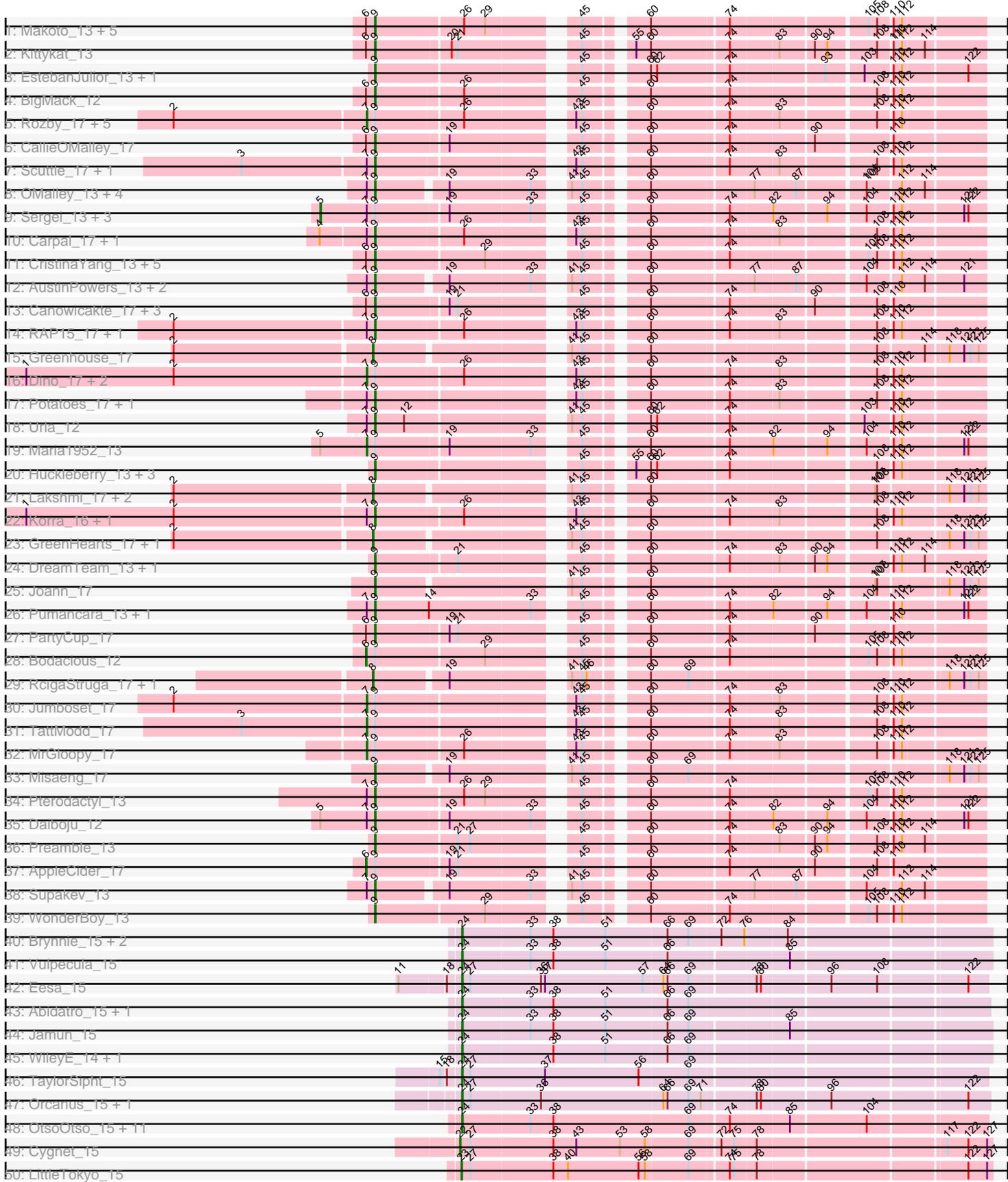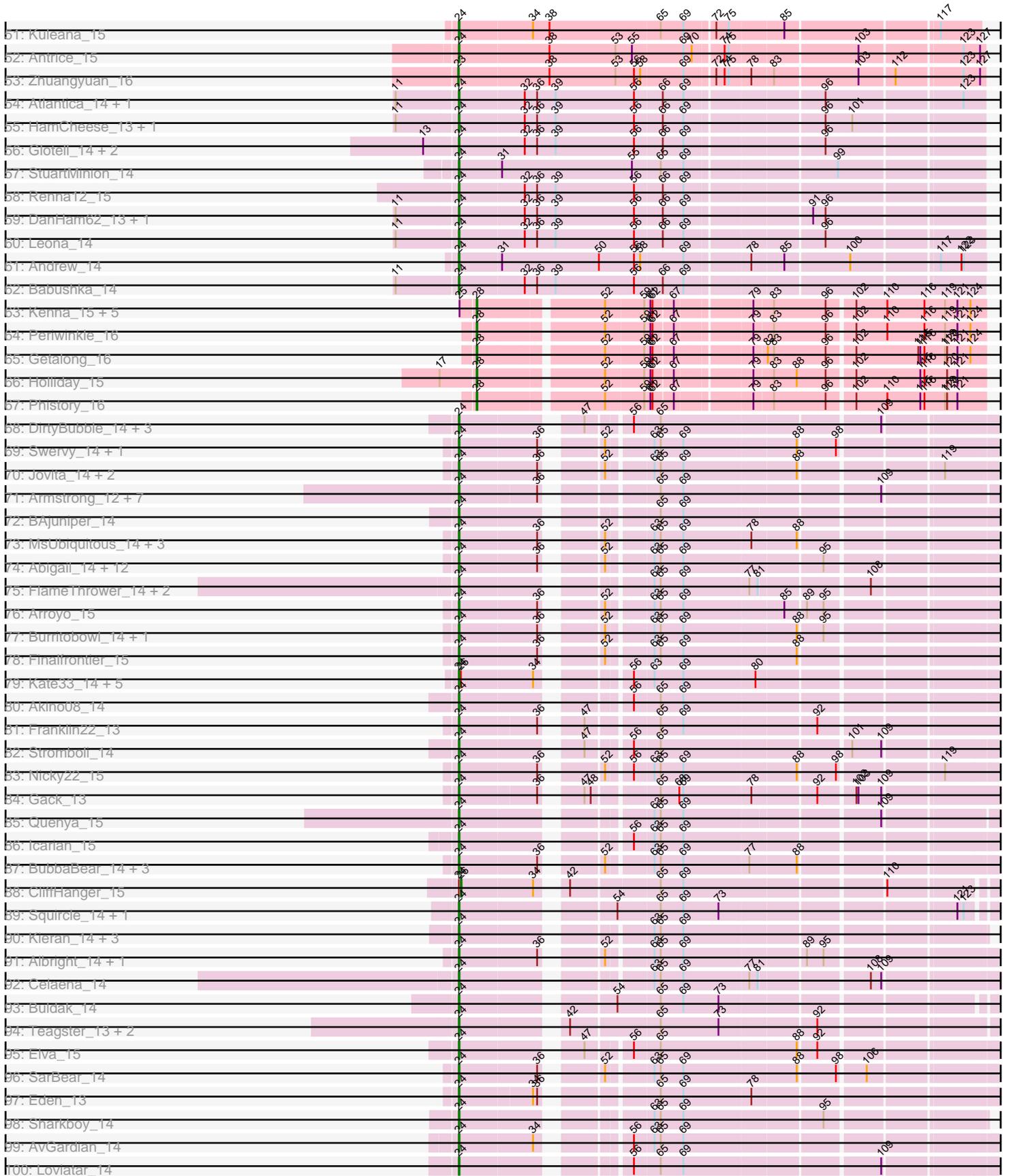# Pham 290838

Pham 290838

Pham 290838

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 290838 Report

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

Pham number 290838 has 219 members, 0 are drafts.

Phages represented in each track:
• Track 1 : Makoto_13, PitaDog_13, Christian_13, DrRobert_13, OurGirlNessie_13, Lucy_13
• Track 2 : Kittykat_13
• Track 3 : EstebanJulior_13, MamaPearl_13
• Track 4 : BigMack_12
• Track 5 : Rozby_17, Immaculata_17, Glenn_17, Savage2526_17, MeganNoll_16, Kalizoi_17
• Track 6 : CallieOMalley_17
• Track 7 : Scuttle_17, Riverdale_17
• Track 8 : OMalley_13, Eunoia_13, Aledel_12, Chridison_13, Riovina_13
• Track 9 : Sergei_13, KingBob_13, Herb_13, Temper16_13
• Track 10 : Carpal_17, Beethoven_17
• Track 11 : CristinaYang_13, Lasagna_13, LilStuart_13, Nancia_13, Lennox_13, ChewChew_13
• Track 12 : AustinPowers_13, HunterDalle_13, Vulture_13
• Track 13 : Canowicakte_17, Suppi_17, Wayne_16, Litotes_17
• Track 14 : RAP15_17, Vallejo_17
• Track 15 : Greenhouse_17
• Track 16 : Dino_17, BrotherBLo_17, Zorro_17
• Track 17 : Potatoes_17, Cholula_17
• Track 18 : Urla_12
• Track 19 : Maria1952_13
• Track 20 : Huckleberry_13, HeadNerd_12, Bennie_13, Moki_13
• Track 21 : Lakshmi_17, Albanese_17, Oxynfrius_17
• Track 22 : Korra_16, Wawa_17
• Track 23 : GreenHearts_17, Nubia_16
• Track 24 : DreamTeam_13, Gisselle_13
• Track 25 : Joann_17
• Track 26 : Pumancara_13, PinkFriday_13
• Track 27 : PartyCup_17
• Track 28 : Bodacious_12
• Track 29 : RcigaStruga_17, Huntingdon_17
• Track 30 : Jumboset_17
• Track 31 : TattModd_17
• Track 32 : MrGloopy_17
• Track 33 : Misaeng_17
• Track 34 : Pterodactyl_13

- Track 35 : Daiboju_12
- Track 36 : Preamble_13
- Track 37 : AppleCider_17
- Track 38 : Supakev_13
- Track 39 : WonderBoy_13
- Track 40 : Brynnie_15, Basilisk_15, Ruchi_15
- Track 41 : Vulpecula_15
- Track 42 : Eesa_15
- Track 43 : Abidatro_15, Galaxy_15
- Track 44 : Jamun_15
- Track 45 : WileyE_14, Chickaboom_14
- Track 46 : TaylorSipht_15
- Track 47 : Orcanus_15, Toad24_16
- Track 48 : OtsoOtso_15, Melons_16, Polka_15, Amelia_16, Cote_16, Lunar_15, Daob_16, Coral_15, Colusalem_15, Kepler_15, HannahPhantana_16, Jerole_16
- Track 49 : Cygnet_15
- Track 50 : LittleTokyo_15
- Track 51 : Kuleana_15
- Track 52 : Antrice_15
- Track 53 : Zhuangyuan_16
- Track 54 : Atlantica_14, Juno112_14
- Track 55 : HamCheese_13, PhluffyCoco_14
- Track 56 : Glotell_14, KHumphrey_14, AmiCi24_14
- Track 57 : StuartMinion_14
- Track 58 : Renna12_15
- Track 59 : DanHam62_13, RedFox_14
- Track 60 : Leona_14
- Track 61 : Andrew_14
- Track 62 : Babushka_14
- Track 63 : Kenna_15, Lutum_16, Leroy_16, Horus_16, BENtherdunthat_16, Asapag_16
- Track 64 : Periwinkle_16
- Track 65 : Getalong_16
- Track 66 : Holliday_15
- Track 67 : Phistory_16
- Track 68 : DirtyBubble_14, Stoor_14, SanaSana_15, BabyYoda_14
- Track 69 : Swervy_14, Slay_14
- Track 70 : Jovita_14, QMacho_15, Eula_14
- Track 71 : Armstrong_12, Clayda5_13, Rollins_12, Coltrane_12, Vitas_13, Brahms_12, Bernstein_12, Skylord_13
- Track 72 : BAjuniper_14
- Track 73 : MsUbiquitous_14, CupcakePrincess_14, TukTuk_14, Jabb_14
- Track 74 : Abigail_14, DickRichards_14, PhigPhack_14, Avocadoman_14, CroZenni_14, SansAfet_14, Johnathan_14, BelmontSKP_15, LimaBean_14, Kenzers_14, Lynlen_14, Bengal_14, AnnaLie_15
- Track 75 : FlameThrower_14, Bachaco_14, Katzastrophic_14
- Track 76 : Arroyo_15
- Track 77 : Burritobowl_14, Milomuff_15
- Track 78 : Finalfrontier_15
- Track 79 : Kate33_14, BabyDaisy_15, Didgeridoo_15, IndyLu_14, Lahqtemish_14, PastaFagioli_14
- Track 80 : Akino08_14
- Track 81 : Franklin22_13

- Track 82 : Stromboli_14
- Track 83 : Nicky22_15
- Track 84 : Gack_13
- Track 85 : Quenya_15
- Track 86 : Icarian_15
- Track 87 : BubbaBear_14, Albedo_14, Doobus_14, Phisb_14
- Track 88 : CliffHanger_15
- Track 89 : Squircle_14, Olliecat_14
- Track 90 : Kieran_14, Rona_14, ChiliPepper_14, Dismas_14
- Track 91 : Albright_14, Softsoap_14
- Track 92 : Celaena_14
- Track 93 : Buldak_14
- Track 94 : Teagster_13, Shayna_13, SunnyD_13
- Track 95 : Elva_15
- Track 96 : SarBear_14
- Track 97 : Eden_13
- Track 98 : Sharkboy_14
- Track 99 : AvGardian_14
- Track 100 : Loviatar_14
- Track 101 : Lilo27_14
- Track 102 : AnnabelLee_16
- Track 103 : Audell_19

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

The start number called the most often in the published annotations is 24, it was called in 120 of the 219 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
- Abidatro_15, Abigail_14, Akino08_14, Albedo_14, Albright_14, Amelia_16, AmiCi24_14, Andrew_14, AnnaLie_15, Antrice_15, Armstrong_12, Arroyo_15, Atlantica_14, AvGardian_14, Avocadoman_14, BAjuniper_14, Babushka_14, BabyDaisy_15, BabyYoda_14, Bachaco_14, Basilisk_15, BelmontSKP_15, Bengal_14, Bernstein_12, Brahms_12, Brynnie_15, BubbaBear_14, Buldak_14, Burritobowl_14, Celaena_14, Chickaboom_14, ChiliPepper_14, Clayda5_13, Coltrane_12, Colusalem_15, Coral_15, Cote_16, CroZenni_14, CupcakePrincess_14, DanHam62_13, Daob_16, DickRichards_14, Didgeridoo_15, DirtyBubble_14, Dismas_14, Doobus_14, Eden_13, Eesa_15, Elva_15, Eula_14, Finalfrontier_15, FlameThrower_14, Franklin22_13, Gack_13, Galaxy_15, Glotell_14, HamCheese_13, HannahPhantana_16, Icarian_15, IndyLu_14, Jabb_14, Jamun_15, Jerole_16, Johnathan_14, Jovita_14, Juno112_14, KHumphrey_14, Kate33_14, Katzastrophic_14, Kenzers_14, Kepler_15, Kieran_14, Kuleana_15, Lahqtemish_14, Leona_14, Lilo27_14, LimaBean_14, Loviatar_14, Lunar_15, Lynlen_14, Melons_16, Milomuff_15, MsUbiquitous_14, Nicky22_15, Olliecat_14, Orcanus_15, OtsoOtso_15, PastaFagioli_14, PhigPhack_14, Phisb_14, PhluffyCoco_14, Polka_15, QMacho_15, Quenya_15, RedFox_14, Renna12_15, Rollins_12, Rona_14, Ruchi_15, SanaSana_15, SansAfet_14, SarBear_14, Sharkboy_14, Shayna_13, Skylord_13, Slay_14, Softsoap_14, Squircle_14, Stoor_14, Stromboli_14, StuartMinion_14, SunnyD_13, Swervy_14, TaylorSipht_15, Teagster_13, Toad24_16, TukTuk_14, Vitas_13, Vulpecula_15, WileyE_14,

Genes that have the "Most Annotated" start but do not call it:
• CliffHanger_15,

Genes that do not have the "Most Annotated" start:
• Albanese_17, Aledel_12, AnnabelLee_16, AppleCider_17, Asapag_16, Audell_19, AustinPowers_13, BENtherdunthat_16, Beethoven_17, Bennie_13, BigMack_12, Bodacious_12, BrotherBLo_17, CallieOMalley_17, Canowicakte_17, Carpal_17, ChewChew_13, Cholula_17, Chridison_13, Christian_13, CristinaYang_13, Cygnet_15, Daiboju_12, Dino_17, DrRobert_13, DreamTeam_13, EstebanJulior_13, Eunoia_13, Getalong_16, Gisselle_13, Glenn_17, GreenHearts_17, Greenhouse_17, HeadNerd_12, Herb_13, Holliday_15, Horus_16, Huckleberry_13, HunterDalle_13, Huntingdon_17, Immaculata_17, Joann_17, Jumboset_17, Kalizoi_17, Kenna_15, KingBob_13, Kittykat_13, Korra_16, Lakshmi_17, Lasagna_13, Lennox_13, Leroy_16, LilStuart_13, Litotes_17, LittleTokyo_15, Lucy_13, Lutum_16, Makoto_13, MamaPearl_13, Maria1952_13, MeganNoll_16, Misaeng_17, Moki_13, MrGloopy_17, Nancia_13, Nubia_16, OMalley_13, OurGirlNessie_13, Oxynfrius_17, PartyCup_17, Periwinkle_16, Phistory_16, PinkFriday_13, PitaDog_13, Potatoes_17, Preamble_13, Pterodactyl_13, Pumancara_13, RAP15_17, RcigaStruga_17, Riovina_13, Riverdale_17, Rozby_17, Savage2526_17, Scuttle_17, Sergei_13, Supakev_13, Suppi_17, TattModd_17, Temper16_13, Urla_12, Vallejo_17, Vulture_13, Wawa_17, Wayne_16, WonderBoy_13, Zhuangyuan_16, Zorro_17,

Summary by start number:

Start 5:
• Found in 6 of 219 (2.7%) of genes in pham
• Manual Annotations of this start: 4 of 219
• Called 66.7% of time when present
• Phage (with cluster) where this start called: Herb_13 (AK), KingBob_13 (AK), Sergei_13 (AK), Temper16_13 (AK),

Start 6:
• Found in 22 of 219 (10.0%) of genes in pham
• Manual Annotations of this start: 2 of 219
• Called 9.1% of time when present
• Phage (with cluster) where this start called: AppleCider_17 (AK), Bodacious_12 (AK),

Start 7:
• Found in 41 of 219 (18.7%) of genes in pham
• Manual Annotations of this start: 13 of 219
• Called 31.7% of time when present
• Phage (with cluster) where this start called: BrotherBLo_17 (AK), Dino_17 (AK), Glenn_17 (AK), Immaculata_17 (AK), Jumboset_17 (AK), Kalizoi_17 (AK), Maria1952_13 (AK), MeganNoll_16 (AK), MrGloopy_17 (AK), Rozby_17 (AK), Savage2526_17 (AK), TattModd_17 (AK), Zorro_17 (AK),

Start 8:
• Found in 8 of 219 (3.7%) of genes in pham
• Manual Annotations of this start: 8 of 219
• Called 100.0% of time when present

• Phage (with cluster) where this start called: Albanese_17 (AK), GreenHearts_17 (AK), Greenhouse_17 (AK), Huntingdon_17 (AK), Lakshmi_17 (AK), Nubia_16 (AK), Oxynfrius_17 (AK), RcigaStruga_17 (AK),

Start 9:
• Found in 75 of 219 (34.2%) of genes in pham
• Manual Annotations of this start: 56 of 219
• Called 74.7% of time when present
• Phage (with cluster) where this start called: Aledel_12 (AK), AustinPowers_13 (AK), Beethoven_17 (AK), Bennie_13 (AK), BigMack_12 (AK), CallieOMalley_17 (AK), Canowicakte_17 (AK), Carpal_17 (AK), ChewChew_13 (AK), Cholula_17 (AK), Chridison_13 (AK), Christian_13 (AK), CristinaYang_13 (AK), Daiboju_12 (AK), DrRobert_13 (AK), DreamTeam_13 (AK), EstebanJulior_13 (AK), Eunoia_13 (AK), Gisselle_13 (AK), HeadNerd_12 (AK), Huckleberry_13 (AK), HunterDalle_13 (AK), Joann_17 (AK), Kittykat_13 (AK), Korra_16 (AK), Lasagna_13 (AK), Lennox_13 (AK), LilStuart_13 (AK), Litotes_17 (AK), Lucy_13 (AK), Makoto_13 (AK), MamaPearl_13 (AK), Misaeng_17 (AK), Moki_13 (AK), Nancia_13 (AK), OMalley_13 (AK), OurGirlNessie_13 (AK), PartyCup_17 (AK), PinkFriday_13 (AK), PitaDog_13 (AK), Potatoes_17 (AK), Preamble_13 (AK), Pterodactyl_13 (AK), Pumancara_13 (AK), RAP15_17 (AK), Riovina_13 (AK), Riverdale_17 (AK), Scuttle_17 (AK), Supakev_13 (AK), Suppi_17 (AK), Urla_12 (AK), Vallejo_17 (AK), Vulture_13 (AK), Wawa_17 (AK), Wayne_16 (AK), WonderBoy_13 (AK),

Start 16:
• Found in 2 of 219 (0.9%) of genes in pham
• Manual Annotations of this start: 2 of 219
• Called 100.0% of time when present
• Phage (with cluster) where this start called: AnnabelLee_16 (FR), Audell_19 (FR),

Start 22:
• Found in 1 of 219 (0.5%) of genes in pham
• Manual Annotations of this start: 1 of 219
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Cygnet_15 (AS2),

Start 23:
• Found in 2 of 219 (0.9%) of genes in pham
• Manual Annotations of this start: 2 of 219
• Called 100.0% of time when present
• Phage (with cluster) where this start called: LittleTokyo_15 (AS2), Zhuangyuan_16 (AS2),

Start 24:
• Found in 121 of 219 (55.3%) of genes in pham
• Manual Annotations of this start: 120 of 219
• Called 99.2% of time when present
• Phage (with cluster) where this start called: Abidatro_15 (AS1), Abigail_14 (EB), Akino08_14 (EB), Albedo_14 (EB), Albright_14 (EB), Amelia_16 (AS2), AmiCi24_14 (AS3), Andrew_14 (AS3), AnnaLie_15 (EB), Antrice_15 (AS2), Armstrong_12 (EB), Arroyo_15 (EB), Atlantica_14 (AS3), AvGardian_14 (EB), Avocadoman_14 (EB), BAjuniper_14 (EB), Babushka_14 (AS3), BabyDaisy_15 (EB), BabyYoda_14 (EB), Bachaco_14 (EB), Basilisk_15 (AS1), BelmontSKP_15 (EB), Bengal_14 (EB), Bernstein_12 (EB), Brahms_12 (EB), Brynnie_15 (AS1), BubbaBear_14 (EB),

Buldak_14 (EB), Burritobowl_14 (EB), Celaena_14 (EB), Chickaboom_14 (AS1), ChiliPepper_14 (EB), Clayda5_13 (EB), Coltrane_12 (EB), Colusalem_15 (AS2), Coral_15 (AS2), Cote_16 (AS2), CroZenni_14 (EB), CupcakePrincess_14 (EB), DanHam62_13 (AS3), Daob_16 (AS2), DickRichards_14 (EB), Didgeridoo_15 (EB), DirtyBubble_14 (EB), Dismas_14 (EB), Doobus_14 (EB), Eden_13 (EB), Eesa_15 (AS1), Elva_15 (EB), Eula_14 (EB), Finalfrontier_15 (EB), FlameThrower_14 (EB), Franklin22_13 (EB), Gack_13 (EB), Galaxy_15 (AS1), Glotell_14 (AS3), HamCheese_13 (AS3), HannahPhantana_16 (AS2), Icarian_15 (EB), IndyLu_14 (EB), Jabb_14 (EB), Jamun_15 (AS1), Jerole_16 (AS2), Johnathan_14 (EB), Jovita_14 (EB), Juno112_14 (AS3), KHumphrey_14 (AS3), Kate33_14 (EB), Katzastrophic_14 (EB), Kenzers_14 (EB), Kepler_15 (AS2), Kieran_14 (EB), Kuleana_15 (AS2), Lahqtemish_14 (EB), Leona_14 (AS3), Lilo27_14 (EB), LimaBean_14 (EB), Loviatar_14 (EB), Lunar_15 (AS2), Lynlen_14 (EB), Melons_16 (AS2), Milomuff_15 (EB), MsUbiquitous_14 (EB), Nicky22_15 (EB), Olliecat_14 (EB), Orcanus_15 (AS1), OtsoOtso_15 (AS2), PastaFagioli_14 (EB), PhigPhack_14 (EB), Phisb_14 (EB), PhluffyCoco_14 (AS3), Polka_15 (AS2), QMacho_15 (EB), Quenya_15 (EB), RedFox_14 (AS3), Renna12_15 (AS3), Rollins_12 (EB), Rona_14 (EB), Ruchi_15 (AS1), SanaSana_15 (EB), SansAfet_14 (EB), SarBear_14 (EB), Sharkboy_14 (EB), Shayna_13 (EB), Skylord_13 (EB), Slay_14 (EB), Softsoap_14 (EB), Squircle_14 (EB), Stoor_14 (EB), Stromboli_14 (EB), StuartMinion_14 (AS3), SunnyD_13 (EB), Swervy_14 (EB), TaylorSipht_15 (AS1), Teagster_13 (EB), Toad24_16 (AS1), TukTuk_14 (EB), Vitas_13 (EB), Vulpecula_15 (AS1), WileyE_14 (AS1),

Start 26:
• Found in 31 of 219 (14.2%) of genes in pham
• Manual Annotations of this start: 1 of 219
• Called 3.2% of time when present
• Phage (with cluster) where this start called: CliffHanger_15 (EB),

Start 28:
• Found in 10 of 219 (4.6%) of genes in pham
• Manual Annotations of this start: 10 of 219
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Asapag_16 (DN1), BENtherdunthat_16 (DN1), Getalong_16 (DN1), Holliday_15 (DN1), Horus_16 (DN1), Kenna_15 (DN1), Leroy_16 (DN1), Lutum_16 (DN1), Periwinkle_16 (DN1), Phistory_16 (DN1),

Summary by clusters:

There are 7 clusters represented in this pham: AS3, AS2, FR, AK, AS1, EB, DN1,

Info for manual annotations of cluster AK:
•Start number 5 was manually annotated 4 times for cluster AK.
•Start number 6 was manually annotated 2 times for cluster AK.
•Start number 7 was manually annotated 13 times for cluster AK.
•Start number 8 was manually annotated 8 times for cluster AK.
•Start number 9 was manually annotated 56 times for cluster AK.

Info for manual annotations of cluster AS1:
•Start number 24 was manually annotated 13 times for cluster AS1.

Info for manual annotations of cluster AS2:

•Start number 22 was manually annotated 1 time for cluster AS2.
•Start number 23 was manually annotated 2 times for cluster AS2.
•Start number 24 was manually annotated 14 times for cluster AS2.

Info for manual annotations of cluster AS3:
•Start number 24 was manually annotated 14 times for cluster AS3.

Info for manual annotations of cluster DN1:
•Start number 28 was manually annotated 10 times for cluster DN1.

Info for manual annotations of cluster EB:
•Start number 24 was manually annotated 79 times for cluster EB.
•Start number 26 was manually annotated 1 time for cluster EB.

Info for manual annotations of cluster FR:
•Start number 16 was manually annotated 2 times for cluster FR.

Gene Information:

Gene: Abidatro_15 Start: 9744, Stop: 10471, Start Num: 24
Candidate Starts for Abidatro_15:
(Start: 24 @9744 has 120 MA's), (33, 9840), (38, 9873), (51, 9948), (66, 10035), (69, 10065),

Gene: Abigail_14 Start: 9362, Stop: 10053, Start Num: 24
Candidate Starts for Abigail_14:
(Start: 24 @9362 has 120 MA's), (36, 9473), (52, 9536), (63, 9593), (65, 9602), (69, 9635), (95, 9827),

Gene: Akino08_14 Start: 9518, Stop: 10209, Start Num: 24
Candidate Starts for Akino08_14:
(Start: 24 @9518 has 120 MA's), (56, 9722), (65, 9758), (69, 9791),

Gene: Albanese_17 Start: 11894, Stop: 12654, Start Num: 8
Candidate Starts for Albanese_17:
(2, 11618), (Start: 8 @11894 has 8 MA's), (41, 12131), (45, 12146), (60, 12218), (107, 12512), (108, 12515), (118, 12602), (121, 12623), (123, 12632), (125, 12644),

Gene: Albedo_14 Start: 9208, Stop: 9899, Start Num: 24
Candidate Starts for Albedo_14:
(Start: 24 @9208 has 120 MA's), (36, 9319), (52, 9382), (63, 9439), (65, 9448), (69, 9481), (77, 9574), (88, 9640),

Gene: Albright_14 Start: 9243, Stop: 9934, Start Num: 24
Candidate Starts for Albright_14:
(Start: 24 @9243 has 120 MA's), (36, 9354), (52, 9417), (63, 9474), (65, 9483), (69, 9516), (89, 9684), (95, 9708),

Gene: Aledel_12 Start: 8974, Stop: 9731, Start Num: 9
Candidate Starts for Aledel_12:
(Start: 7 @8965 has 13 MA's), (Start: 9 @8974 has 56 MA's), (19, 9067), (33, 9181), (41, 9208), (45, 9223), (60, 9295), (77, 9433), (87, 9487), (104, 9574), (105, 9577), (112, 9619), (114, 9649),

Gene: Amelia_16 Start: 9644, Stop: 10362, Start Num: 24
Candidate Starts for Amelia_16:
(Start: 24 @9644 has 120 MA's), (33, 9740), (38, 9773), (69, 9965), (74, 10016), (85, 10097), (104, 10202),

Gene: AmiCi24_14 Start: 9058, Stop: 9782, Start Num: 24
Candidate Starts for AmiCi24_14:
(13, 9016), (Start: 24 @9058 has 120 MA's), (32, 9151), (36, 9169), (39, 9196), (56, 9310), (66, 9349), (69, 9379), (96, 9565),

Gene: Andrew_14 Start: 9438, Stop: 10162, Start Num: 24
Candidate Starts for Andrew_14:
(Start: 24 @9438 has 120 MA's), (31, 9498), (50, 9639), (56, 9690), (58, 9699), (69, 9759), (78, 9846), (85, 9891), (100, 9981), (117, 10098), (122, 10128), (123, 10131),

Gene: AnnaLie_15 Start: 9652, Stop: 10343, Start Num: 24
Candidate Starts for AnnaLie_15:
(Start: 24 @9652 has 120 MA's), (36, 9763), (52, 9826), (63, 9883), (65, 9892), (69, 9925), (95, 10117),

Gene: AnnabelLee_16 Start: 8830, Stop: 9566, Start Num: 16
Candidate Starts for AnnabelLee_16:
(Start: 16 @8830 has 2 MA's), (30, 8914), (43, 9007), (44, 9010), (49, 9037), (61, 9115), (72, 9199), (74, 9211), (79, 9250), (83, 9280), (113, 9463), (125, 9541), (126, 9547),

Gene: Antrice_15 Start: 9399, Stop: 10123, Start Num: 24
Candidate Starts for Antrice_15:
(Start: 24 @9399 has 120 MA's), (38, 9528), (53, 9624), (55, 9648), (69, 9720), (70, 9732), (74, 9771), (75, 9777), (103, 9954), (123, 10092), (127, 10116),

Gene: AppleCider_17 Start: 11828, Stop: 12606, Start Num: 6
Candidate Starts for AppleCider_17:
(Start: 6 @11828 has 2 MA's), (Start: 9 @11840 has 56 MA's), (19, 11939), (21, 11951), (45, 12095), (60, 12167), (74, 12272), (90, 12383), (108, 12464), (110, 12482),

Gene: Armstrong_12 Start: 8785, Stop: 9494, Start Num: 24
Candidate Starts for Armstrong_12:
(Start: 24 @8785 has 120 MA's), (36, 8893), (65, 9025), (69, 9058), (109, 9325),

Gene: Arroyo_15 Start: 9713, Stop: 10404, Start Num: 24
Candidate Starts for Arroyo_15:
(Start: 24 @9713 has 120 MA's), (36, 9824), (52, 9887), (63, 9944), (65, 9953), (69, 9986), (85, 10127), (89, 10154), (95, 10178),

Gene: Asapag_16 Start: 8335, Stop: 9014, Start Num: 28
Candidate Starts for Asapag_16:
(25, 8314), (Start: 28 @8335 has 10 MA's), (52, 8500), (59, 8554), (61, 8560), (62, 8563), (67, 8590), (79, 8689), (83, 8716), (96, 8791), (102, 8827), (110, 8872), (116, 8926), (119, 8956), (121, 8974), (124, 8992),

Gene: Atlantica_14 Start: 9060, Stop: 9784, Start Num: 24
Candidate Starts for Atlantica_14:
(11, 8976), (Start: 24 @9060 has 120 MA's), (32, 9153), (36, 9171), (39, 9198), (56, 9312), (66, 9351), (69, 9381), (96, 9567), (123, 9753),

Gene: Audell_19 Start: 12164, Stop: 12891, Start Num: 16
Candidate Starts for Audell_19:
(10, 12092), (Start: 16 @12164 has 2 MA's), (35, 12296), (49, 12365), (61, 12443), (72, 12527), (79, 12578), (83, 12605), (86, 12623), (97, 12677), (105, 12719), (121, 12845), (125, 12866),

Gene: AustinPowers_13 Start: 8975, Stop: 9732, Start Num: 9
Candidate Starts for AustinPowers_13:
(Start: 7 @8966 has 13 MA's), (Start: 9 @8975 has 56 MA's), (19, 9068), (33, 9182), (41, 9209), (45, 9224), (60, 9296), (77, 9434), (87, 9488), (104, 9575), (112, 9620), (114, 9650), (121, 9701),

Gene: AvGardian_14 Start: 9267, Stop: 9958, Start Num: 24
Candidate Starts for AvGardian_14:
(Start: 24 @9267 has 120 MA's), (34, 9372), (56, 9471), (63, 9498), (65, 9507), (69, 9540),

Gene: Avocadoman_14 Start: 9305, Stop: 9996, Start Num: 24
Candidate Starts for Avocadoman_14:
(Start: 24 @9305 has 120 MA's), (36, 9416), (52, 9479), (63, 9536), (65, 9545), (69, 9578), (95, 9770),

Gene: BAjuniper_14 Start: 8933, Stop: 9645, Start Num: 24
Candidate Starts for BAjuniper_14:
(Start: 24 @8933 has 120 MA's), (65, 9173), (69, 9206),

Gene: BENtherdunthat_16 Start: 8335, Stop: 9014, Start Num: 28
Candidate Starts for BENtherdunthat_16:
(25, 8314), (Start: 28 @8335 has 10 MA's), (52, 8500), (59, 8554), (61, 8560), (62, 8563), (67, 8590), (79, 8689), (83, 8716), (96, 8791), (102, 8827), (110, 8872), (116, 8926), (119, 8956), (121, 8974), (124, 8992),

Gene: Babushka_14 Start: 9108, Stop: 9832, Start Num: 24
Candidate Starts for Babushka_14:
(11, 9024), (Start: 24 @9108 has 120 MA's), (32, 9201), (36, 9219), (39, 9246), (56, 9360), (66, 9399), (69, 9429),

Gene: BabyDaisy_15 Start: 9464, Stop: 10155, Start Num: 24
Candidate Starts for BabyDaisy_15:
(Start: 24 @9464 has 120 MA's), (Start: 26 @9467 has 1 MA's), (34, 9569), (56, 9668), (63, 9695), (69, 9737), (80, 9839),

Gene: BabyYoda_14 Start: 9464, Stop: 10155, Start Num: 24
Candidate Starts for BabyYoda_14:
(Start: 24 @9464 has 120 MA's), (47, 9614), (56, 9668), (65, 9704), (109, 10004),

Gene: Bachaco_14 Start: 9138, Stop: 9847, Start Num: 24
Candidate Starts for Bachaco_14:
(Start: 24 @9138 has 120 MA's), (63, 9369), (65, 9378), (69, 9411), (77, 9504), (81, 9516), (108, 9660),

Gene: Basilisk_15 Start: 10064, Stop: 10794, Start Num: 24
Candidate Starts for Basilisk_15:
(Start: 24 @10064 has 120 MA's), (33, 10160), (38, 10193), (51, 10268), (66, 10355), (69, 10385), (72, 10430), (76, 10463), (84, 10520),

Gene: Beethoven_17 Start: 11795, Stop: 12561, Start Num: 9

Candidate Starts for Beethoven_17:
(4, 11723), (Start: 7 @11786 has 13 MA's), (Start: 9 @11795 has 56 MA's), (Start: 26 @11915 has 1 MA's), (43, 12041), (45, 12050), (60, 12122), (74, 12227), (83, 12293), (108, 12419), (110, 12437), (112, 12449),

Gene: BelmontSKP_15 Start: 9652, Stop: 10343, Start Num: 24
Candidate Starts for BelmontSKP_15:
(Start: 24 @9652 has 120 MA's), (36, 9763), (52, 9826), (63, 9883), (65, 9892), (69, 9925), (95, 10117),

Gene: Bengal_14 Start: 9243, Stop: 9934, Start Num: 24
Candidate Starts for Bengal_14:
(Start: 24 @9243 has 120 MA's), (36, 9354), (52, 9417), (63, 9474), (65, 9483), (69, 9516), (95, 9708),

Gene: Bennie_13 Start: 8948, Stop: 9714, Start Num: 9
Candidate Starts for Bennie_13:
(Start: 9 @8948 has 56 MA's), (45, 9203), (55, 9254), (60, 9275), (62, 9284), (74, 9380), (108, 9572), (110, 9590), (112, 9602),

Gene: Bernstein_12 Start: 8845, Stop: 9554, Start Num: 24
Candidate Starts for Bernstein_12:
(Start: 24 @8845 has 120 MA's), (36, 8953), (65, 9085), (69, 9118), (109, 9385),

Gene: BigMack_12 Start: 8944, Stop: 9710, Start Num: 9
Candidate Starts for BigMack_12:
(Start: 6 @8932 has 2 MA's), (Start: 9 @8944 has 56 MA's), (Start: 26 @9064 has 1 MA's), (45, 9199), (60, 9271), (74, 9376), (108, 9568), (110, 9586), (112, 9598),

Gene: Bodacious_12 Start: 8930, Stop: 9711, Start Num: 6
Candidate Starts for Bodacious_12:
(Start: 6 @8930 has 2 MA's), (Start: 9 @8942 has 56 MA's), (29, 9095), (45, 9200), (60, 9272), (74, 9377), (105, 9557), (108, 9569), (110, 9587), (112, 9599),

Gene: Brahms_12 Start: 8785, Stop: 9494, Start Num: 24
Candidate Starts for Brahms_12:
(Start: 24 @8785 has 120 MA's), (36, 8893), (65, 9025), (69, 9058), (109, 9325),

Gene: BrotherBLo_17 Start: 11792, Stop: 12567, Start Num: 7
Candidate Starts for BrotherBLo_17:
(1, 11306), (2, 11519), (Start: 7 @11792 has 13 MA's), (Start: 9 @11801 has 56 MA's), (Start: 26 @11921 has 1 MA's), (43, 12047), (45, 12056), (60, 12128), (74, 12233), (83, 12299), (108, 12425), (110, 12443), (112, 12455),

Gene: Brynnie_15 Start: 9876, Stop: 10606, Start Num: 24
Candidate Starts for Brynnie_15:
(Start: 24 @9876 has 120 MA's), (33, 9972), (38, 10005), (51, 10080), (66, 10167), (69, 10197), (72, 10242), (76, 10275), (84, 10332),

Gene: BubbaBear_14 Start: 9208, Stop: 9899, Start Num: 24
Candidate Starts for BubbaBear_14:
(Start: 24 @9208 has 120 MA's), (36, 9319), (52, 9382), (63, 9439), (65, 9448), (69, 9481), (77, 9574), (88, 9640),

Gene: Buldak_14 Start: 9315, Stop: 10006, Start Num: 24

Candidate Starts for Buldak_14:
(Start: 24 @9315 has 120 MA's), (54, 9507), (65, 9567), (69, 9600), (73, 9651),

Gene: Burritobowl_14 Start: 9270, Stop: 9961, Start Num: 24
Candidate Starts for Burritobowl_14:
(Start: 24 @9270 has 120 MA's), (36, 9381), (52, 9444), (63, 9501), (65, 9510), (69, 9543), (88, 9702), (95, 9735),

Gene: CallieOMalley_17 Start: 11840, Stop: 12606, Start Num: 9
Candidate Starts for CallieOMalley_17:
(Start: 6 @11828 has 2 MA's), (Start: 9 @11840 has 56 MA's), (19, 11939), (45, 12095), (60, 12167), (74, 12272), (90, 12383), (110, 12482),

Gene: Canowicakte_17 Start: 11875, Stop: 12641, Start Num: 9
Candidate Starts for Canowicakte_17:
(Start: 6 @11863 has 2 MA's), (Start: 9 @11875 has 56 MA's), (19, 11974), (21, 11986), (45, 12130), (60, 12202), (74, 12307), (90, 12418), (108, 12499), (110, 12517),

Gene: Carpal_17 Start: 11802, Stop: 12568, Start Num: 9
Candidate Starts for Carpal_17:
(4, 11730), (Start: 7 @11793 has 13 MA's), (Start: 9 @11802 has 56 MA's), (Start: 26 @11922 has 1 MA's), (43, 12048), (45, 12057), (60, 12129), (74, 12234), (83, 12300), (108, 12426), (110, 12444), (112, 12456),

Gene: Celaena_14 Start: 9074, Stop: 9783, Start Num: 24
Candidate Starts for Celaena_14:
(Start: 24 @9074 has 120 MA's), (63, 9305), (65, 9314), (69, 9347), (77, 9440), (81, 9452), (108, 9596), (109, 9611),

Gene: ChewChew_13 Start: 8941, Stop: 9710, Start Num: 9
Candidate Starts for ChewChew_13:
(Start: 6 @8929 has 2 MA's), (Start: 9 @8941 has 56 MA's), (29, 9094), (45, 9199), (60, 9271), (74, 9376), (105, 9556), (108, 9568), (110, 9586), (112, 9598),

Gene: Chickaboom_14 Start: 9421, Stop: 10145, Start Num: 24
Candidate Starts for Chickaboom_14:
(Start: 24 @9421 has 120 MA's), (38, 9550), (51, 9625), (66, 9712), (69, 9742),

Gene: ChiliPepper_14 Start: 9439, Stop: 10115, Start Num: 24
Candidate Starts for ChiliPepper_14:
(Start: 24 @9439 has 120 MA's), (63, 9670), (65, 9679), (69, 9712),

Gene: Cholula_17 Start: 11847, Stop: 12613, Start Num: 9
Candidate Starts for Cholula_17:
(Start: 7 @11838 has 13 MA's), (Start: 9 @11847 has 56 MA's), (43, 12093), (45, 12102), (60, 12174), (74, 12279), (83, 12345), (108, 12471), (110, 12489), (112, 12501),

Gene: Chridison_13 Start: 8975, Stop: 9732, Start Num: 9
Candidate Starts for Chridison_13:
(Start: 7 @8966 has 13 MA's), (Start: 9 @8975 has 56 MA's), (19, 9068), (33, 9182), (41, 9209), (45, 9224), (60, 9296), (77, 9434), (87, 9488), (104, 9575), (105, 9578), (112, 9620), (114, 9650),

Gene: Christian_13 Start: 8942, Stop: 9711, Start Num: 9

Candidate Starts for Christian_13:
(Start: 6 @8930 has 2 MA's), (Start: 9 @8942 has 56 MA's), (Start: 26 @9065 has 1 MA's), (29, 9095), (45, 9200), (60, 9272), (74, 9377), (105, 9557), (108, 9569), (110, 9587), (112, 9599),

Gene: Clayda5_13 Start: 8785, Stop: 9494, Start Num: 24
Candidate Starts for Clayda5_13:
(Start: 24 @8785 has 120 MA's), (36, 8893), (65, 9025), (69, 9058), (109, 9325),

Gene: CliffHanger_15 Start: 8971, Stop: 9659, Start Num: 26
Candidate Starts for CliffHanger_15:
(Start: 24 @8968 has 120 MA's), (Start: 26 @8971 has 1 MA's), (34, 9073), (42, 9097), (65, 9217), (69, 9250), (110, 9523),

Gene: Coltrane_12 Start: 8785, Stop: 9494, Start Num: 24
Candidate Starts for Coltrane_12:
(Start: 24 @8785 has 120 MA's), (36, 8893), (65, 9025), (69, 9058), (109, 9325),

Gene: Colusalem_15 Start: 9483, Stop: 10201, Start Num: 24
Candidate Starts for Colusalem_15:
(Start: 24 @9483 has 120 MA's), (33, 9579), (38, 9612), (69, 9804), (74, 9855), (85, 9936), (104, 10041),

Gene: Coral_15 Start: 9483, Stop: 10201, Start Num: 24
Candidate Starts for Coral_15:
(Start: 24 @9483 has 120 MA's), (33, 9579), (38, 9612), (69, 9804), (74, 9855), (85, 9936), (104, 10041),

Gene: Cote_16 Start: 9644, Stop: 10362, Start Num: 24
Candidate Starts for Cote_16:
(Start: 24 @9644 has 120 MA's), (33, 9740), (38, 9773), (69, 9965), (74, 10016), (85, 10097), (104, 10202),

Gene: CristinaYang_13 Start: 8942, Stop: 9711, Start Num: 9
Candidate Starts for CristinaYang_13:
(Start: 6 @8930 has 2 MA's), (Start: 9 @8942 has 56 MA's), (29, 9095), (45, 9200), (60, 9272), (74, 9377), (105, 9557), (108, 9569), (110, 9587), (112, 9599),

Gene: CroZenni_14 Start: 9243, Stop: 9934, Start Num: 24
Candidate Starts for CroZenni_14:
(Start: 24 @9243 has 120 MA's), (36, 9354), (52, 9417), (63, 9474), (65, 9483), (69, 9516), (95, 9708),

Gene: CupcakePrincess_14 Start: 9283, Stop: 9974, Start Num: 24
Candidate Starts for CupcakePrincess_14:
(Start: 24 @9283 has 120 MA's), (36, 9394), (52, 9457), (63, 9514), (65, 9523), (69, 9556), (78, 9652), (88, 9715),

Gene: Cygnet_15 Start: 9436, Stop: 10160, Start Num: 22
Candidate Starts for Cygnet_15:
(Start: 22 @9436 has 1 MA's), (27, 9448), (38, 9565), (43, 9598), (53, 9661), (58, 9697), (69, 9757), (72, 9796), (75, 9814), (78, 9844), (117, 10096), (122, 10126), (127, 10153),

Gene: Daiboju_12 Start: 8974, Stop: 9737, Start Num: 9
Candidate Starts for Daiboju_12:

(Start: 5 @8899 has 4 MA's), (Start: 7 @8965 has 13 MA's), (Start: 9 @8974 has 56 MA's), (19, 9073), (33, 9187), (45, 9229), (60, 9301), (74, 9406), (82, 9460), (94, 9532), (104, 9580), (110, 9613), (112, 9625), (121, 9706), (122, 9712),

Gene: DanHam62_13 Start: 9060, Stop: 9784, Start Num: 24
Candidate Starts for DanHam62_13:
(11, 8976), (Start: 24 @9060 has 120 MA's), (32, 9153), (36, 9171), (39, 9198), (56, 9312), (66, 9351), (69, 9381), (91, 9549), (96, 9567),

Gene: Daob_16 Start: 9647, Stop: 10365, Start Num: 24
Candidate Starts for Daob_16:
(Start: 24 @9647 has 120 MA's), (33, 9743), (38, 9776), (69, 9968), (74, 10019), (85, 10100), (104, 10205),

Gene: DickRichards_14 Start: 9737, Stop: 10428, Start Num: 24
Candidate Starts for DickRichards_14:
(Start: 24 @9737 has 120 MA's), (36, 9848), (52, 9911), (63, 9968), (65, 9977), (69, 10010), (95, 10202),

Gene: Didgeridoo_15 Start: 9466, Stop: 10157, Start Num: 24
Candidate Starts for Didgeridoo_15:
(Start: 24 @9466 has 120 MA's), (Start: 26 @9469 has 1 MA's), (34, 9571), (56, 9670), (63, 9697), (69, 9739), (80, 9841),

Gene: Dino_17 Start: 11791, Stop: 12566, Start Num: 7
Candidate Starts for Dino_17:
(1, 11305), (2, 11518), (Start: 7 @11791 has 13 MA's), (Start: 9 @11800 has 56 MA's), (Start: 26 @11920 has 1 MA's), (43, 12046), (45, 12055), (60, 12127), (74, 12232), (83, 12298), (108, 12424), (110, 12442), (112, 12454),

Gene: DirtyBubble_14 Start: 9472, Stop: 10163, Start Num: 24
Candidate Starts for DirtyBubble_14:
(Start: 24 @9472 has 120 MA's), (47, 9622), (56, 9676), (65, 9712), (109, 10012),

Gene: Dismas_14 Start: 9439, Stop: 10115, Start Num: 24
Candidate Starts for Dismas_14:
(Start: 24 @9439 has 120 MA's), (63, 9670), (65, 9679), (69, 9712),

Gene: Doobus_14 Start: 9474, Stop: 10165, Start Num: 24
Candidate Starts for Doobus_14:
(Start: 24 @9474 has 120 MA's), (36, 9585), (52, 9648), (63, 9705), (65, 9714), (69, 9747), (77, 9840), (88, 9906),

Gene: DrRobert_13 Start: 8942, Stop: 9711, Start Num: 9
Candidate Starts for DrRobert_13:
(Start: 6 @8930 has 2 MA's), (Start: 9 @8942 has 56 MA's), (Start: 26 @9065 has 1 MA's), (29, 9095), (45, 9200), (60, 9272), (74, 9377), (105, 9557), (108, 9569), (110, 9587), (112, 9599),

Gene: DreamTeam_13 Start: 9012, Stop: 9778, Start Num: 9
Candidate Starts for DreamTeam_13:
(Start: 9 @9012 has 56 MA's), (21, 9123), (45, 9267), (60, 9339), (74, 9444), (83, 9510), (90, 9555), (94, 9573), (110, 9654), (112, 9666), (114, 9696),

Gene: Eden_13 Start: 8899, Stop: 9614, Start Num: 24
Candidate Starts for Eden_13:
(Start: 24 @8899 has 120 MA's), (34, 9001), (36, 9007), (65, 9139), (69, 9172), (78, 9268),

Gene: Eesa_15 Start: 9662, Stop: 10383, Start Num: 24
Candidate Starts for Eesa_15:
(11, 9584), (18, 9647), (Start: 24 @9662 has 120 MA's), (27, 9674), (36, 9776), (37, 9782), (57, 9923), (64, 9950), (66, 9956), (69, 9986), (78, 10073), (80, 10079), (96, 10172), (108, 10238), (122, 10355),

Gene: Elva_15 Start: 9524, Stop: 10215, Start Num: 24
Candidate Starts for Elva_15:
(Start: 24 @9524 has 120 MA's), (47, 9674), (56, 9728), (65, 9764), (88, 9956), (92, 9980),

Gene: EstebanJulior_13 Start: 8981, Stop: 9747, Start Num: 9
Candidate Starts for EstebanJulior_13:
(Start: 9 @8981 has 56 MA's), (45, 9236), (60, 9308), (62, 9317), (74, 9413), (93, 9539), (103, 9587), (110, 9623), (112, 9635), (122, 9722),

Gene: Eula_14 Start: 9244, Stop: 9935, Start Num: 24
Candidate Starts for Eula_14:
(Start: 24 @9244 has 120 MA's), (36, 9355), (52, 9418), (63, 9475), (65, 9484), (69, 9517), (88, 9676), (119, 9862),

Gene: Eunoia_13 Start: 8974, Stop: 9731, Start Num: 9
Candidate Starts for Eunoia_13:
(Start: 7 @8965 has 13 MA's), (Start: 9 @8974 has 56 MA's), (19, 9067), (33, 9181), (41, 9208), (45, 9223), (60, 9295), (77, 9433), (87, 9487), (104, 9574), (105, 9577), (112, 9619), (114, 9649),

Gene: Finalfrontier_15 Start: 9756, Stop: 10447, Start Num: 24
Candidate Starts for Finalfrontier_15:
(Start: 24 @9756 has 120 MA's), (36, 9867), (52, 9930), (63, 9987), (65, 9996), (69, 10029), (88, 10188),

Gene: FlameThrower_14 Start: 8962, Stop: 9671, Start Num: 24
Candidate Starts for FlameThrower_14:
(Start: 24 @8962 has 120 MA's), (63, 9193), (65, 9202), (69, 9235), (77, 9328), (81, 9340), (108, 9484),

Gene: Franklin22_13 Start: 8878, Stop: 9596, Start Num: 24
Candidate Starts for Franklin22_13:
(Start: 24 @8878 has 120 MA's), (36, 8986), (47, 9025), (65, 9118), (69, 9151), (92, 9334),

Gene: Gack_13 Start: 8940, Stop: 9655, Start Num: 24
Candidate Starts for Gack_13:
(Start: 24 @8940 has 120 MA's), (36, 9048), (47, 9087), (48, 9096), (65, 9180), (68, 9207), (69, 9213), (78, 9309), (92, 9396), (102, 9444), (103, 9447), (109, 9480),

Gene: Galaxy_15 Start: 9750, Stop: 10477, Start Num: 24
Candidate Starts for Galaxy_15:
(Start: 24 @9750 has 120 MA's), (33, 9846), (38, 9879), (51, 9954), (66, 10041), (69, 10071),

Gene: Getalong_16 Start: 8315, Stop: 8997, Start Num: 28
Candidate Starts for Getalong_16:

(Start: 28 @8315 has 10 MA's), (52, 8480), (59, 8534), (61, 8540), (62, 8543), (67, 8570), (79, 8672), (82, 8690), (83, 8699), (96, 8774), (102, 8810), (114, 8900), (115, 8903), (116, 8909), (119, 8939), (120, 8942), (121, 8957), (124, 8975),

Gene: Gisselle_13 Start: 9012, Stop: 9778, Start Num: 9
Candidate Starts for Gisselle_13:
(Start: 9 @9012 has 56 MA's), (21, 9123), (45, 9267), (60, 9339), (74, 9444), (83, 9510), (90, 9555), (94, 9573), (110, 9654), (112, 9666), (114, 9696),

Gene: Glenn_17 Start: 11843, Stop: 12618, Start Num: 7
Candidate Starts for Glenn_17:
(2, 11570), (Start: 7 @11843 has 13 MA's), (Start: 9 @11852 has 56 MA's), (Start: 26 @11972 has 1 MA's), (43, 12098), (45, 12107), (60, 12179), (74, 12284), (83, 12350), (108, 12476), (110, 12494), (112, 12506),

Gene: Glotell_14 Start: 9058, Stop: 9782, Start Num: 24
Candidate Starts for Glotell_14:
(13, 9016), (Start: 24 @9058 has 120 MA's), (32, 9151), (36, 9169), (39, 9196), (56, 9310), (66, 9349), (69, 9379), (96, 9565),

Gene: GreenHearts_17 Start: 11941, Stop: 12701, Start Num: 8
Candidate Starts for GreenHearts_17:
(2, 11665), (Start: 8 @11941 has 8 MA's), (41, 12178), (45, 12193), (60, 12265), (108, 12562), (118, 12649), (121, 12670), (123, 12679), (125, 12691),

Gene: Greenhouse_17 Start: 11865, Stop: 12625, Start Num: 8
Candidate Starts for Greenhouse_17:
(2, 11589), (Start: 8 @11865 has 8 MA's), (41, 12102), (45, 12117), (60, 12189), (108, 12486), (114, 12546), (118, 12573), (121, 12594), (123, 12603), (125, 12615),

Gene: HamCheese_13 Start: 9060, Stop: 9784, Start Num: 24
Candidate Starts for HamCheese_13:
(11, 8976), (Start: 24 @9060 has 120 MA's), (32, 9153), (36, 9171), (39, 9198), (56, 9312), (66, 9351), (69, 9381), (96, 9567), (101, 9606),

Gene: HannahPhantana_16 Start: 9647, Stop: 10365, Start Num: 24
Candidate Starts for HannahPhantana_16:
(Start: 24 @9647 has 120 MA's), (33, 9743), (38, 9776), (69, 9968), (74, 10019), (85, 10100), (104, 10205),

Gene: HeadNerd_12 Start: 8948, Stop: 9714, Start Num: 9
Candidate Starts for HeadNerd_12:
(Start: 9 @8948 has 56 MA's), (45, 9203), (55, 9254), (60, 9275), (62, 9284), (74, 9380), (108, 9572), (110, 9590), (112, 9602),

Gene: Herb_13 Start: 8899, Stop: 9737, Start Num: 5
Candidate Starts for Herb_13:
(Start: 5 @8899 has 4 MA's), (Start: 7 @8965 has 13 MA's), (Start: 9 @8974 has 56 MA's), (19, 9073), (33, 9187), (45, 9229), (60, 9301), (74, 9406), (82, 9460), (94, 9532), (104, 9580), (110, 9613), (112, 9625), (121, 9706), (122, 9712),

Gene: Holliday_15 Start: 8319, Stop: 8998, Start Num: 28
Candidate Starts for Holliday_15:

(17, 8271), (Start: 28 @8319 has 10 MA's), (52, 8484), (59, 8538), (61, 8544), (62, 8547), (67, 8574), (79, 8673), (83, 8700), (88, 8733), (96, 8775), (102, 8811), (115, 8904), (116, 8910), (120, 8943), (121, 8958),

Gene: Horus_16 Start: 8335, Stop: 9014, Start Num: 28
Candidate Starts for Horus_16:
(25, 8314), (Start: 28 @8335 has 10 MA's), (52, 8500), (59, 8554), (61, 8560), (62, 8563), (67, 8590), (79, 8689), (83, 8716), (96, 8791), (102, 8827), (110, 8872), (116, 8926), (119, 8956), (121, 8974), (124, 8992),

Gene: Huckleberry_13 Start: 8948, Stop: 9714, Start Num: 9
Candidate Starts for Huckleberry_13:
(Start: 9 @8948 has 56 MA's), (45, 9203), (55, 9254), (60, 9275), (62, 9284), (74, 9380), (108, 9572), (110, 9590), (112, 9602),

Gene: HunterDalle_13 Start: 8974, Stop: 9731, Start Num: 9
Candidate Starts for HunterDalle_13:
(Start: 7 @8965 has 13 MA's), (Start: 9 @8974 has 56 MA's), (19, 9067), (33, 9181), (41, 9208), (45, 9223), (60, 9295), (77, 9433), (87, 9487), (104, 9574), (112, 9619), (114, 9649), (121, 9700),

Gene: Huntingdon_17 Start: 11851, Stop: 12611, Start Num: 8
Candidate Starts for Huntingdon_17:
(Start: 8 @11851 has 8 MA's), (19, 11947), (41, 12088), (45, 12103), (46, 12109), (60, 12175), (69, 12229), (118, 12559), (121, 12580), (123, 12589), (125, 12601),

Gene: Icarian_15 Start: 9446, Stop: 10137, Start Num: 24
Candidate Starts for Icarian_15:
(Start: 24 @9446 has 120 MA's), (56, 9650), (63, 9677), (65, 9686), (69, 9719),

Gene: Immaculata_17 Start: 11837, Stop: 12612, Start Num: 7
Candidate Starts for Immaculata_17:
(2, 11564), (Start: 7 @11837 has 13 MA's), (Start: 9 @11846 has 56 MA's), (Start: 26 @11966 has 1 MA's), (43, 12092), (45, 12101), (60, 12173), (74, 12278), (83, 12344), (108, 12470), (110, 12488), (112, 12500),

Gene: IndyLu_14 Start: 9288, Stop: 9979, Start Num: 24
Candidate Starts for IndyLu_14:
(Start: 24 @9288 has 120 MA's), (Start: 26 @9291 has 1 MA's), (34, 9393), (56, 9492), (63, 9519), (69, 9561), (80, 9663),

Gene: Jabb_14 Start: 9283, Stop: 9974, Start Num: 24
Candidate Starts for Jabb_14:
(Start: 24 @9283 has 120 MA's), (36, 9394), (52, 9457), (63, 9514), (65, 9523), (69, 9556), (78, 9652), (88, 9715),

Gene: Jamun_15 Start: 10088, Stop: 10812, Start Num: 24
Candidate Starts for Jamun_15:
(Start: 24 @10088 has 120 MA's), (33, 10184), (38, 10217), (51, 10292), (66, 10379), (69, 10409), (85, 10541),

Gene: Jerole_16 Start: 9644, Stop: 10362, Start Num: 24
Candidate Starts for Jerole_16:

(Start: 24 @9644 has 120 MA's), (33, 9740), (38, 9773), (69, 9965), (74, 10016), (85, 10097), (104, 10202),

Gene: Joann_17 Start: 11845, Stop: 12605, Start Num: 9
Candidate Starts for Joann_17:
(Start: 9 @11845 has 56 MA's), (41, 12082), (45, 12097), (60, 12169), (107, 12463), (108, 12466), (118, 12553), (121, 12574), (123, 12583), (125, 12595),

Gene: Johnathan_14 Start: 9243, Stop: 9934, Start Num: 24
Candidate Starts for Johnathan_14:
(Start: 24 @9243 has 120 MA's), (36, 9354), (52, 9417), (63, 9474), (65, 9483), (69, 9516), (95, 9708),

Gene: Jovita_14 Start: 9345, Stop: 10036, Start Num: 24
Candidate Starts for Jovita_14:
(Start: 24 @9345 has 120 MA's), (36, 9456), (52, 9519), (63, 9576), (65, 9585), (69, 9618), (88, 9777), (119, 9963),

Gene: Jumboset_17 Start: 11786, Stop: 12561, Start Num: 7
Candidate Starts for Jumboset_17:
(2, 11513), (Start: 7 @11786 has 13 MA's), (Start: 9 @11795 has 56 MA's), (43, 12041), (45, 12050), (60, 12122), (74, 12227), (83, 12293), (108, 12419), (110, 12437), (112, 12449),

Gene: Juno112_14 Start: 9061, Stop: 9785, Start Num: 24
Candidate Starts for Juno112_14:
(11, 8977), (Start: 24 @9061 has 120 MA's), (32, 9154), (36, 9172), (39, 9199), (56, 9313), (66, 9352), (69, 9382), (96, 9568), (123, 9754),

Gene: KHumphrey_14 Start: 9058, Stop: 9782, Start Num: 24
Candidate Starts for KHumphrey_14:
(13, 9016), (Start: 24 @9058 has 120 MA's), (32, 9151), (36, 9169), (39, 9196), (56, 9310), (66, 9349), (69, 9379), (96, 9565),

Gene: Kalizoi_17 Start: 11785, Stop: 12560, Start Num: 7
Candidate Starts for Kalizoi_17:
(2, 11512), (Start: 7 @11785 has 13 MA's), (Start: 9 @11794 has 56 MA's), (Start: 26 @11914 has 1 MA's), (43, 12040), (45, 12049), (60, 12121), (74, 12226), (83, 12292), (108, 12418), (110, 12436), (112, 12448),

Gene: Kate33_14 Start: 9287, Stop: 9978, Start Num: 24
Candidate Starts for Kate33_14:
(Start: 24 @9287 has 120 MA's), (Start: 26 @9290 has 1 MA's), (34, 9392), (56, 9491), (63, 9518), (69, 9560), (80, 9662),

Gene: Katzastrophic_14 Start: 9137, Stop: 9846, Start Num: 24
Candidate Starts for Katzastrophic_14:
(Start: 24 @9137 has 120 MA's), (63, 9368), (65, 9377), (69, 9410), (77, 9503), (81, 9515), (108, 9659),

Gene: Kenna_15 Start: 8335, Stop: 9014, Start Num: 28
Candidate Starts for Kenna_15:
(25, 8314), (Start: 28 @8335 has 10 MA's), (52, 8500), (59, 8554), (61, 8560), (62, 8563), (67, 8590), (79, 8689), (83, 8716), (96, 8791), (102, 8827), (110, 8872), (116, 8926), (119, 8956), (121, 8974), (124, 8992),

Gene: Kenzers_14 Start: 9260, Stop: 9951, Start Num: 24
Candidate Starts for Kenzers_14:
(Start: 24 @9260 has 120 MA's), (36, 9371), (52, 9434), (63, 9491), (65, 9500), (69, 9533), (95, 9725),

Gene: Kepler_15 Start: 9482, Stop: 10200, Start Num: 24
Candidate Starts for Kepler_15:
(Start: 24 @9482 has 120 MA's), (33, 9578), (38, 9611), (69, 9803), (74, 9854), (85, 9935), (104, 10040),

Gene: Kieran_14 Start: 9442, Stop: 10118, Start Num: 24
Candidate Starts for Kieran_14:
(Start: 24 @9442 has 120 MA's), (63, 9673), (65, 9682), (69, 9715),

Gene: KingBob_13 Start: 8899, Stop: 9737, Start Num: 5
Candidate Starts for KingBob_13:
(Start: 5 @8899 has 4 MA's), (Start: 7 @8965 has 13 MA's), (Start: 9 @8974 has 56 MA's), (19, 9073), (33, 9187), (45, 9229), (60, 9301), (74, 9406), (82, 9460), (94, 9532), (104, 9580), (110, 9613), (112, 9625), (121, 9706), (122, 9712),

Gene: Kittykat_13 Start: 8984, Stop: 9750, Start Num: 9
Candidate Starts for Kittykat_13:
(Start: 6 @8972 has 2 MA's), (Start: 9 @8984 has 56 MA's), (20, 9086), (21, 9095), (45, 9239), (55, 9290), (60, 9311), (74, 9416), (83, 9482), (90, 9527), (94, 9545), (108, 9608), (110, 9626), (111, 9629), (112, 9638), (114, 9668),

Gene: Korra_16 Start: 11800, Stop: 12566, Start Num: 9
Candidate Starts for Korra_16:
(1, 11305), (2, 11518), (Start: 7 @11791 has 13 MA's), (Start: 9 @11800 has 56 MA's), (Start: 26 @11920 has 1 MA's), (43, 12046), (45, 12055), (60, 12127), (74, 12232), (83, 12298), (108, 12424), (110, 12442), (112, 12454),

Gene: Kuleana_15 Start: 9441, Stop: 10159, Start Num: 24
Candidate Starts for Kuleana_15:
(Start: 24 @9441 has 120 MA's), (34, 9546), (38, 9570), (65, 9729), (69, 9762), (72, 9801), (75, 9819), (85, 9894), (117, 10101),

Gene: Lahqtemish_14 Start: 9360, Stop: 10051, Start Num: 24
Candidate Starts for Lahqtemish_14:
(Start: 24 @9360 has 120 MA's), (Start: 26 @9363 has 1 MA's), (34, 9465), (56, 9564), (63, 9591), (69, 9633), (80, 9735),

Gene: Lakshmi_17 Start: 11870, Stop: 12630, Start Num: 8
Candidate Starts for Lakshmi_17:
(2, 11594), (Start: 8 @11870 has 8 MA's), (41, 12107), (45, 12122), (60, 12194), (107, 12488), (108, 12491), (118, 12578), (121, 12599), (123, 12608), (125, 12620),

Gene: Lasagna_13 Start: 8942, Stop: 9711, Start Num: 9
Candidate Starts for Lasagna_13:
(Start: 6 @8930 has 2 MA's), (Start: 9 @8942 has 56 MA's), (29, 9095), (45, 9200), (60, 9272), (74, 9377), (105, 9557), (108, 9569), (110, 9587), (112, 9599),

Gene: Lennox_13 Start: 8942, Stop: 9711, Start Num: 9
Candidate Starts for Lennox_13:

(Start: 6 @8930 has 2 MA's), (Start: 9 @8942 has 56 MA's), (29, 9095), (45, 9200), (60, 9272), (74, 9377), (105, 9557), (108, 9569), (110, 9587), (112, 9599),

Gene: Leona_14 Start: 9111, Stop: 9835, Start Num: 24
Candidate Starts for Leona_14:
(11, 9027), (Start: 24 @9111 has 120 MA's), (32, 9204), (36, 9222), (39, 9249), (56, 9363), (66, 9402), (69, 9432), (96, 9618),

Gene: Leroy_16 Start: 8336, Stop: 9015, Start Num: 28
Candidate Starts for Leroy_16:
(25, 8315), (Start: 28 @8336 has 10 MA's), (52, 8501), (59, 8555), (61, 8561), (62, 8564), (67, 8591), (79, 8690), (83, 8717), (96, 8792), (102, 8828), (110, 8873), (116, 8927), (119, 8957), (121, 8975), (124, 8993),

Gene: LilStuart_13 Start: 8942, Stop: 9711, Start Num: 9
Candidate Starts for LilStuart_13:
(Start: 6 @8930 has 2 MA's), (Start: 9 @8942 has 56 MA's), (29, 9095), (45, 9200), (60, 9272), (74, 9377), (105, 9557), (108, 9569), (110, 9587), (112, 9599),

Gene: Lilo27_14 Start: 9220, Stop: 9911, Start Num: 24
Candidate Starts for Lilo27_14:
(Start: 24 @9220 has 120 MA's), (36, 9331), (52, 9394), (56, 9424), (63, 9451), (65, 9460), (69, 9493), (88, 9652), (98, 9703),

Gene: LimaBean_14 Start: 9243, Stop: 9934, Start Num: 24
Candidate Starts for LimaBean_14:
(Start: 24 @9243 has 120 MA's), (36, 9354), (52, 9417), (63, 9474), (65, 9483), (69, 9516), (95, 9708),

Gene: Litotes_17 Start: 11825, Stop: 12591, Start Num: 9
Candidate Starts for Litotes_17:
(Start: 6 @11813 has 2 MA's), (Start: 9 @11825 has 56 MA's), (19, 11924), (21, 11936), (45, 12080), (60, 12152), (74, 12257), (90, 12368), (108, 12449), (110, 12467),

Gene: LittleTokyo_15 Start: 9395, Stop: 10119, Start Num: 23
Candidate Starts for LittleTokyo_15:
(Start: 23 @9395 has 2 MA's), (27, 9407), (38, 9524), (40, 9545), (56, 9647), (58, 9656), (69, 9716), (74, 9767), (75, 9773), (78, 9803), (122, 10085), (127, 10112),

Gene: Loviatar_14 Start: 9533, Stop: 10224, Start Num: 24
Candidate Starts for Loviatar_14:
(Start: 24 @9533 has 120 MA's), (56, 9737), (65, 9773), (69, 9806), (109, 10073),

Gene: Lucy_13 Start: 8934, Stop: 9703, Start Num: 9
Candidate Starts for Lucy_13:
(Start: 6 @8922 has 2 MA's), (Start: 9 @8934 has 56 MA's), (Start: 26 @9057 has 1 MA's), (29, 9087), (45, 9192), (60, 9264), (74, 9369), (105, 9549), (108, 9561), (110, 9579), (112, 9591),

Gene: Lunar_15 Start: 9644, Stop: 10362, Start Num: 24
Candidate Starts for Lunar_15:
(Start: 24 @9644 has 120 MA's), (33, 9740), (38, 9773), (69, 9965), (74, 10016), (85, 10097), (104, 10202),

Gene: Lutum_16 Start: 8335, Stop: 9014, Start Num: 28

Candidate Starts for Lutum_16:
(25, 8314), (Start: 28 @8335 has 10 MA's), (52, 8500), (59, 8554), (61, 8560), (62, 8563), (67, 8590), (79, 8689), (83, 8716), (96, 8791), (102, 8827), (110, 8872), (116, 8926), (119, 8956), (121, 8974), (124, 8992),

Gene: Lynlen_14 Start: 9260, Stop: 9951, Start Num: 24
Candidate Starts for Lynlen_14:
(Start: 24 @9260 has 120 MA's), (36, 9371), (52, 9434), (63, 9491), (65, 9500), (69, 9533), (95, 9725),

Gene: Makoto_13 Start: 8943, Stop: 9712, Start Num: 9
Candidate Starts for Makoto_13:
(Start: 6 @8931 has 2 MA's), (Start: 9 @8943 has 56 MA's), (Start: 26 @9066 has 1 MA's), (29, 9096), (45, 9201), (60, 9273), (74, 9378), (105, 9558), (108, 9570), (110, 9588), (112, 9600),

Gene: MamaPearl_13 Start: 8981, Stop: 9747, Start Num: 9
Candidate Starts for MamaPearl_13:
(Start: 9 @8981 has 56 MA's), (45, 9236), (60, 9308), (62, 9317), (74, 9413), (93, 9539), (103, 9587), (110, 9623), (112, 9635), (122, 9722),

Gene: Maria1952_13 Start: 8965, Stop: 9737, Start Num: 7
Candidate Starts for Maria1952_13:
(Start: 5 @8899 has 4 MA's), (Start: 7 @8965 has 13 MA's), (Start: 9 @8974 has 56 MA's), (19, 9073), (33, 9187), (45, 9229), (60, 9301), (74, 9406), (82, 9460), (94, 9532), (104, 9580), (110, 9613), (112, 9625), (121, 9706), (122, 9712),

Gene: MeganNoll_16 Start: 11843, Stop: 12618, Start Num: 7
Candidate Starts for MeganNoll_16:
(2, 11570), (Start: 7 @11843 has 13 MA's), (Start: 9 @11852 has 56 MA's), (Start: 26 @11972 has 1 MA's), (43, 12098), (45, 12107), (60, 12179), (74, 12284), (83, 12350), (108, 12476), (110, 12494), (112, 12506),

Gene: Melons_16 Start: 9644, Stop: 10362, Start Num: 24
Candidate Starts for Melons_16:
(Start: 24 @9644 has 120 MA's), (33, 9740), (38, 9773), (69, 9965), (74, 10016), (85, 10097), (104, 10202),

Gene: Milomuff_15 Start: 9629, Stop: 10320, Start Num: 24
Candidate Starts for Milomuff_15:
(Start: 24 @9629 has 120 MA's), (36, 9740), (52, 9803), (63, 9860), (65, 9869), (69, 9902), (88, 10061), (95, 10094),

Gene: Misaeng_17 Start: 11918, Stop: 12678, Start Num: 9
Candidate Starts for Misaeng_17:
(Start: 9 @11918 has 56 MA's), (19, 12014), (41, 12155), (45, 12170), (60, 12242), (69, 12296), (118, 12626), (121, 12647), (123, 12656), (125, 12668),

Gene: Moki_13 Start: 8948, Stop: 9714, Start Num: 9
Candidate Starts for Moki_13:
(Start: 9 @8948 has 56 MA's), (45, 9203), (55, 9254), (60, 9275), (62, 9284), (74, 9380), (108, 9572), (110, 9590), (112, 9602),

Gene: MrGloopy_17 Start: 11777, Stop: 12552, Start Num: 7
Candidate Starts for MrGloopy_17:

(Start: 7 @11777 has 13 MA's), (Start: 9 @11786 has 56 MA's), (Start: 26 @11906 has 1 MA's), (43, 12032), (45, 12041), (60, 12113), (74, 12218), (83, 12284), (108, 12410), (110, 12428), (112, 12440),

Gene: MsUbiquitous_14 Start: 9283, Stop: 9974, Start Num: 24
Candidate Starts for MsUbiquitous_14:
(Start: 24 @9283 has 120 MA's), (36, 9394), (52, 9457), (63, 9514), (65, 9523), (69, 9556), (78, 9652), (88, 9715),

Gene: Nancia_13 Start: 8942, Stop: 9711, Start Num: 9
Candidate Starts for Nancia_13:
(Start: 6 @8930 has 2 MA's), (Start: 9 @8942 has 56 MA's), (29, 9095), (45, 9200), (60, 9272), (74, 9377), (105, 9557), (108, 9569), (110, 9587), (112, 9599),

Gene: Nicky22_15 Start: 9691, Stop: 10382, Start Num: 24
Candidate Starts for Nicky22_15:
(Start: 24 @9691 has 120 MA's), (36, 9802), (52, 9865), (56, 9895), (63, 9922), (65, 9931), (69, 9964), (88, 10123), (98, 10174), (119, 10309),

Gene: Nubia_16 Start: 11830, Stop: 12590, Start Num: 8
Candidate Starts for Nubia_16:
(2, 11554), (Start: 8 @11830 has 8 MA's), (41, 12067), (45, 12082), (60, 12154), (108, 12451), (118, 12538), (121, 12559), (123, 12568), (125, 12580),

Gene: OMalley_13 Start: 8974, Stop: 9731, Start Num: 9
Candidate Starts for OMalley_13:
(Start: 7 @8965 has 13 MA's), (Start: 9 @8974 has 56 MA's), (19, 9067), (33, 9181), (41, 9208), (45, 9223), (60, 9295), (77, 9433), (87, 9487), (104, 9574), (105, 9577), (112, 9619), (114, 9649),

Gene: Olliecat_14 Start: 9271, Stop: 9962, Start Num: 24
Candidate Starts for Olliecat_14:
(Start: 24 @9271 has 120 MA's), (54, 9463), (65, 9523), (69, 9556), (73, 9607), (121, 9919), (123, 9928),

Gene: Orcanus_15 Start: 9449, Stop: 10170, Start Num: 24
Candidate Starts for Orcanus_15:
(Start: 24 @9449 has 120 MA's), (27, 9461), (36, 9560), (64, 9734), (66, 9740), (69, 9770), (71, 9788), (78, 9857), (80, 9863), (96, 9956), (122, 10139),

Gene: OtsoOtso_15 Start: 9483, Stop: 10201, Start Num: 24
Candidate Starts for OtsoOtso_15:
(Start: 24 @9483 has 120 MA's), (33, 9579), (38, 9612), (69, 9804), (74, 9855), (85, 9936), (104, 10041),

Gene: OurGirlNessie_13 Start: 8934, Stop: 9703, Start Num: 9
Candidate Starts for OurGirlNessie_13:
(Start: 6 @8922 has 2 MA's), (Start: 9 @8934 has 56 MA's), (Start: 26 @9057 has 1 MA's), (29, 9087), (45, 9192), (60, 9264), (74, 9369), (105, 9549), (108, 9561), (110, 9579), (112, 9591),

Gene: Oxynfrius_17 Start: 11843, Stop: 12603, Start Num: 8
Candidate Starts for Oxynfrius_17:
(2, 11567), (Start: 8 @11843 has 8 MA's), (41, 12080), (45, 12095), (60, 12167), (107, 12461), (108, 12464), (118, 12551), (121, 12572), (123, 12581), (125, 12593),

Gene: PartyCup_17 Start: 11872, Stop: 12638, Start Num: 9
Candidate Starts for PartyCup_17:
(Start: 6 @11860 has 2 MA's), (Start: 9 @11872 has 56 MA's), (19, 11971), (21, 11983), (45, 12127), (60, 12199), (74, 12304), (90, 12415), (110, 12514),

Gene: PastaFagioli_14 Start: 9348, Stop: 10039, Start Num: 24
Candidate Starts for PastaFagioli_14:
(Start: 24 @9348 has 120 MA's), (Start: 26 @9351 has 1 MA's), (34, 9453), (56, 9552), (63, 9579), (69, 9621), (80, 9723),

Gene: Periwinkle_16 Start: 8315, Stop: 8994, Start Num: 28
Candidate Starts for Periwinkle_16:
(Start: 28 @8315 has 10 MA's), (52, 8480), (59, 8534), (61, 8540), (62, 8543), (67, 8570), (79, 8669), (83, 8696), (96, 8771), (102, 8807), (110, 8852), (116, 8906), (119, 8936), (121, 8954), (124, 8972),

Gene: PhigPhack_14 Start: 9272, Stop: 9963, Start Num: 24
Candidate Starts for PhigPhack_14:
(Start: 24 @9272 has 120 MA's), (36, 9383), (52, 9446), (63, 9503), (65, 9512), (69, 9545), (95, 9737),

Gene: Phisb_14 Start: 9208, Stop: 9899, Start Num: 24
Candidate Starts for Phisb_14:
(Start: 24 @9208 has 120 MA's), (36, 9319), (52, 9382), (63, 9439), (65, 9448), (69, 9481), (77, 9574), (88, 9640),

Gene: Phistory_16 Start: 8304, Stop: 8983, Start Num: 28
Candidate Starts for Phistory_16:
(Start: 28 @8304 has 10 MA's), (52, 8469), (59, 8523), (61, 8529), (62, 8532), (67, 8559), (79, 8658), (83, 8685), (96, 8760), (102, 8796), (110, 8841), (115, 8889), (116, 8895), (119, 8925), (120, 8928), (121, 8943),

Gene: PhluffyCoco_14 Start: 9060, Stop: 9784, Start Num: 24
Candidate Starts for PhluffyCoco_14:
(11, 8976), (Start: 24 @9060 has 120 MA's), (32, 9153), (36, 9171), (39, 9198), (56, 9312), (66, 9351), (69, 9381), (96, 9567), (101, 9606),

Gene: PinkFriday_13 Start: 8971, Stop: 9743, Start Num: 9
Candidate Starts for PinkFriday_13:
(Start: 7 @8962 has 13 MA's), (Start: 9 @8971 has 56 MA's), (14, 9049), (33, 9193), (45, 9235), (60, 9307), (74, 9412), (82, 9466), (94, 9538), (104, 9586), (110, 9619), (112, 9631), (121, 9712), (122, 9718),

Gene: PitaDog_13 Start: 8933, Stop: 9702, Start Num: 9
Candidate Starts for PitaDog_13:
(Start: 6 @8921 has 2 MA's), (Start: 9 @8933 has 56 MA's), (Start: 26 @9056 has 1 MA's), (29, 9086), (45, 9191), (60, 9263), (74, 9368), (105, 9548), (108, 9560), (110, 9578), (112, 9590),

Gene: Polka_15 Start: 9483, Stop: 10201, Start Num: 24
Candidate Starts for Polka_15:
(Start: 24 @9483 has 120 MA's), (33, 9579), (38, 9612), (69, 9804), (74, 9855), (85, 9936), (104, 10041),

Gene: Potatoes_17 Start: 11847, Stop: 12613, Start Num: 9
Candidate Starts for Potatoes_17:

(Start: 7 @11838 has 13 MA's), (Start: 9 @11847 has 56 MA's), (43, 12093), (45, 12102), (60, 12174), (74, 12279), (83, 12345), (108, 12471), (110, 12489), (112, 12501),

Gene: Preamble_13 Start: 8946, Stop: 9715, Start Num: 9
Candidate Starts for Preamble_13:
(Start: 9 @8946 has 56 MA's), (21, 9060), (27, 9078), (45, 9204), (60, 9276), (74, 9381), (83, 9447), (90, 9492), (94, 9510), (108, 9573), (110, 9591), (112, 9603), (114, 9633),

Gene: Pterodactyl_13 Start: 8935, Stop: 9704, Start Num: 9
Candidate Starts for Pterodactyl_13:
(Start: 7 @8923 has 13 MA's), (Start: 9 @8935 has 56 MA's), (Start: 26 @9058 has 1 MA's), (29, 9088), (45, 9193), (60, 9265), (74, 9370), (105, 9550), (108, 9562), (110, 9580), (112, 9592),

Gene: Pumancara_13 Start: 8970, Stop: 9742, Start Num: 9
Candidate Starts for Pumancara_13:
(Start: 7 @8961 has 13 MA's), (Start: 9 @8970 has 56 MA's), (14, 9048), (33, 9192), (45, 9234), (60, 9306), (74, 9411), (82, 9465), (94, 9537), (104, 9585), (110, 9618), (112, 9630), (121, 9711), (122, 9717),

Gene: QMacho_15 Start: 9727, Stop: 10418, Start Num: 24
Candidate Starts for QMacho_15:
(Start: 24 @9727 has 120 MA's), (36, 9838), (52, 9901), (63, 9958), (65, 9967), (69, 10000), (88, 10159), (119, 10345),

Gene: Quenya_15 Start: 9138, Stop: 9844, Start Num: 24
Candidate Starts for Quenya_15:
(Start: 24 @9138 has 120 MA's), (63, 9369), (65, 9378), (69, 9411), (109, 9675),

Gene: RAP15_17 Start: 11852, Stop: 12618, Start Num: 9
Candidate Starts for RAP15_17:
(2, 11570), (Start: 7 @11843 has 13 MA's), (Start: 9 @11852 has 56 MA's), (Start: 26 @11972 has 1 MA's), (43, 12098), (45, 12107), (60, 12179), (74, 12284), (83, 12350), (108, 12476), (110, 12494), (112, 12506),

Gene: RcigaStruga_17 Start: 11851, Stop: 12611, Start Num: 8
Candidate Starts for RcigaStruga_17:
(Start: 8 @11851 has 8 MA's), (19, 11947), (41, 12088), (45, 12103), (46, 12109), (60, 12175), (69, 12229), (118, 12559), (121, 12580), (123, 12589), (125, 12601),

Gene: RedFox_14 Start: 9060, Stop: 9784, Start Num: 24
Candidate Starts for RedFox_14:
(11, 8976), (Start: 24 @9060 has 120 MA's), (32, 9153), (36, 9171), (39, 9198), (56, 9312), (66, 9351), (69, 9381), (91, 9549), (96, 9567),

Gene: Renna12_15 Start: 9269, Stop: 9993, Start Num: 24
Candidate Starts for Renna12_15:
(Start: 24 @9269 has 120 MA's), (32, 9362), (36, 9380), (39, 9407), (56, 9521), (66, 9560), (69, 9590),

Gene: Riovina_13 Start: 8974, Stop: 9731, Start Num: 9
Candidate Starts for Riovina_13:
(Start: 7 @8965 has 13 MA's), (Start: 9 @8974 has 56 MA's), (19, 9067), (33, 9181), (41, 9208), (45, 9223), (60, 9295), (77, 9433), (87, 9487), (104, 9574), (105, 9577), (112, 9619), (114, 9649),

Gene: Riverdale_17 Start: 11782, Stop: 12548, Start Num: 9
Candidate Starts for Riverdale_17:
(3, 11599), (Start: 7 @11773 has 13 MA's), (Start: 9 @11782 has 56 MA's), (43, 12028), (45, 12037), (60, 12109), (74, 12214), (83, 12280), (108, 12406), (110, 12424), (112, 12436),

Gene: Rollins_12 Start: 8845, Stop: 9554, Start Num: 24
Candidate Starts for Rollins_12:
(Start: 24 @8845 has 120 MA's), (36, 8953), (65, 9085), (69, 9118), (109, 9385),

Gene: Rona_14 Start: 9439, Stop: 10115, Start Num: 24
Candidate Starts for Rona_14:
(Start: 24 @9439 has 120 MA's), (63, 9670), (65, 9679), (69, 9712),

Gene: Rozby_17 Start: 11774, Stop: 12549, Start Num: 7
Candidate Starts for Rozby_17:
(2, 11501), (Start: 7 @11774 has 13 MA's), (Start: 9 @11783 has 56 MA's), (Start: 26 @11903 has 1 MA's), (43, 12029), (45, 12038), (60, 12110), (74, 12215), (83, 12281), (108, 12407), (110, 12425), (112, 12437),

Gene: Ruchi_15 Start: 10010, Stop: 10740, Start Num: 24
Candidate Starts for Ruchi_15:
(Start: 24 @10010 has 120 MA's), (33, 10106), (38, 10139), (51, 10214), (66, 10301), (69, 10331), (72, 10376), (76, 10409), (84, 10466),

Gene: SanaSana_15 Start: 9463, Stop: 10154, Start Num: 24
Candidate Starts for SanaSana_15:
(Start: 24 @9463 has 120 MA's), (47, 9613), (56, 9667), (65, 9703), (109, 10003),

Gene: SansAfet_14 Start: 9254, Stop: 9945, Start Num: 24
Candidate Starts for SansAfet_14:
(Start: 24 @9254 has 120 MA's), (36, 9365), (52, 9428), (63, 9485), (65, 9494), (69, 9527), (95, 9719),

Gene: SarBear_14 Start: 9220, Stop: 9911, Start Num: 24
Candidate Starts for SarBear_14:
(Start: 24 @9220 has 120 MA's), (36, 9331), (52, 9394), (63, 9451), (65, 9460), (69, 9493), (88, 9652), (98, 9703), (106, 9739),

Gene: Savage2526_17 Start: 11837, Stop: 12612, Start Num: 7
Candidate Starts for Savage2526_17:
(2, 11564), (Start: 7 @11837 has 13 MA's), (Start: 9 @11846 has 56 MA's), (Start: 26 @11966 has 1 MA's), (43, 12092), (45, 12101), (60, 12173), (74, 12278), (83, 12344), (108, 12470), (110, 12488), (112, 12500),

Gene: Scuttle_17 Start: 11851, Stop: 12617, Start Num: 9
Candidate Starts for Scuttle_17:
(3, 11668), (Start: 7 @11842 has 13 MA's), (Start: 9 @11851 has 56 MA's), (43, 12097), (45, 12106), (60, 12178), (74, 12283), (83, 12349), (108, 12475), (110, 12493), (112, 12505),

Gene: Sergei_13 Start: 8899, Stop: 9737, Start Num: 5
Candidate Starts for Sergei_13:
(Start: 5 @8899 has 4 MA's), (Start: 7 @8965 has 13 MA's), (Start: 9 @8974 has 56 MA's), (19, 9073), (33, 9187), (45, 9229), (60, 9301), (74, 9406), (82, 9460), (94, 9532), (104, 9580), (110, 9613), (112, 9625), (121, 9706), (122, 9712),

Gene: Sharkboy_14 Start: 9438, Stop: 10114, Start Num: 24
Candidate Starts for Sharkboy_14:
(Start: 24 @9438 has 120 MA's), (63, 9669), (65, 9678), (69, 9711), (95, 9903),

Gene: Shayna_13 Start: 8829, Stop: 9529, Start Num: 24
Candidate Starts for Shayna_13:
(Start: 24 @8829 has 120 MA's), (42, 8958), (65, 9081), (73, 9165), (92, 9297),

Gene: Skylord_13 Start: 8785, Stop: 9494, Start Num: 24
Candidate Starts for Skylord_13:
(Start: 24 @8785 has 120 MA's), (36, 8893), (65, 9025), (69, 9058), (109, 9325),

Gene: Slay_14 Start: 9696, Stop: 10387, Start Num: 24
Candidate Starts for Slay_14:
(Start: 24 @9696 has 120 MA's), (36, 9807), (52, 9870), (63, 9927), (65, 9936), (69, 9969), (88, 10128), (98, 10179),

Gene: Softsoap_14 Start: 9243, Stop: 9934, Start Num: 24
Candidate Starts for Softsoap_14:
(Start: 24 @9243 has 120 MA's), (36, 9354), (52, 9417), (63, 9474), (65, 9483), (69, 9516), (89, 9684), (95, 9708),

Gene: Squircle_14 Start: 9270, Stop: 9961, Start Num: 24
Candidate Starts for Squircle_14:
(Start: 24 @9270 has 120 MA's), (54, 9462), (65, 9522), (69, 9555), (73, 9606), (121, 9918), (123, 9927),

Gene: Stoor_14 Start: 9460, Stop: 10151, Start Num: 24
Candidate Starts for Stoor_14:
(Start: 24 @9460 has 120 MA's), (47, 9610), (56, 9664), (65, 9700), (109, 10000),

Gene: Stromboli_14 Start: 9463, Stop: 10154, Start Num: 24
Candidate Starts for Stromboli_14:
(Start: 24 @9463 has 120 MA's), (47, 9613), (56, 9667), (65, 9703), (101, 9961), (109, 10003),

Gene: StuartMinion_14 Start: 9092, Stop: 9816, Start Num: 24
Candidate Starts for StuartMinion_14:
(Start: 24 @9092 has 120 MA's), (31, 9152), (55, 9341), (65, 9380), (69, 9413), (99, 9617),

Gene: SunnyD_13 Start: 8829, Stop: 9529, Start Num: 24
Candidate Starts for SunnyD_13:
(Start: 24 @8829 has 120 MA's), (42, 8958), (65, 9081), (73, 9165), (92, 9297),

Gene: Supakev_13 Start: 8976, Stop: 9733, Start Num: 9
Candidate Starts for Supakev_13:
(Start: 7 @8967 has 13 MA's), (Start: 9 @8976 has 56 MA's), (19, 9069), (33, 9183), (41, 9210), (45, 9225), (60, 9297), (77, 9435), (87, 9489), (104, 9576), (112, 9621), (114, 9651),

Gene: Suppi_17 Start: 11875, Stop: 12641, Start Num: 9
Candidate Starts for Suppi_17:
(Start: 6 @11863 has 2 MA's), (Start: 9 @11875 has 56 MA's), (19, 11974), (21, 11986), (45, 12130), (60, 12202), (74, 12307), (90, 12418), (108, 12499), (110, 12517),

Gene: Swervy_14 Start: 9220, Stop: 9911, Start Num: 24
Candidate Starts for Swervy_14:
(Start: 24 @9220 has 120 MA's), (36, 9331), (52, 9394), (63, 9451), (65, 9460), (69, 9493), (88, 9652), (98, 9703),

Gene: TattModd_17 Start: 11836, Stop: 12611, Start Num: 7
Candidate Starts for TattModd_17:
(3, 11662), (Start: 7 @11836 has 13 MA's), (Start: 9 @11845 has 56 MA's), (43, 12091), (45, 12100), (60, 12172), (74, 12277), (83, 12343), (108, 12469), (110, 12487), (112, 12499),

Gene: TaylorSipht_15 Start: 9540, Stop: 10261, Start Num: 24
Candidate Starts for TaylorSipht_15:
(15, 9516), (18, 9522), (Start: 24 @9540 has 120 MA's), (27, 9552), (37, 9660), (56, 9795), (69, 9864),

Gene: Teagster_13 Start: 8829, Stop: 9529, Start Num: 24
Candidate Starts for Teagster_13:
(Start: 24 @8829 has 120 MA's), (42, 8958), (65, 9081), (73, 9165), (92, 9297),

Gene: Temper16_13 Start: 8899, Stop: 9737, Start Num: 5
Candidate Starts for Temper16_13:
(Start: 5 @8899 has 4 MA's), (Start: 7 @8965 has 13 MA's), (Start: 9 @8974 has 56 MA's), (19, 9073), (33, 9187), (45, 9229), (60, 9301), (74, 9406), (82, 9460), (94, 9532), (104, 9580), (110, 9613), (112, 9625), (121, 9706), (122, 9712),

Gene: Toad24_16 Start: 9656, Stop: 10377, Start Num: 24
Candidate Starts for Toad24_16:
(Start: 24 @9656 has 120 MA's), (27, 9668), (36, 9767), (64, 9941), (66, 9947), (69, 9977), (71, 9995), (78, 10064), (80, 10070), (96, 10163), (122, 10346),

Gene: TukTuk_14 Start: 9280, Stop: 9971, Start Num: 24
Candidate Starts for TukTuk_14:
(Start: 24 @9280 has 120 MA's), (36, 9391), (52, 9454), (63, 9511), (65, 9520), (69, 9553), (78, 9649), (88, 9712),

Gene: Urla_12 Start: 8980, Stop: 9749, Start Num: 9
Candidate Starts for Urla_12:
(Start: 7 @8971 has 13 MA's), (Start: 9 @8980 has 56 MA's), (12, 9022), (41, 9223), (45, 9238), (60, 9310), (62, 9319), (74, 9415), (103, 9589), (110, 9625), (112, 9637),

Gene: Vallejo_17 Start: 11784, Stop: 12550, Start Num: 9
Candidate Starts for Vallejo_17:
(2, 11502), (Start: 7 @11775 has 13 MA's), (Start: 9 @11784 has 56 MA's), (Start: 26 @11904 has 1 MA's), (43, 12030), (45, 12039), (60, 12111), (74, 12216), (83, 12282), (108, 12408), (110, 12426), (112, 12438),

Gene: Vitas_13 Start: 8785, Stop: 9494, Start Num: 24
Candidate Starts for Vitas_13:
(Start: 24 @8785 has 120 MA's), (36, 8893), (65, 9025), (69, 9058), (109, 9325),

Gene: Vulpecula_15 Start: 10086, Stop: 10810, Start Num: 24
Candidate Starts for Vulpecula_15:
(Start: 24 @10086 has 120 MA's), (33, 10182), (38, 10215), (51, 10290), (66, 10377), (85, 10539),

Gene: Vulture_13 Start: 8974, Stop: 9731, Start Num: 9
Candidate Starts for Vulture_13:
(Start: 7 @8965 has 13 MA's), (Start: 9 @8974 has 56 MA's), (19, 9067), (33, 9181), (41, 9208), (45, 9223), (60, 9295), (77, 9433), (87, 9487), (104, 9574), (112, 9619), (114, 9649), (121, 9700),

Gene: Wawa_17 Start: 11821, Stop: 12587, Start Num: 9
Candidate Starts for Wawa_17:
(1, 11326), (2, 11539), (Start: 7 @11812 has 13 MA's), (Start: 9 @11821 has 56 MA's), (Start: 26 @11941 has 1 MA's), (43, 12067), (45, 12076), (60, 12148), (74, 12253), (83, 12319), (108, 12445), (110, 12463), (112, 12475),

Gene: Wayne_16 Start: 11921, Stop: 12687, Start Num: 9
Candidate Starts for Wayne_16:
(Start: 6 @11909 has 2 MA's), (Start: 9 @11921 has 56 MA's), (19, 12020), (21, 12032), (45, 12176), (60, 12248), (74, 12353), (90, 12464), (108, 12545), (110, 12563),

Gene: WileyE_14 Start: 9421, Stop: 10145, Start Num: 24
Candidate Starts for WileyE_14:
(Start: 24 @9421 has 120 MA's), (38, 9550), (51, 9625), (66, 9712), (69, 9742),

Gene: WonderBoy_13 Start: 8935, Stop: 9704, Start Num: 9
Candidate Starts for WonderBoy_13:
(Start: 9 @8935 has 56 MA's), (29, 9088), (45, 9193), (60, 9265), (74, 9370), (105, 9550), (108, 9562), (110, 9580), (112, 9592),

Gene: Zhuangyuan_16 Start: 9822, Stop: 10546, Start Num: 23
Candidate Starts for Zhuangyuan_16:
(Start: 23 @9822 has 2 MA's), (38, 9951), (53, 10047), (56, 10074), (58, 10083), (69, 10143), (72, 10182), (74, 10194), (75, 10200), (78, 10230), (83, 10260), (103, 10377), (112, 10425), (123, 10515), (127, 10539),

Gene: Zorro_17 Start: 11791, Stop: 12566, Start Num: 7
Candidate Starts for Zorro_17:
(1, 11305), (2, 11518), (Start: 7 @11791 has 13 MA's), (Start: 9 @11800 has 56 MA's), (Start: 26 @11920 has 1 MA's), (43, 12046), (45, 12055), (60, 12127), (74, 12232), (83, 12298), (108, 12424), (110, 12442), (112, 12454),