002), (134, 18137), (143, 18164), (148, 18179),

Gene: Scotia_24 Start: 22705, Stop: 23118, Start Num: 55
Candidate Starts for Scotia_24:
(43, 22666), (Start: 55 @22705 has 19 MA's), (99, 22873), (120, 22969), (127, 22996), (148, 23074), (157, 23107),

Gene: Scuttle_23 Start: 19265, Stop: 19714, Start Num: 59
Candidate Starts for Scuttle_23:
(Start: 59 @19265 has 85 MA's), (70, 19316), (89, 19403), (104, 19454), (110, 19493), (114, 19511), (126, 19559), (133, 19595), (142, 19622), (143, 19625), (150, 19649), (151, 19652),

Gene: Sergei_19 Start: 17670, Stop: 18113, Start Num: 59
Candidate Starts for Sergei_19:
(18, 17400), (23, 17448), (34, 17550), (37, 17559), (Start: 59 @17670 has 85 MA's), (70, 17721), (74, 17739), (91, 17811), (110, 17898), (114, 17916), (126, 17964), (135, 18000), (141, 18018),

Gene: Shynx_31 Start: 26374, Stop: 26826, Start Num: 52
Candidate Starts for Shynx_31:
(6, 25720), (7, 25804), (15, 26092), (28, 26224), (31, 26275), (Start: 48 @26365 has 1 MA's), (Start: 51 @26371 has 27 MA's), (Start: 52 @26374 has 18 MA's), (66, 26437), (97, 26560), (99, 26569), (103, 26584), (105, 26590), (113, 26635), (123, 26677), (136, 26734), (142, 26752), (154, 26791),

Gene: Skelbel_23 Start: 19281, Stop: 19748, Start Num: 51
Candidate Starts for Skelbel_23:
(Start: 51 @19281 has 27 MA's), (70, 19356), (71, 19362), (97, 19458), (115, 19545), (116, 19548), (118, 19557), (155, 19695), (160, 19710),

Gene: Sleepyhead_22 Start: 19612, Stop: 20022, Start Num: 62
Candidate Starts for Sleepyhead_22:
(Start: 62 @19612 has 1 MA's), (106, 19786), (123, 19867), (128, 19885), (134, 19915), (147, 19951), (161, 19999),

Gene: Snek_21 Start: 16347, Stop: 16814, Start Num: 51
Candidate Starts for Snek_21:
(42, 16329), (Start: 51 @16347 has 27 MA's), (66, 16407), (80, 16449), (116, 16611),

Gene: Stuff_31 Start: 26387, Stop: 26848, Start Num: 48
Candidate Starts for Stuff_31:
(1, 24806), (3, 25421), (4, 25451), (5, 25682), (6, 25739), (7, 25823), (15, 26114), (31, 26297), (Start: 48 @26387 has 1 MA's), (Start: 51 @26393 has 27 MA's), (Start: 52 @26396 has 18 MA's), (97, 26582), (99, 26591), (103, 26606), (105, 26612), (113, 26657), (123, 26699), (136, 26756), (142, 26774), (154, 26813),

Gene: Subaru_22 Start: 19281, Stop: 19748, Start Num: 51
Candidate Starts for Subaru_22:
(Start: 51 @19281 has 27 MA's), (70, 19356), (71, 19362), (97, 19458), (115, 19545), (118, 19557), (155, 19695), (160, 19710),

Gene: Sue2_21 Start: 17971, Stop: 18432, Start Num: 51
Candidate Starts for Sue2_21:
(Start: 51 @17971 has 27 MA's), (69, 18043), (81, 18076), (89, 18124), (100, 18160), (137, 18328), (143, 18346), (147, 18358),

Gene: Supakev_19 Start: 17657, Stop: 18100, Start Num: 59
Candidate Starts for Supakev_19:
(18, 17387), (19, 17393), (29, 17492), (38, 17558), (Start: 59 @17657 has 85 MA's), (70, 17708), (71, 17714), (74, 17726), (110, 17885), (114, 17903), (135, 17987), (141, 18005), (143, 18011),

Gene: Suppi_23 Start: 19307, Stop: 19756, Start Num: 59
Candidate Starts for Suppi_23:
(19, 19043), (34, 19187), (38, 19208), (40, 19238), (Start: 59 @19307 has 85 MA's), (70, 19358), (71, 19364), (86, 19421), (87, 19427), (110, 19535), (114, 19553), (126, 19601), (127, 19604), (133, 19637), (140, 19655), (150, 19691), (151, 19694),

Gene: Taotie_26 Start: 25157, Stop: 25570, Start Num: 59
Candidate Starts for Taotie_26:
(53, 25133), (54, 25139), (Start: 59 @25157 has 85 MA's), (Start: 62 @25172 has 1 MA's), (63, 25184), (76, 25232), (90, 25298), (94, 25310), (98, 25322), (104, 25343), (110, 25376), (112, 25385), (116, 25397), (117, 25400), (126, 25436), (127, 25439), (139, 25472), (149, 25502),

Gene: TattModd_23 Start: 19259, Stop: 19708, Start Num: 59
Candidate Starts for TattModd_23:
(Start: 59 @19259 has 85 MA's), (70, 19310), (89, 19397), (92, 19406), (102, 19442), (104, 19448), (110, 19487), (114, 19505), (126, 19553), (133, 19589), (143, 19619), (150, 19643), (151, 19646),

Gene: Temper16_19 Start: 17670, Stop: 18113, Start Num: 59
Candidate Starts for Temper16_19:
(18, 17400), (23, 17448), (34, 17550), (37, 17559), (Start: 59 @17670 has 85 MA's), (70, 17721), (74, 17739), (91, 17811), (110, 17898), (114, 17916), (126, 17964), (135, 18000), (141, 18018),

Gene: TforTroy_22 Start: 19431, Stop: 19886, Start Num: 51
Candidate Starts for TforTroy_22:
(Start: 51 @19431 has 27 MA's), (67, 19494), (78, 19530), (115, 19692), (147, 19815), (155, 19842),

Gene: ThursdayNight_22 Start: 18615, Stop: 19073, Start Num: 51
Candidate Starts for ThursdayNight_22:
(Start: 51 @18615 has 27 MA's), (67, 18678), (88, 18762), (97, 18795), (105, 18825), (121, 18906), (144, 18996),

Gene: TouchMeNot_26 Start: 24491, Stop: 24949, Start Num: 41
Candidate Starts for TouchMeNot_26:
(Start: 41 @24491 has 4 MA's), (Start: 62 @24554 has 1 MA's), (82, 24626), (93, 24680), (100, 24707), (116, 24785), (121, 24806), (129, 24836), (140, 24878), (145, 24893),

Gene: Tuck_23 Start: 20900, Stop: 21367, Start Num: 51
Candidate Starts for Tuck_23:
(Start: 51 @20900 has 27 MA's), (69, 20972), (71, 20981), (89, 21053), (97, 21077), (113, 21155), (155, 21314), (160, 21329),

Gene: Tweety19_21 Start: 16346, Stop: 16813, Start Num: 51
Candidate Starts for Tweety19_21:

(42, 16328), (Start: 51 @16346 has 27 MA's), (66, 16406), (80, 16448), (116, 16610),

Gene: UNTPL_31 Start: 26213, Stop: 26668, Start Num: 51
Candidate Starts for UNTPL_31:
(15, 25934), (31, 26117), (Start: 48 @26207 has 1 MA's), (Start: 51 @26213 has 27 MA's), (Start: 52 @26216 has 18 MA's), (89, 26378), (99, 26411), (103, 26426), (105, 26432), (113, 26477), (123, 26519), (134, 26570), (136, 26576), (142, 26594), (154, 26633),

Gene: Urla_19 Start: 17674, Stop: 18123, Start Num: 59
Candidate Starts for Urla_19:
(Start: 59 @17674 has 85 MA's), (100, 17848), (110, 17902), (114, 17920), (126, 17968), (133, 18004), (142, 18031), (143, 18034),

Gene: VResidence_21 Start: 17376, Stop: 17837, Start Num: 51
Candidate Starts for VResidence_21:
(Start: 51 @17376 has 27 MA's), (67, 17439), (69, 17448), (73, 17463), (138, 17736),

Gene: Vallejo_23 Start: 19198, Stop: 19647, Start Num: 59
Candidate Starts for Vallejo_23:
(Start: 59 @19198 has 85 MA's), (70, 19249), (89, 19336), (92, 19345), (104, 19387), (110, 19426), (114, 19444), (126, 19492), (133, 19528), (140, 19546), (142, 19555), (143, 19558), (150, 19582), (151, 19585),

Gene: Vibaki_25 Start: 24558, Stop: 24980, Start Num: 55
Candidate Starts for Vibaki_25:
(Start: 55 @24558 has 19 MA's), (67, 24609), (68, 24612), (113, 24801), (121, 24834), (133, 24891), (148, 24936),

Gene: Vitus_25 Start: 21345, Stop: 21767, Start Num: 55
Candidate Starts for Vitus_25:
(Start: 55 @21345 has 19 MA's), (68, 21399), (85, 21465), (92, 21498), (106, 21546), (119, 21612), (121, 21621), (133, 21678), (148, 21723),

Gene: Vulture_19 Start: 17655, Stop: 18098, Start Num: 59
Candidate Starts for Vulture_19:
(18, 17385), (19, 17391), (29, 17490), (38, 17556), (Start: 59 @17655 has 85 MA's), (70, 17706), (71, 17712), (74, 17724), (110, 17883), (114, 17901), (132, 17973), (135, 17985), (141, 18003), (143, 18009),

Gene: Wawa_23 Start: 19235, Stop: 19684, Start Num: 59
Candidate Starts for Wawa_23:
(Start: 59 @19235 has 85 MA's), (70, 19286), (89, 19373), (92, 19382), (104, 19424), (110, 19463), (114, 19481), (126, 19529), (142, 19592), (143, 19595), (150, 19619), (151, 19622),

Gene: Wayne_23 Start: 19353, Stop: 19802, Start Num: 59
Candidate Starts for Wayne_23:
(34, 19233), (38, 19254), (40, 19284), (Start: 59 @19353 has 85 MA's), (70, 19404), (71, 19410), (87, 19473), (110, 19581), (114, 19599), (126, 19647), (133, 19683), (140, 19701), (150, 19737), (151, 19740),

Gene: Wildwest_22 Start: 18728, Stop: 19186, Start Num: 51
Candidate Starts for Wildwest_22:

(13, 18344), (21, 18524), (33, 18647), (Start: 51 @18728 has 27 MA's), (67, 18791), (69, 18800), (71, 18809), (73, 18815), (97, 18905), (100, 18917), (113, 18983), (115, 18992), (137, 19085), (155, 19142),

Gene: Wollypog_22 Start: 20463, Stop: 20921, Start Num: 58
Candidate Starts for Wollypog_22:
(Start: 58 @20463 has 1 MA's), (72, 20529), (92, 20613), (118, 20727), (137, 20802), (146, 20829), (148, 20835), (150, 20844), (158, 20868),

Gene: WonderBoy_19 Start: 17655, Stop: 18098, Start Num: 59
Candidate Starts for WonderBoy_19:
(18, 17385), (23, 17433), (27, 17469), (34, 17535), (38, 17556), (44, 17598), (Start: 59 @17655 has 85 MA's), (70, 17706), (71, 17712), (72, 17715), (89, 17793), (99, 17826), (110, 17883), (133, 17979), (141, 18003), (142, 18006), (143, 18009), (150, 18033),

Gene: Zorro_23 Start: 19214, Stop: 19663, Start Num: 59
Candidate Starts for Zorro_23:
(Start: 59 @19214 has 85 MA's), (70, 19265), (89, 19352), (92, 19361), (104, 19403), (110, 19442), (114, 19460), (126, 19508), (133, 19544), (142, 19571), (143, 19574), (150, 19598), (151, 19601),

Gene: pZL12_42c Start: 31108, Stop: 30641, Start Num: 45
Candidate Starts for pZL12_42c:
(35, 31177), (45, 31108), (61, 31048), (145, 30715), (156, 30676),