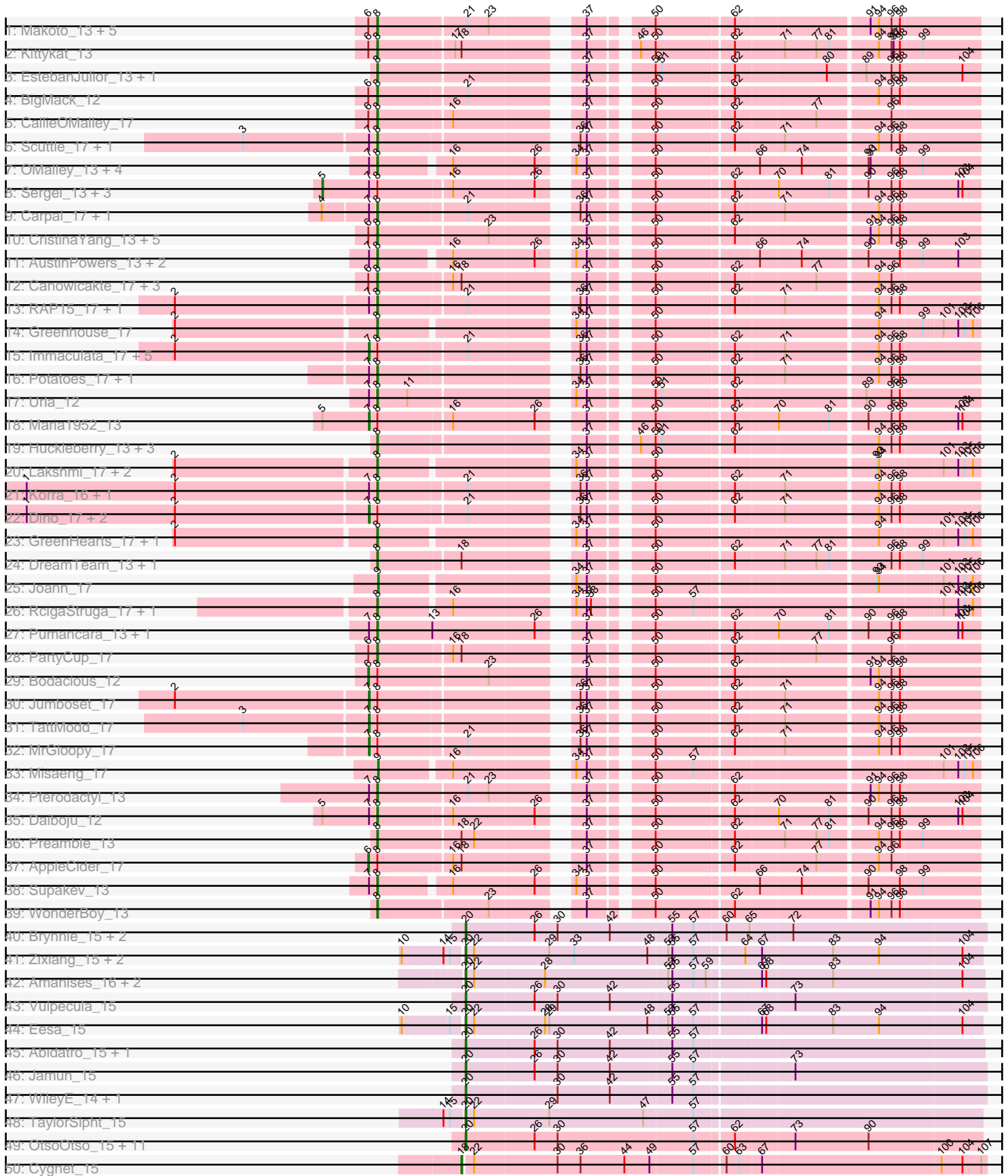


Pham 301062



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 301062 Report

This analysis was run 06/08/26 on database version 649.

Pham number 301062 has 213 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 : CallieOMalley_17
- Track 6 : Scuttle_17, Riverdale_17
- Track 7 : OMalley_13, Eunoia_13, Aledel_12, Chridison_13, Riovina_13
- Track 8 : Sergei_13, KingBob_13, Herb_13, Temper16_13
- Track 9 : Carpal_17, Beethoven_17
- Track 10 : CristinaYang_13, Lasagna_13, LilStuart_13, Lennox_13, Nancia_13, ChewChew_13
- Track 11 : AustinPowers_13, HunterDalle_13, Vulture_13
- Track 12 : Canowicakte_17, Wayne_16, Suppi_17, Litotes_17
- Track 13 : RAP15_17, Vallejo_17
- Track 14 : Greenhouse_17
- Track 15 : Immaculata_17, Glenn_17, Savage2526_17, Rozby_17, MeganNoll_16, Kalizoi_17
- Track 16 : Potatoes_17, Cholula_17
- Track 17 : Urla_12
- Track 18 : Maria1952_13
- Track 19 : Huckleberry_13, HeadNerd_12, Bennie_13, Moki_13
- Track 20 : Lakshmi_17, Albanese_17, Oxynfrius_17
- Track 21 : Korra_16, Wawa_17
- Track 22 : Dino_17, BrotherBLo_17, Zorro_17
- Track 23 : GreenHearts_17, Nubia_16
- Track 24 : DreamTeam_13, Gisselle_13
- Track 25 : Joann_17
- Track 26 : RcigaStruga_17, Huntingdon_17
- Track 27 : Pumancara_13, PinkFriday_13
- Track 28 : PartyCup_17
- Track 29 : Bodacious_12
- 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, Ruchi_15, Basilisk_15
- Track 41 : Zixiang_15, Niblet_15, Chicken_15
- Track 42 : Amanises_16, Toad24_16, Orcanus_15
- Track 43 : Vulpecula_15
- Track 44 : Eesa_15
- Track 45 : Abidatro_15, Galaxy_15
- Track 46 : Jamun_15
- Track 47 : WileyE_14, Chickaboom_14
- Track 48 : TaylorSipht_15
- Track 49 : 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 50 : Cygnet_15
- Track 51 : LittleTokyo_15
- Track 52 : Kuleana_15
- Track 53 : Antrice_15
- Track 54 : Zhuangyuan_16
- Track 55 : Amphitrite_14, HamCheese_13, PhluffyCoco_14
- Track 56 : Glotell_14, KHumphrey_14, AmiCi24_14
- Track 57 : Fingolfin_14, Juno112_14, Atlantica_14
- Track 58 : StuartMinion_14
- Track 59 : Renna12_15
- Track 60 : DanHam62_14, RedFox_14
- Track 61 : Leona_14
- Track 62 : Andrew_14
- Track 63 : Babushka_14
- Track 64 : DirtyBubble_14, Stoor_14, SanaSana_15, BabyYoda_14
- Track 65 : Swervy_14, Slay_14
- Track 66 : Armstrong_12, Clayda5_13, Rollins_12, Coltrane_12, Vitas_13, Brahms_12, Bernstein_12, Skylord_13
- Track 67 : Avocadoman_14, Abigail_14, DickRichards_14, PhigPhack_14, CroZenni_14, SansAfet_14, Johnathan_14, BelmontSKP_15, LimaBean_14, Kenzers_14, Lynlen_14, Bengal_14, AnnaLie_15
- Track 68 : BAjuniper_14
- Track 69 : Rona_14, Kieran_14, ChiliPepper_14, Dismas_14
- Track 70 : MsUbiquitous_14, CupcakePrincess_14, TukTuk_14, Jabb_14
- Track 71 : FlameThrower_14, Bachaco_14, Katzastrophic_14
- Track 72 : Celaena_14
- Track 73 : Jovita_14, QMacho_15, Eula_14
- Track 74 : Arroyo_15
- Track 75 : Burritobowl_14, Milomuff_15
- Track 76 : Finalfrontier_15
- Track 77 : Kate33_14, BabyDaisy_15, Didgeridoo_15, IndyLu_14, Lahqtemish_14, PastaFagioli_14
- Track 78 : Akino08_14
- Track 79 : Franklin22_13
- Track 80 : Stromboli_14
- Track 81 : Nicky22_15
- Track 82 : Gack_13

- Track 83 : Quenya_15
- Track 84 : Icarian_15
- Track 85 : BubbaBear_14, Albedo_14, Doobus_14, Phisb_14
- Track 86 : CliffHanger_15
- Track 87 : Squircle_14, Olliecat_14
- Track 88 : Albright_14, Softsoap_14
- Track 89 : Buldak_14
- Track 90 : Teagster_13, Shayna_13, SunnyD_13
- Track 91 : Elva_15
- Track 92 : SarBear_14
- Track 93 : Eden_13
- Track 94 : Sharkboy_14
- Track 95 : AvGardian_14
- Track 96 : Loviatar_14
- Track 97 : Lilo27_14

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

The start number called the most often in the published annotations is 20, it was called in 126 of the 213 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abidatro_15, Abigail_14, Akino08_14, Albedo_14, Albright_14, Amanises_16, Amelia_16, AmiCi24_14, Amphitrite_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, Chicken_15, ChiliPepper_14, Clayda5_13, Coltrane_12, Colusalem_15, Coral_15, Cote_16, CroZenni_14, CupcakePrincess_14, DanHam62_14, Daob_16, DickRichards_14, Didgeridoo_15, DirtyBubble_14, Dismas_14, Doobus_14, Eden_13, Eesa_15, Elva_15, Eula_14, Finalfrontier_15, Fingolfin_14, 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, Niblet_15, 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, Zixiang_15,

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, AppleCider_17, AustinPowers_13, 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, Gisselle_13, Glenn_17, GreenHearts_17, Greenhouse_17, HeadNerd_12, Herb_13, Huckleberry_13, HunterDalle_13, Huntingdon_17, Immaculata_17, Joann_17, Jumboset_17, Kalizoi_17, KingBob_13, Kittykat_13, Korra_16, Lakshmi_17, Lasagna_13, Lennox_13, LilStuart_13, Litotes_17, LittleTokyo_15, Lucy_13, 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, 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 213 (2.8%) of genes in pham
- Manual Annotations of this start: 4 of 213
- 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 213 (10.3%) of genes in pham
- Manual Annotations of this start: 2 of 213
- 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 213 (19.2%) of genes in pham
- Manual Annotations of this start: 13 of 213
- 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 81 of 213 (38.0%) of genes in pham
- Manual Annotations of this start: 62 of 213
- Called 76.5% of time when present
- Phage (with cluster) where this start called: Albanese_17 (AK), 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), GreenHearts_17 (AK), Greenhouse_17 (AK), HeadNerd_12 (AK), Huckleberry_13 (AK), HunterDalle_13 (AK), Huntingdon_17 (AK),

Kittykat_13 (AK), Korra_16 (AK), Lakshmi_17 (AK), Lasagna_13 (AK), Lennox_13 (AK), LilStuart_13 (AK), Litotes_17 (AK), Lucy_13 (AK), Makoto_13 (AK), MamaPearl_13 (AK), Moki_13 (AK), Nancia_13 (AK), Nubia_16 (AK), OMalley_13 (AK), OurGirlNessie_13 (AK), Oxynfrius_17 (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), RcigaStruga_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 9:

- Found in 2 of 213 (0.9%) of genes in pham
- Manual Annotations of this start: 2 of 213
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Joann_17 (AK), Misaeng_17 (AK),

Start 18:

- Found in 11 of 213 (5.2%) of genes in pham
- Manual Annotations of this start: 1 of 213
- Called 9.1% of time when present
- Phage (with cluster) where this start called: Cygnet_15 (AS2),

Start 19:

- Found in 2 of 213 (0.9%) of genes in pham
- Manual Annotations of this start: 2 of 213
- Called 100.0% of time when present
- Phage (with cluster) where this start called: LittleTokyo_15 (AS2), Zhuangyuan_16 (AS2),

Start 20:

- Found in 127 of 213 (59.6%) of genes in pham
- Manual Annotations of this start: 126 of 213
- 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), Amanises_16 (AS1), Amelia_16 (AS2), AmiCi24_14 (AS3), Amphitrite_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), Chicken_15 (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_14 (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), Fingolfin_14 (AS3), 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), Niblet_15 (AS1), 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), TaylorSipt_15 (AS1), Teagster_13 (EB), Toad24_16 (AS1), TukTuk_14 (EB), Vitas_13 (EB), Vulpecula_15 (AS1), WileyE_14 (AS1), Zixiang_15 (AS1),

Start 21:

- Found in 31 of 213 (14.6%) of genes in pham
- Manual Annotations of this start: 1 of 213
- Called 3.2% of time when present
- Phage (with cluster) where this start called: CliffHanger_15 (EB),

Summary by clusters:

There are 5 clusters represented in this pham: AS3, AS2, AK, AS1, EB,

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 62 times for cluster AK.
- Start number 9 was manually annotated 2 times for cluster AK.

Info for manual annotations of cluster AS1:

- Start number 20 was manually annotated 17 times for cluster AS1.

Info for manual annotations of cluster AS2:

- Start number 18 was manually annotated 1 time for cluster AS2.
- Start number 19 was manually annotated 2 times for cluster AS2.
- Start number 20 was manually annotated 14 times for cluster AS2.

Info for manual annotations of cluster AS3:

- Start number 20 was manually annotated 16 times for cluster AS3.

Info for manual annotations of cluster EB:

- Start number 20 was manually annotated 79 times for cluster EB.
- Start number 21 was manually annotated 1 time for cluster EB.

Gene Information:

Gene: Abidatro_15 Start: 9744, Stop: 10471, Start Num: 20

Candidate Starts for Abidatro_15:

(Start: 20 @9744 has 126 MA's), (26, 9840), (30, 9873), (42, 9948), (55, 10035), (57, 10065),

Gene: Abigail_14 Start: 9362, Stop: 10053, Start Num: 20

Candidate Starts for Abigail_14:

(Start: 20 @9362 has 126 MA's), (28, 9473), (43, 9536), (52, 9593), (54, 9602), (57, 9635), (82, 9827),

Gene: Akino08_14 Start: 9518, Stop: 10209, Start Num: 20

Candidate Starts for Akino08_14:

(Start: 20 @9518 has 126 MA's), (47, 9722), (54, 9758), (57, 9791),

Gene: Albanese_17 Start: 11894, Stop: 12654, Start Num: 8

Candidate Starts for Albanese_17:

(2, 11618), (Start: 8 @11894 has 62 MA's), (34, 12131), (37, 12146), (50, 12218), (93, 12512), (94, 12515), (101, 12602), (103, 12623), (105, 12632), (106, 12644),

Gene: Albedo_14 Start: 9208, Stop: 9899, Start Num: 20

Candidate Starts for Albedo_14:

(Start: 20 @9208 has 126 MA's), (28, 9319), (43, 9382), (52, 9439), (54, 9448), (57, 9481), (66, 9574), (75, 9640),

Gene: Albright_14 Start: 9243, Stop: 9934, Start Num: 20

Candidate Starts for Albright_14:

(Start: 20 @9243 has 126 MA's), (28, 9354), (43, 9417), (52, 9474), (54, 9483), (57, 9516), (76, 9684), (82, 9708),

Gene: Aledel_12 Start: 8974, Stop: 9731, Start Num: 8

Candidate Starts for Aledel_12:

(Start: 7 @8965 has 13 MA's), (Start: 8 @8974 has 62 MA's), (16, 9067), (26, 9181), (34, 9208), (37, 9223), (50, 9295), (66, 9433), (74, 9487), (90, 9574), (91, 9577), (98, 9619), (99, 9649),

Gene: Amanises_16 Start: 9656, Stop: 10377, Start Num: 20

Candidate Starts for Amanises_16:

(Start: 20 @9656 has 126 MA's), (22, 9668), (28, 9767), (53, 9941), (55, 9947), (57, 9977), (59, 9995), (67, 10064), (68, 10070), (83, 10163), (104, 10346),

Gene: Amelia_16 Start: 9644, Stop: 10362, Start Num: 20

Candidate Starts for Amelia_16:

(Start: 20 @9644 has 126 MA's), (26, 9740), (30, 9773), (57, 9965), (62, 10016), (73, 10097), (90, 10202),

Gene: AmiCi24_14 Start: 9058, Stop: 9782, Start Num: 20

Candidate Starts for AmiCi24_14:

(12, 9016), (Start: 20 @9058 has 126 MA's), (25, 9151), (28, 9169), (31, 9196), (47, 9310), (55, 9349), (57, 9379), (83, 9565),

Gene: Amphitrite_14 Start: 9058, Stop: 9782, Start Num: 20

Candidate Starts for Amphitrite_14:

(10, 8974), (Start: 20 @9058 has 126 MA's), (25, 9151), (28, 9169), (31, 9196), (47, 9310), (55, 9349), (57, 9379), (83, 9565), (87, 9604),

Gene: Andrew_14 Start: 9438, Stop: 10162, Start Num: 20

Candidate Starts for Andrew_14:

(Start: 20 @9438 has 126 MA's), (24, 9498), (41, 9639), (47, 9690), (49, 9699), (57, 9759), (67, 9846), (73, 9891), (86, 9981), (100, 10098), (104, 10128), (105, 10131),

Gene: AnnaLie_15 Start: 9652, Stop: 10343, Start Num: 20

Candidate Starts for AnnaLie_15:

(Start: 20 @9652 has 126 MA's), (28, 9763), (43, 9826), (52, 9883), (54, 9892), (57, 9925), (82, 10117),

Gene: Antrice_15 Start: 9399, Stop: 10123, Start Num: 20

Candidate Starts for Antrice_15:

(Start: 20 @9399 has 126 MA's), (30, 9528), (44, 9624), (46, 9648), (57, 9720), (58, 9732), (62, 9771), (63, 9777), (89, 9954), (105, 10092), (107, 10116),

Gene: AppleCider_17 Start: 11828, Stop: 12606, Start Num: 6

Candidate Starts for AppleCider_17:

(Start: 6 @11828 has 2 MA's), (Start: 8 @11840 has 62 MA's), (16, 11939), (Start: 18 @11951 has 1 MA's), (37, 12095), (50, 12167), (62, 12272), (77, 12383), (94, 12464), (96, 12482),

Gene: Armstrong_12 Start: 8785, Stop: 9494, Start Num: 20

Candidate Starts for Armstrong_12:

(Start: 20 @8785 has 126 MA's), (28, 8893), (54, 9025), (57, 9058), (95, 9325),

Gene: Arroyo_15 Start: 9713, Stop: 10404, Start Num: 20

Candidate Starts for Arroyo_15:

(Start: 20 @9713 has 126 MA's), (28, 9824), (43, 9887), (52, 9944), (54, 9953), (57, 9986), (73, 10127), (76, 10154), (82, 10178),

Gene: Atlantica_14 Start: 9060, Stop: 9784, Start Num: 20

Candidate Starts for Atlantica_14:

(10, 8976), (Start: 20 @9060 has 126 MA's), (25, 9153), (28, 9171), (31, 9198), (47, 9312), (55, 9351), (57, 9381), (83, 9567), (105, 9753),

Gene: AustinPowers_13 Start: 8975, Stop: 9732, Start Num: 8

Candidate Starts for AustinPowers_13:

(Start: 7 @8966 has 13 MA's), (Start: 8 @8975 has 62 MA's), (16, 9068), (26, 9182), (34, 9209), (37, 9224), (50, 9296), (66, 9434), (74, 9488), (90, 9575), (98, 9620), (99, 9650), (103, 9701),

Gene: AvGardian_14 Start: 9267, Stop: 9958, Start Num: 20

Candidate Starts for AvGardian_14:

(Start: 20 @9267 has 126 MA's), (27, 9372), (47, 9471), (52, 9498), (54, 9507), (57, 9540),

Gene: Avocadoman_14 Start: 9305, Stop: 9996, Start Num: 20

Candidate Starts for Avocadoman_14:

(Start: 20 @9305 has 126 MA's), (28, 9416), (43, 9479), (52, 9536), (54, 9545), (57, 9578), (82, 9770),

Gene: BAjuniper_14 Start: 8933, Stop: 9645, Start Num: 20

Candidate Starts for BAjuniper_14:

(Start: 20 @8933 has 126 MA's), (54, 9173), (57, 9206),

Gene: Babushka_14 Start: 9108, Stop: 9832, Start Num: 20

Candidate Starts for Babushka_14:

(10, 9024), (Start: 20 @9108 has 126 MA's), (25, 9201), (28, 9219), (31, 9246), (47, 9360), (55, 9399), (57, 9429),

Gene: BabyDaisy_15 Start: 9464, Stop: 10155, Start Num: 20

Candidate Starts for BabyDaisy_15:

(Start: 20 @9464 has 126 MA's), (Start: 21 @9467 has 1 MA's), (27, 9569), (47, 9668), (52, 9695), (57, 9737), (68, 9839),

Gene: BabyYoda_14 Start: 9464, Stop: 10155, Start Num: 20

Candidate Starts for BabyYoda_14:

(Start: 20 @9464 has 126 MA's), (39, 9614), (47, 9668), (54, 9704), (95, 10004),

Gene: Bachaco_14 Start: 9138, Stop: 9847, Start Num: 20

Candidate Starts for Bachaco_14:

(Start: 20 @9138 has 126 MA's), (52, 9369), (54, 9378), (57, 9411), (66, 9504), (69, 9516), (94, 9660),

Gene: Basilisk_15 Start: 10064, Stop: 10794, Start Num: 20

Candidate Starts for Basilisk_15:

(Start: 20 @10064 has 126 MA's), (26, 10160), (30, 10193), (42, 10268), (55, 10355), (57, 10385), (60, 10430), (65, 10463), (72, 10520),

Gene: Beethoven_17 Start: 11795, Stop: 12561, Start Num: 8

Candidate Starts for Beethoven_17:

(4, 11723), (Start: 7 @11786 has 13 MA's), (Start: 8 @11795 has 62 MA's), (Start: 21 @11915 has 1 MA's), (36, 12041), (37, 12050), (50, 12122), (62, 12227), (71, 12293), (94, 12419), (96, 12437), (98, 12449),

Gene: BelmontSKP_15 Start: 9652, Stop: 10343, Start Num: 20

Candidate Starts for BelmontSKP_15:

(Start: 20 @9652 has 126 MA's), (28, 9763), (43, 9826), (52, 9883), (54, 9892), (57, 9925), (82, 10117),

Gene: Bengal_14 Start: 9243, Stop: 9934, Start Num: 20

Candidate Starts for Bengal_14:

(Start: 20 @9243 has 126 MA's), (28, 9354), (43, 9417), (52, 9474), (54, 9483), (57, 9516), (82, 9708),

Gene: Bennie_13 Start: 8948, Stop: 9714, Start Num: 8

Candidate Starts for Bennie_13:

(Start: 8 @8948 has 62 MA's), (37, 9203), (46, 9254), (50, 9275), (51, 9284), (62, 9380), (94, 9572), (96, 9590), (98, 9602),

Gene: Bernstein_12 Start: 8845, Stop: 9554, Start Num: 20

Candidate Starts for Bernstein_12:

(Start: 20 @8845 has 126 MA's), (28, 8953), (54, 9085), (57, 9118), (95, 9385),

Gene: BigMack_12 Start: 8944, Stop: 9710, Start Num: 8

Candidate Starts for BigMack_12:

(Start: 6 @8932 has 2 MA's), (Start: 8 @8944 has 62 MA's), (Start: 21 @9064 has 1 MA's), (37, 9199), (50, 9271), (62, 9376), (94, 9568), (96, 9586), (98, 9598),

Gene: Bodacious_12 Start: 8930, Stop: 9711, Start Num: 6

Candidate Starts for Bodacious_12:

(Start: 6 @8930 has 2 MA's), (Start: 8 @8942 has 62 MA's), (23, 9095), (37, 9200), (50, 9272), (62, 9377), (91, 9557), (94, 9569), (96, 9587), (98, 9599),

Gene: Brahms_12 Start: 8785, Stop: 9494, Start Num: 20

Candidate Starts for Brahms_12:

(Start: 20 @8785 has 126 MA's), (28, 8893), (54, 9025), (57, 9058), (95, 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: 8 @11801 has 62 MA's), (Start: 21 @11921 has 1 MA's), (36, 12047), (37, 12056), (50, 12128), (62, 12233), (71, 12299), (94, 12425), (96, 12443), (98, 12455),

Gene: Brynnie_15 Start: 9876, Stop: 10606, Start Num: 20

Candidate Starts for Brynnie_15:

(Start: 20 @9876 has 126 MA's), (26, 9972), (30, 10005), (42, 10080), (55, 10167), (57, 10197), (60, 10242), (65, 10275), (72, 10332),

Gene: BubbaBear_14 Start: 9208, Stop: 9899, Start Num: 20

Candidate Starts for BubbaBear_14:

(Start: 20 @9208 has 126 MA's), (28, 9319), (43, 9382), (52, 9439), (54, 9448), (57, 9481), (66, 9574), (75, 9640),

Gene: Buldak_14 Start: 9315, Stop: 10006, Start Num: 20

Candidate Starts for Buldak_14:

(Start: 20 @9315 has 126 MA's), (45, 9507), (54, 9567), (57, 9600), (61, 9651),

Gene: Burritobowl_14 Start: 9270, Stop: 9961, Start Num: 20

Candidate Starts for Burritobowl_14:

(Start: 20 @9270 has 126 MA's), (28, 9381), (43, 9444), (52, 9501), (54, 9510), (57, 9543), (75, 9702), (82, 9735),

Gene: CallieOMalley_17 Start: 11840, Stop: 12606, Start Num: 8

Candidate Starts for CallieOMalley_17:

(Start: 6 @11828 has 2 MA's), (Start: 8 @11840 has 62 MA's), (16, 11939), (37, 12095), (50, 12167), (62, 12272), (77, 12383), (96, 12482),

Gene: Canowicakte_17 Start: 11875, Stop: 12641, Start Num: 8

Candidate Starts for Canowicakte_17:

(Start: 6 @11863 has 2 MA's), (Start: 8 @11875 has 62 MA's), (16, 11974), (Start: 18 @11986 has 1 MA's), (37, 12130), (50, 12202), (62, 12307), (77, 12418), (94, 12499), (96, 12517),

Gene: Carpal_17 Start: 11802, Stop: 12568, Start Num: 8

Candidate Starts for Carpal_17:

(4, 11730), (Start: 7 @11793 has 13 MA's), (Start: 8 @11802 has 62 MA's), (Start: 21 @11922 has 1 MA's), (36, 12048), (37, 12057), (50, 12129), (62, 12234), (71, 12300), (94, 12426), (96, 12444), (98, 12456),

Gene: Celaena_14 Start: 9074, Stop: 9783, Start Num: 20

Candidate Starts for Celaena_14:

(Start: 20 @9074 has 126 MA's), (52, 9305), (54, 9314), (57, 9347), (66, 9440), (69, 9452), (94, 9596), (95, 9611),

Gene: ChewChew_13 Start: 8941, Stop: 9710, Start Num: 8

Candidate Starts for ChewChew_13:

(Start: 6 @8929 has 2 MA's), (Start: 8 @8941 has 62 MA's), (23, 9094), (37, 9199), (50, 9271), (62, 9376), (91, 9556), (94, 9568), (96, 9586), (98, 9598),

Gene: Chickaboom_14 Start: 9421, Stop: 10145, Start Num: 20

Candidate Starts for Chickaboom_14:

(Start: 20 @9421 has 126 MA's), (30, 9550), (42, 9625), (55, 9712), (57, 9742),

Gene: Chicken_15 Start: 9448, Stop: 10169, Start Num: 20

Candidate Starts for Chicken_15:

(10, 9370), (14, 9427), (15, 9433), (Start: 20 @9448 has 126 MA's), (22, 9460), (29, 9568), (33, 9604), (48, 9709), (53, 9736), (55, 9742), (57, 9772), (64, 9838), (67, 9859), (83, 9958), (94, 10024), (104, 10141),

Gene: ChiliPepper_14 Start: 9439, Stop: 10115, Start Num: 20

Candidate Starts for ChiliPepper_14:

(Start: 20 @9439 has 126 MA's), (52, 9670), (54, 9679), (57, 9712),

Gene: Cholula_17 Start: 11847, Stop: 12613, Start Num: 8

Candidate Starts for Cholula_17:

(Start: 7 @11838 has 13 MA's), (Start: 8 @11847 has 62 MA's), (36, 12093), (37, 12102), (50, 12174), (62, 12279), (71, 12345), (94, 12471), (96, 12489), (98, 12501),

Gene: Chridison_13 Start: 8975, Stop: 9732, Start Num: 8

Candidate Starts for Chridison_13:

(Start: 7 @8966 has 13 MA's), (Start: 8 @8975 has 62 MA's), (16, 9068), (26, 9182), (34, 9209), (37, 9224), (50, 9296), (66, 9434), (74, 9488), (90, 9575), (91, 9578), (98, 9620), (99, 9650),

Gene: Christian_13 Start: 8942, Stop: 9711, Start Num: 8

Candidate Starts for Christian_13:

(Start: 6 @8930 has 2 MA's), (Start: 8 @8942 has 62 MA's), (Start: 21 @9065 has 1 MA's), (23, 9095), (37, 9200), (50, 9272), (62, 9377), (91, 9557), (94, 9569), (96, 9587), (98, 9599),

Gene: Clayda5_13 Start: 8785, Stop: 9494, Start Num: 20

Candidate Starts for Clayda5_13:

(Start: 20 @8785 has 126 MA's), (28, 8893), (54, 9025), (57, 9058), (95, 9325),

Gene: CliffHanger_15 Start: 8971, Stop: 9659, Start Num: 21

Candidate Starts for CliffHanger_15:

(Start: 20 @8968 has 126 MA's), (Start: 21 @8971 has 1 MA's), (27, 9073), (35, 9097), (54, 9217), (57, 9250), (96, 9523),

Gene: Coltrane_12 Start: 8785, Stop: 9494, Start Num: 20

Candidate Starts for Coltrane_12:

(Start: 20 @8785 has 126 MA's), (28, 8893), (54, 9025), (57, 9058), (95, 9325),

Gene: Colusalem_15 Start: 9483, Stop: 10201, Start Num: 20

Candidate Starts for Colusalem_15:

(Start: 20 @9483 has 126 MA's), (26, 9579), (30, 9612), (57, 9804), (62, 9855), (73, 9936), (90, 10041),

Gene: Coral_15 Start: 9483, Stop: 10201, Start Num: 20

Candidate Starts for Coral_15:

(Start: 20 @9483 has 126 MA's), (26, 9579), (30, 9612), (57, 9804), (62, 9855), (73, 9936), (90, 10041),

Gene: Cote_16 Start: 9644, Stop: 10362, Start Num: 20

Candidate Starts for Cote_16:

(Start: 20 @9644 has 126 MA's), (26, 9740), (30, 9773), (57, 9965), (62, 10016), (73, 10097), (90, 10202),

Gene: CristinaYang_13 Start: 8942, Stop: 9711, Start Num: 8

Candidate Starts for CristinaYang_13:

(Start: 6 @8930 has 2 MA's), (Start: 8 @8942 has 62 MA's), (23, 9095), (37, 9200), (50, 9272), (62, 9377), (91, 9557), (94, 9569), (96, 9587), (98, 9599),

Gene: CroZenni_14 Start: 9243, Stop: 9934, Start Num: 20

Candidate Starts for CroZenni_14:

(Start: 20 @9243 has 126 MA's), (28, 9354), (43, 9417), (52, 9474), (54, 9483), (57, 9516), (82, 9708),

Gene: CupcakePrincess_14 Start: 9283, Stop: 9974, Start Num: 20

Candidate Starts for CupcakePrincess_14:

(Start: 20 @9283 has 126 MA's), (28, 9394), (43, 9457), (52, 9514), (54, 9523), (57, 9556), (67, 9652), (75, 9715),

Gene: Cygnet_15 Start: 9436, Stop: 10160, Start Num: 18

Candidate Starts for Cygnet_15:

(Start: 18 @9436 has 1 MA's), (22, 9448), (30, 9565), (36, 9598), (44, 9661), (49, 9697), (57, 9757), (60, 9796), (63, 9814), (67, 9844), (100, 10096), (104, 10126), (107, 10153),

Gene: Daiboju_12 Start: 8974, Stop: 9737, Start Num: 8

Candidate Starts for Daiboju_12:

(Start: 5 @8899 has 4 MA's), (Start: 7 @8965 has 13 MA's), (Start: 8 @8974 has 62 MA's), (16, 9073), (26, 9187), (37, 9229), (50, 9301), (62, 9406), (70, 9460), (81, 9532), (90, 9580), (96, 9613), (98, 9625), (103, 9706), (104, 9712),

Gene: DanHam62_14 Start: 9060, Stop: 9784, Start Num: 20

Candidate Starts for DanHam62_14:

(10, 8976), (Start: 20 @9060 has 126 MA's), (25, 9153), (28, 9171), (31, 9198), (47, 9312), (55, 9351), (57, 9381), (78, 9549), (83, 9567),

Gene: Daob_16 Start: 9647, Stop: 10365, Start Num: 20

Candidate Starts for Daob_16:

(Start: 20 @9647 has 126 MA's), (26, 9743), (30, 9776), (57, 9968), (62, 10019), (73, 10100), (90, 10205),

Gene: DickRichards_14 Start: 9737, Stop: 10428, Start Num: 20

Candidate Starts for DickRichards_14:

(Start: 20 @9737 has 126 MA's), (28, 9848), (43, 9911), (52, 9968), (54, 9977), (57, 10010), (82, 10202),

Gene: Didgeridoo_15 Start: 9466, Stop: 10157, Start Num: 20

Candidate Starts for Didgeridoo_15:

(Start: 20 @9466 has 126 MA's), (Start: 21 @9469 has 1 MA's), (27, 9571), (47, 9670), (52, 9697), (57, 9739), (68, 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: 8 @11800 has 62 MA's), (Start: 21 @11920 has 1 MA's), (36, 12046), (37, 12055), (50, 12127), (62, 12232), (71, 12298), (94, 12424), (96, 12442), (98, 12454),

Gene: DirtyBubble_14 Start: 9472, Stop: 10163, Start Num: 20

Candidate Starts for DirtyBubble_14:

(Start: 20 @9472 has 126 MA's), (39, 9622), (47, 9676), (54, 9712), (95, 10012),

Gene: Dismas_14 Start: 9439, Stop: 10115, Start Num: 20
Candidate Starts for Dismas_14:
(Start: 20 @9439 has 126 MA's), (52, 9670), (54, 9679), (57, 9712),

Gene: Doobus_14 Start: 9474, Stop: 10165, Start Num: 20
Candidate Starts for Doobus_14:
(Start: 20 @9474 has 126 MA's), (28, 9585), (43, 9648), (52, 9705), (54, 9714), (57, 9747), (66, 9840),
(75, 9906),

Gene: DrRobert_13 Start: 8942, Stop: 9711, Start Num: 8
Candidate Starts for DrRobert_13:
(Start: 6 @8930 has 2 MA's), (Start: 8 @8942 has 62 MA's), (Start: 21 @9065 has 1 MA's), (23, 9095),
(37, 9200), (50, 9272), (62, 9377), (91, 9557), (94, 9569), (96, 9587), (98, 9599),

Gene: DreamTeam_13 Start: 9012, Stop: 9778, Start Num: 8
Candidate Starts for DreamTeam_13:
(Start: 8 @9012 has 62 MA's), (Start: 18 @9123 has 1 MA's), (37, 9267), (50, 9339), (62, 9444), (71,
9510), (77, 9555), (81, 9573), (96, 9654), (98, 9666), (99, 9696),

Gene: Eden_13 Start: 8899, Stop: 9614, Start Num: 20
Candidate Starts for Eden_13:
(Start: 20 @8899 has 126 MA's), (27, 9001), (28, 9007), (54, 9139), (57, 9172), (67, 9268),

Gene: Eesa_15 Start: 9662, Stop: 10383, Start Num: 20
Candidate Starts for Eesa_15:
(10, 9584), (15, 9647), (Start: 20 @9662 has 126 MA's), (22, 9674), (28, 9776), (29, 9782), (48, 9923),
(53, 9950), (55, 9956), (57, 9986), (67, 10073), (68, 10079), (83, 10172), (94, 10238), (104, 10355),

Gene: Elva_15 Start: 9524, Stop: 10215, Start Num: 20
Candidate Starts for Elva_15:
(Start: 20 @9524 has 126 MA's), (39, 9674), (47, 9728), (54, 9764), (75, 9956), (79, 9980),

Gene: EstebanJulior_13 Start: 8981, Stop: 9747, Start Num: 8
Candidate Starts for EstebanJulior_13:
(Start: 8 @8981 has 62 MA's), (37, 9236), (50, 9308), (51, 9317), (62, 9413), (80, 9539), (89, 9587),
(96, 9623), (98, 9635), (104, 9722),

Gene: Eula_14 Start: 9244, Stop: 9935, Start Num: 20
Candidate Starts for Eula_14:
(Start: 20 @9244 has 126 MA's), (28, 9355), (43, 9418), (52, 9475), (54, 9484), (57, 9517), (75, 9676),
(102, 9862),

Gene: Eunoia_13 Start: 8974, Stop: 9731, Start Num: 8
Candidate Starts for Eunoia_13:
(Start: 7 @8965 has 13 MA's), (Start: 8 @8974 has 62 MA's), (16, 9067), (26, 9181), (34, 9208), (37,
9223), (50, 9295), (66, 9433), (74, 9487), (90, 9574), (91, 9577), (98, 9619), (99, 9649),

Gene: Finalfrontier_15 Start: 9756, Stop: 10447, Start Num: 20
Candidate Starts for Finalfrontier_15:
(Start: 20 @9756 has 126 MA's), (28, 9867), (43, 9930), (52, 9987), (54, 9996), (57, 10029), (75,
10188),

Gene: Fingolfin_14 Start: 9061, Stop: 9785, Start Num: 20

Candidate Starts for Fingolfin_14:

(10, 8977), (Start: 20 @9061 has 126 MA's), (25, 9154), (28, 9172), (31, 9199), (47, 9313), (55, 9352), (57, 9382), (83, 9568), (105, 9754),

Gene: FlameThrower_14 Start: 8962, Stop: 9671, Start Num: 20

Candidate Starts for FlameThrower_14:

(Start: 20 @8962 has 126 MA's), (52, 9193), (54, 9202), (57, 9235), (66, 9328), (69, 9340), (94, 9484),

Gene: Franklin22_13 Start: 8878, Stop: 9596, Start Num: 20

Candidate Starts for Franklin22_13:

(Start: 20 @8878 has 126 MA's), (28, 8986), (39, 9025), (54, 9118), (57, 9151), (79, 9334),

Gene: Gack_13 Start: 8940, Stop: 9655, Start Num: 20

Candidate Starts for Gack_13:

(Start: 20 @8940 has 126 MA's), (28, 9048), (39, 9087), (40, 9096), (54, 9180), (56, 9207), (57, 9213), (67, 9309), (79, 9396), (88, 9444), (89, 9447), (95, 9480),

Gene: Galaxy_15 Start: 9750, Stop: 10477, Start Num: 20

Candidate Starts for Galaxy_15:

(Start: 20 @9750 has 126 MA's), (26, 9846), (30, 9879), (42, 9954), (55, 10041), (57, 10071),

Gene: Gisselle_13 Start: 9012, Stop: 9778, Start Num: 8

Candidate Starts for Gisselle_13:

(Start: 8 @9012 has 62 MA's), (Start: 18 @9123 has 1 MA's), (37, 9267), (50, 9339), (62, 9444), (71, 9510), (77, 9555), (81, 9573), (96, 9654), (98, 9666), (99, 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: 8 @11852 has 62 MA's), (Start: 21 @11972 has 1 MA's), (36, 12098), (37, 12107), (50, 12179), (62, 12284), (71, 12350), (94, 12476), (96, 12494), (98, 12506),

Gene: Glotell_14 Start: 9058, Stop: 9782, Start Num: 20

Candidate Starts for Glotell_14:

(12, 9016), (Start: 20 @9058 has 126 MA's), (25, 9151), (28, 9169), (31, 9196), (47, 9310), (55, 9349), (57, 9379), (83, 9565),

Gene: GreenHearts_17 Start: 11941, Stop: 12701, Start Num: 8

Candidate Starts for GreenHearts_17:

(2, 11665), (Start: 8 @11941 has 62 MA's), (34, 12178), (37, 12193), (50, 12265), (94, 12562), (101, 12649), (103, 12670), (105, 12679), (106, 12691),

Gene: Greenhouse_17 Start: 11865, Stop: 12625, Start Num: 8

Candidate Starts for Greenhouse_17:

(2, 11589), (Start: 8 @11865 has 62 MA's), (34, 12102), (37, 12117), (50, 12189), (94, 12486), (99, 12546), (101, 12573), (103, 12594), (105, 12603), (106, 12615),

Gene: HamCheese_13 Start: 9060, Stop: 9784, Start Num: 20

Candidate Starts for HamCheese_13:

(10, 8976), (Start: 20 @9060 has 126 MA's), (25, 9153), (28, 9171), (31, 9198), (47, 9312), (55, 9351), (57, 9381), (83, 9567), (87, 9606),

Gene: HannahPhantana_16 Start: 9647, Stop: 10365, Start Num: 20

Candidate Starts for HannahPhantana_16:

(Start: 20 @9647 has 126 MA's), (26, 9743), (30, 9776), (57, 9968), (62, 10019), (73, 10100), (90, 10205),

Gene: HeadNerd_12 Start: 8948, Stop: 9714, Start Num: 8

Candidate Starts for HeadNerd_12:

(Start: 8 @8948 has 62 MA's), (37, 9203), (46, 9254), (50, 9275), (51, 9284), (62, 9380), (94, 9572), (96, 9590), (98, 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: 8 @8974 has 62 MA's), (16, 9073), (26, 9187), (37, 9229), (50, 9301), (62, 9406), (70, 9460), (81, 9532), (90, 9580), (96, 9613), (98, 9625), (103, 9706), (104, 9712),

Gene: Huckleberry_13 Start: 8948, Stop: 9714, Start Num: 8

Candidate Starts for Huckleberry_13:

(Start: 8 @8948 has 62 MA's), (37, 9203), (46, 9254), (50, 9275), (51, 9284), (62, 9380), (94, 9572), (96, 9590), (98, 9602),

Gene: HunterDalle_13 Start: 8974, Stop: 9731, Start Num: 8

Candidate Starts for HunterDalle_13:

(Start: 7 @8965 has 13 MA's), (Start: 8 @8974 has 62 MA's), (16, 9067), (26, 9181), (34, 9208), (37, 9223), (50, 9295), (66, 9433), (74, 9487), (90, 9574), (98, 9619), (99, 9649), (103, 9700),

Gene: Huntingdon_17 Start: 11851, Stop: 12611, Start Num: 8

Candidate Starts for Huntingdon_17:

(Start: 8 @11851 has 62 MA's), (16, 11947), (34, 12088), (37, 12103), (38, 12109), (50, 12175), (57, 12229), (101, 12559), (103, 12580), (105, 12589), (106, 12601),

Gene: Icarian_15 Start: 9446, Stop: 10137, Start Num: 20

Candidate Starts for Icarian_15:

(Start: 20 @9446 has 126 MA's), (47, 9650), (52, 9677), (54, 9686), (57, 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: 8 @11846 has 62 MA's), (Start: 21 @11966 has 1 MA's), (36, 12092), (37, 12101), (50, 12173), (62, 12278), (71, 12344), (94, 12470), (96, 12488), (98, 12500),

Gene: IndyLu_14 Start: 9288, Stop: 9979, Start Num: 20

Candidate Starts for IndyLu_14:

(Start: 20 @9288 has 126 MA's), (Start: 21 @9291 has 1 MA's), (27, 9393), (47, 9492), (52, 9519), (57, 9561), (68, 9663),

Gene: Jabb_14 Start: 9283, Stop: 9974, Start Num: 20

Candidate Starts for Jabb_14:

(Start: 20 @9283 has 126 MA's), (28, 9394), (43, 9457), (52, 9514), (54, 9523), (57, 9556), (67, 9652), (75, 9715),

Gene: Jamun_15 Start: 10088, Stop: 10812, Start Num: 20

Candidate Starts for Jamun_15:

(Start: 20 @10088 has 126 MA's), (26, 10184), (30, 10217), (42, 10292), (55, 10379), (57, 10409), (73, 10541),

Gene: Jerole_16 Start: 9644, Stop: 10362, Start Num: 20

Candidate Starts for Jerole_16:

(Start: 20 @9644 has 126 MA's), (26, 9740), (30, 9773), (57, 9965), (62, 10016), (73, 10097), (90, 10202),

Gene: Joann_17 Start: 11845, Stop: 12605, Start Num: 9

Candidate Starts for Joann_17:

(Start: 9 @11845 has 2 MA's), (34, 12082), (37, 12097), (50, 12169), (93, 12463), (94, 12466), (101, 12553), (103, 12574), (105, 12583), (106, 12595),

Gene: Johnathan_14 Start: 9243, Stop: 9934, Start Num: 20

Candidate Starts for Johnathan_14:

(Start: 20 @9243 has 126 MA's), (28, 9354), (43, 9417), (52, 9474), (54, 9483), (57, 9516), (82, 9708),

Gene: Jovita_14 Start: 9345, Stop: 10036, Start Num: 20

Candidate Starts for Jovita_14:

(Start: 20 @9345 has 126 MA's), (28, 9456), (43, 9519), (52, 9576), (54, 9585), (57, 9618), (75, 9777), (102, 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: 8 @11795 has 62 MA's), (36, 12041), (37, 12050), (50, 12122), (62, 12227), (71, 12293), (94, 12419), (96, 12437), (98, 12449),

Gene: Juno112_14 Start: 9061, Stop: 9785, Start Num: 20

Candidate Starts for Juno112_14:

(10, 8977), (Start: 20 @9061 has 126 MA's), (25, 9154), (28, 9172), (31, 9199), (47, 9313), (55, 9352), (57, 9382), (83, 9568), (105, 9754),

Gene: KHumphrey_14 Start: 9058, Stop: 9782, Start Num: 20

Candidate Starts for KHumphrey_14:

(12, 9016), (Start: 20 @9058 has 126 MA's), (25, 9151), (28, 9169), (31, 9196), (47, 9310), (55, 9349), (57, 9379), (83, 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: 8 @11794 has 62 MA's), (Start: 21 @11914 has 1 MA's), (36, 12040), (37, 12049), (50, 12121), (62, 12226), (71, 12292), (94, 12418), (96, 12436), (98, 12448),

Gene: Kate33_14 Start: 9287, Stop: 9978, Start Num: 20

Candidate Starts for Kate33_14:

(Start: 20 @9287 has 126 MA's), (Start: 21 @9290 has 1 MA's), (27, 9392), (47, 9491), (52, 9518), (57, 9560), (68, 9662),

Gene: Katzastrophic_14 Start: 9137, Stop: 9846, Start Num: 20

Candidate Starts for Katzastrophic_14:

(Start: 20 @9137 has 126 MA's), (52, 9368), (54, 9377), (57, 9410), (66, 9503), (69, 9515), (94, 9659),

Gene: Kenzers_14 Start: 9260, Stop: 9951, Start Num: 20

Candidate Starts for Kenzers_14:

(Start: 20 @9260 has 126 MA's), (28, 9371), (43, 9434), (52, 9491), (54, 9500), (57, 9533), (82, 9725),

Gene: Kepler_15 Start: 9482, Stop: 10200, Start Num: 20

Candidate Starts for Kepler_15:

(Start: 20 @9482 has 126 MA's), (26, 9578), (30, 9611), (57, 9803), (62, 9854), (73, 9935), (90, 10040),

Gene: Kieran_14 Start: 9442, Stop: 10118, Start Num: 20

Candidate Starts for Kieran_14:

(Start: 20 @9442 has 126 MA's), (52, 9673), (54, 9682), (57, 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: 8 @8974 has 62 MA's), (16, 9073), (26, 9187), (37, 9229), (50, 9301), (62, 9406), (70, 9460), (81, 9532), (90, 9580), (96, 9613), (98, 9625), (103, 9706), (104, 9712),

Gene: Kittykat_13 Start: 8984, Stop: 9750, Start Num: 8

Candidate Starts for Kittykat_13:

(Start: 6 @8972 has 2 MA's), (Start: 8 @8984 has 62 MA's), (17, 9086), (Start: 18 @9095 has 1 MA's), (37, 9239), (46, 9290), (50, 9311), (62, 9416), (71, 9482), (77, 9527), (81, 9545), (94, 9608), (96, 9626), (97, 9629), (98, 9638), (99, 9668),

Gene: Korra_16 Start: 11800, Stop: 12566, Start Num: 8

Candidate Starts for Korra_16:

(1, 11305), (2, 11518), (Start: 7 @11791 has 13 MA's), (Start: 8 @11800 has 62 MA's), (Start: 21 @11920 has 1 MA's), (36, 12046), (37, 12055), (50, 12127), (62, 12232), (71, 12298), (94, 12424), (96, 12442), (98, 12454),

Gene: Kuleana_15 Start: 9441, Stop: 10159, Start Num: 20

Candidate Starts for Kuleana_15:

(Start: 20 @9441 has 126 MA's), (27, 9546), (30, 9570), (54, 9729), (57, 9762), (60, 9801), (63, 9819), (73, 9894), (100, 10101),

Gene: Lahqtemish_14 Start: 9360, Stop: 10051, Start Num: 20

Candidate Starts for Lahqtemish_14:

(Start: 20 @9360 has 126 MA's), (Start: 21 @9363 has 1 MA's), (27, 9465), (47, 9564), (52, 9591), (57, 9633), (68, 9735),

Gene: Lakshmi_17 Start: 11870, Stop: 12630, Start Num: 8

Candidate Starts for Lakshmi_17:

(2, 11594), (Start: 8 @11870 has 62 MA's), (34, 12107), (37, 12122), (50, 12194), (93, 12488), (94, 12491), (101, 12578), (103, 12599), (105, 12608), (106, 12620),

Gene: Lasagna_13 Start: 8942, Stop: 9711, Start Num: 8

Candidate Starts for Lasagna_13:

(Start: 6 @8930 has 2 MA's), (Start: 8 @8942 has 62 MA's), (23, 9095), (37, 9200), (50, 9272), (62, 9377), (91, 9557), (94, 9569), (96, 9587), (98, 9599),

Gene: Lennox_13 Start: 8942, Stop: 9711, Start Num: 8

Candidate Starts for Lennox_13:

(Start: 6 @8930 has 2 MA's), (Start: 8 @8942 has 62 MA's), (23, 9095), (37, 9200), (50, 9272), (62, 9377), (91, 9557), (94, 9569), (96, 9587), (98, 9599),

Gene: Leona_14 Start: 9111, Stop: 9835, Start Num: 20

Candidate Starts for Leona_14:

(10, 9027), (Start: 20 @9111 has 126 MA's), (25, 9204), (28, 9222), (31, 9249), (47, 9363), (55, 9402), (57, 9432), (83, 9618),

Gene: LilStuart_13 Start: 8942, Stop: 9711, Start Num: 8

Candidate Starts for LilStuart_13:

(Start: 6 @8930 has 2 MA's), (Start: 8 @8942 has 62 MA's), (23, 9095), (37, 9200), (50, 9272), (62, 9377), (91, 9557), (94, 9569), (96, 9587), (98, 9599),

Gene: Lilo27_14 Start: 9220, Stop: 9911, Start Num: 20

Candidate Starts for Lilo27_14:

(Start: 20 @9220 has 126 MA's), (28, 9331), (43, 9394), (47, 9424), (52, 9451), (54, 9460), (57, 9493), (75, 9652), (84, 9703),

Gene: LimaBean_14 Start: 9243, Stop: 9934, Start Num: 20

Candidate Starts for LimaBean_14:

(Start: 20 @9243 has 126 MA's), (28, 9354), (43, 9417), (52, 9474), (54, 9483), (57, 9516), (82, 9708),

Gene: Litotes_17 Start: 11825, Stop: 12591, Start Num: 8

Candidate Starts for Litotes_17:

(Start: 6 @11813 has 2 MA's), (Start: 8 @11825 has 62 MA's), (16, 11924), (Start: 18 @11936 has 1 MA's), (37, 12080), (50, 12152), (62, 12257), (77, 12368), (94, 12449), (96, 12467),

Gene: LittleTokyo_15 Start: 9395, Stop: 10119, Start Num: 19

Candidate Starts for LittleTokyo_15:

(Start: 19 @9395 has 2 MA's), (22, 9407), (30, 9524), (32, 9545), (47, 9647), (49, 9656), (57, 9716), (62, 9767), (63, 9773), (67, 9803), (104, 10085), (107, 10112),

Gene: Loviatar_14 Start: 9533, Stop: 10224, Start Num: 20

Candidate Starts for Loviatar_14:

(Start: 20 @9533 has 126 MA's), (47, 9737), (54, 9773), (57, 9806), (95, 10073),

Gene: Lucy_13 Start: 8934, Stop: 9703, Start Num: 8

Candidate Starts for Lucy_13:

(Start: 6 @8922 has 2 MA's), (Start: 8 @8934 has 62 MA's), (Start: 21 @9057 has 1 MA's), (23, 9087), (37, 9192), (50, 9264), (62, 9369), (91, 9549), (94, 9561), (96, 9579), (98, 9591),

Gene: Lunar_15 Start: 9644, Stop: 10362, Start Num: 20

Candidate Starts for Lunar_15:

(Start: 20 @9644 has 126 MA's), (26, 9740), (30, 9773), (57, 9965), (62, 10016), (73, 10097), (90, 10202),

Gene: Lynlen_14 Start: 9260, Stop: 9951, Start Num: 20

Candidate Starts for Lynlen_14:

(Start: 20 @9260 has 126 MA's), (28, 9371), (43, 9434), (52, 9491), (54, 9500), (57, 9533), (82, 9725),

Gene: Makoto_13 Start: 8943, Stop: 9712, Start Num: 8

Candidate Starts for Makoto_13:

(Start: 6 @8931 has 2 MA's), (Start: 8 @8943 has 62 MA's), (Start: 21 @9066 has 1 MA's), (23, 9096), (37, 9201), (50, 9273), (62, 9378), (91, 9558), (94, 9570), (96, 9588), (98, 9600),

Gene: MamaPearl_13 Start: 8981, Stop: 9747, Start Num: 8

Candidate Starts for MamaPearl_13:

(Start: 8 @8981 has 62 MA's), (37, 9236), (50, 9308), (51, 9317), (62, 9413), (80, 9539), (89, 9587), (96, 9623), (98, 9635), (104, 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: 8 @8974 has 62 MA's), (16, 9073), (26, 9187), (37, 9229), (50, 9301), (62, 9406), (70, 9460), (81, 9532), (90, 9580), (96, 9613), (98, 9625), (103, 9706), (104, 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: 8 @11852 has 62 MA's), (Start: 21 @11972 has 1 MA's), (36, 12098), (37, 12107), (50, 12179), (62, 12284), (71, 12350), (94, 12476), (96, 12494), (98, 12506),

Gene: Melons_16 Start: 9644, Stop: 10362, Start Num: 20

Candidate Starts for Melons_16:

(Start: 20 @9644 has 126 MA's), (26, 9740), (30, 9773), (57, 9965), (62, 10016), (73, 10097), (90, 10202),

Gene: Milomuff_15 Start: 9629, Stop: 10320, Start Num: 20

Candidate Starts for Milomuff_15:

(Start: 20 @9629 has 126 MA's), (28, 9740), (43, 9803), (52, 9860), (54, 9869), (57, 9902), (75, 10061), (82, 10094),

Gene: Misaeng_17 Start: 11918, Stop: 12678, Start Num: 9

Candidate Starts for Misaeng_17:

(Start: 9 @11918 has 2 MA's), (16, 12014), (34, 12155), (37, 12170), (50, 12242), (57, 12296), (101, 12626), (103, 12647), (105, 12656), (106, 12668),

Gene: Moki_13 Start: 8948, Stop: 9714, Start Num: 8

Candidate Starts for Moki_13:

(Start: 8 @8948 has 62 MA's), (37, 9203), (46, 9254), (50, 9275), (51, 9284), (62, 9380), (94, 9572), (96, 9590), (98, 9602),

Gene: MrGloopy_17 Start: 11777, Stop: 12552, Start Num: 7

Candidate Starts for MrGloopy_17:

(Start: 7 @11777 has 13 MA's), (Start: 8 @11786 has 62 MA's), (Start: 21 @11906 has 1 MA's), (36, 12032), (37, 12041), (50, 12113), (62, 12218), (71, 12284), (94, 12410), (96, 12428), (98, 12440),

Gene: MsUbiquitous_14 Start: 9283, Stop: 9974, Start Num: 20

Candidate Starts for MsUbiquitous_14:

(Start: 20 @9283 has 126 MA's), (28, 9394), (43, 9457), (52, 9514), (54, 9523), (57, 9556), (67, 9652), (75, 9715),

Gene: Nancia_13 Start: 8942, Stop: 9711, Start Num: 8

Candidate Starts for Nancia_13:

(Start: 6 @8930 has 2 MA's), (Start: 8 @8942 has 62 MA's), (23, 9095), (37, 9200), (50, 9272), (62, 9377), (91, 9557), (94, 9569), (96, 9587), (98, 9599),

Gene: Niblet_15 Start: 9448, Stop: 10169, Start Num: 20

Candidate Starts for Niblet_15:

(10, 9370), (14, 9427), (15, 9433), (Start: 20 @9448 has 126 MA's), (22, 9460), (29, 9568), (33, 9604), (48, 9709), (53, 9736), (55, 9742), (57, 9772), (64, 9838), (67, 9859), (83, 9958), (94, 10024), (104, 10141),

Gene: Nicky22_15 Start: 9691, Stop: 10382, Start Num: 20

Candidate Starts for Nicky22_15:

(Start: 20 @9691 has 126 MA's), (28, 9802), (43, 9865), (47, 9895), (52, 9922), (54, 9931), (57, 9964), (75, 10123), (84, 10174), (102, 10309),

Gene: Nubia_16 Start: 11830, Stop: 12590, Start Num: 8

Candidate Starts for Nubia_16:

(2, 11554), (Start: 8 @11830 has 62 MA's), (34, 12067), (37, 12082), (50, 12154), (94, 12451), (101, 12538), (103, 12559), (105, 12568), (106, 12580),

Gene: OMalley_13 Start: 8974, Stop: 9731, Start Num: 8

Candidate Starts for OMalley_13:

(Start: 7 @8965 has 13 MA's), (Start: 8 @8974 has 62 MA's), (16, 9067), (26, 9181), (34, 9208), (37, 9223), (50, 9295), (66, 9433), (74, 9487), (90, 9574), (91, 9577), (98, 9619), (99, 9649),

Gene: Olliecat_14 Start: 9271, Stop: 9962, Start Num: 20

Candidate Starts for Olliecat_14:

(Start: 20 @9271 has 126 MA's), (45, 9463), (54, 9523), (57, 9556), (61, 9607), (103, 9919), (105, 9928),

Gene: Orcanus_15 Start: 9449, Stop: 10170, Start Num: 20

Candidate Starts for Orcanus_15:

(Start: 20 @9449 has 126 MA's), (22, 9461), (28, 9560), (53, 9734), (55, 9740), (57, 9770), (59, 9788), (67, 9857), (68, 9863), (83, 9956), (104, 10139),

Gene: OtsoOtso_15 Start: 9483, Stop: 10201, Start Num: 20

Candidate Starts for OtsoOtso_15:

(Start: 20 @9483 has 126 MA's), (26, 9579), (30, 9612), (57, 9804), (62, 9855), (73, 9936), (90, 10041),

Gene: OurGirlNessie_13 Start: 8934, Stop: 9703, Start Num: 8

Candidate Starts for OurGirlNessie_13:

(Start: 6 @8922 has 2 MA's), (Start: 8 @8934 has 62 MA's), (Start: 21 @9057 has 1 MA's), (23, 9087), (37, 9192), (50, 9264), (62, 9369), (91, 9549), (94, 9561), (96, 9579), (98, 9591),

Gene: Oxynfrius_17 Start: 11843, Stop: 12603, Start Num: 8

Candidate Starts for Oxynfrius_17:

(2, 11567), (Start: 8 @11843 has 62 MA's), (34, 12080), (37, 12095), (50, 12167), (93, 12461), (94, 12464), (101, 12551), (103, 12572), (105, 12581), (106, 12593),

Gene: PartyCup_17 Start: 11872, Stop: 12638, Start Num: 8

Candidate Starts for PartyCup_17:

(Start: 6 @11860 has 2 MA's), (Start: 8 @11872 has 62 MA's), (16, 11971), (Start: 18 @11983 has 1 MA's), (37, 12127), (50, 12199), (62, 12304), (77, 12415), (96, 12514),

Gene: PastaFagioli_14 Start: 9348, Stop: 10039, Start Num: 20

Candidate Starts for PastaFagioli_14:

(Start: 20 @9348 has 126 MA's), (Start: 21 @9351 has 1 MA's), (27, 9453), (47, 9552), (52, 9579), (57, 9621), (68, 9723),

Gene: PhigPhack_14 Start: 9272, Stop: 9963, Start Num: 20

Candidate Starts for PhigPhack_14:

(Start: 20 @9272 has 126 MA's), (28, 9383), (43, 9446), (52, 9503), (54, 9512), (57, 9545), (82, 9737),

Gene: Phisb_14 Start: 9208, Stop: 9899, Start Num: 20

Candidate Starts for Phisb_14:

(Start: 20 @9208 has 126 MA's), (28, 9319), (43, 9382), (52, 9439), (54, 9448), (57, 9481), (66, 9574), (75, 9640),

Gene: PhluffyCoco_14 Start: 9060, Stop: 9784, Start Num: 20

Candidate Starts for PhluffyCoco_14:

(10, 8976), (Start: 20 @9060 has 126 MA's), (25, 9153), (28, 9171), (31, 9198), (47, 9312), (55, 9351), (57, 9381), (83, 9567), (87, 9606),

Gene: PinkFriday_13 Start: 8971, Stop: 9743, Start Num: 8

Candidate Starts for PinkFriday_13:

(Start: 7 @8962 has 13 MA's), (Start: 8 @8971 has 62 MA's), (13, 9049), (26, 9193), (37, 9235), (50, 9307), (62, 9412), (70, 9466), (81, 9538), (90, 9586), (96, 9619), (98, 9631), (103, 9712), (104, 9718),

Gene: PitaDog_13 Start: 8933, Stop: 9702, Start Num: 8

Candidate Starts for PitaDog_13:

(Start: 6 @8921 has 2 MA's), (Start: 8 @8933 has 62 MA's), (Start: 21 @9056 has 1 MA's), (23, 9086), (37, 9191), (50, 9263), (62, 9368), (91, 9548), (94, 9560), (96, 9578), (98, 9590),

Gene: Polka_15 Start: 9483, Stop: 10201, Start Num: 20

Candidate Starts for Polka_15:

(Start: 20 @9483 has 126 MA's), (26, 9579), (30, 9612), (57, 9804), (62, 9855), (73, 9936), (90, 10041),

Gene: Potatoes_17 Start: 11847, Stop: 12613, Start Num: 8

Candidate Starts for Potatoes_17:

(Start: 7 @11838 has 13 MA's), (Start: 8 @11847 has 62 MA's), (36, 12093), (37, 12102), (50, 12174), (62, 12279), (71, 12345), (94, 12471), (96, 12489), (98, 12501),

Gene: Preamble_13 Start: 8946, Stop: 9715, Start Num: 8

Candidate Starts for Preamble_13:

(Start: 8 @8946 has 62 MA's), (Start: 18 @9060 has 1 MA's), (22, 9078), (37, 9204), (50, 9276), (62, 9381), (71, 9447), (77, 9492), (81, 9510), (94, 9573), (96, 9591), (98, 9603), (99, 9633),

Gene: Pterodactyl_13 Start: 8935, Stop: 9704, Start Num: 8

Candidate Starts for Pterodactyl_13:

(Start: 7 @8923 has 13 MA's), (Start: 8 @8935 has 62 MA's), (Start: 21 @9058 has 1 MA's), (23, 9088), (37, 9193), (50, 9265), (62, 9370), (91, 9550), (94, 9562), (96, 9580), (98, 9592),

Gene: Pumancara_13 Start: 8970, Stop: 9742, Start Num: 8

Candidate Starts for Pumancara_13:

(Start: 7 @8961 has 13 MA's), (Start: 8 @8970 has 62 MA's), (13, 9048), (26, 9192), (37, 9234), (50, 9306), (62, 9411), (70, 9465), (81, 9537), (90, 9585), (96, 9618), (98, 9630), (103, 9711), (104, 9717),

Gene: QMacho_15 Start: 9727, Stop: 10418, Start Num: 20

Candidate Starts for QMacho_15:

(Start: 20 @9727 has 126 MA's), (28, 9838), (43, 9901), (52, 9958), (54, 9967), (57, 10000), (75, 10159), (102, 10345),

Gene: Quenya_15 Start: 9138, Stop: 9844, Start Num: 20

Candidate Starts for Quenya_15:

(Start: 20 @9138 has 126 MA's), (52, 9369), (54, 9378), (57, 9411), (95, 9675),

Gene: RAP15_17 Start: 11852, Stop: 12618, Start Num: 8

Candidate Starts for RAP15_17:

(2, 11570), (Start: 7 @11843 has 13 MA's), (Start: 8 @11852 has 62 MA's), (Start: 21 @11972 has 1 MA's), (36, 12098), (37, 12107), (50, 12179), (62, 12284), (71, 12350), (94, 12476), (96, 12494), (98, 12506),

Gene: RcigaStruga_17 Start: 11851, Stop: 12611, Start Num: 8

Candidate Starts for RcigaStruga_17:

(Start: 8 @11851 has 62 MA's), (16, 11947), (34, 12088), (37, 12103), (38, 12109), (50, 12175), (57, 12229), (101, 12559), (103, 12580), (105, 12589), (106, 12601),

Gene: RedFox_14 Start: 9060, Stop: 9784, Start Num: 20

Candidate Starts for RedFox_14:

(10, 8976), (Start: 20 @9060 has 126 MA's), (25, 9153), (28, 9171), (31, 9198), (47, 9312), (55, 9351), (57, 9381), (78, 9549), (83, 9567),

Gene: Renna12_15 Start: 9269, Stop: 9993, Start Num: 20

Candidate Starts for Renna12_15:

(Start: 20 @9269 has 126 MA's), (25, 9362), (28, 9380), (31, 9407), (47, 9521), (55, 9560), (57, 9590),

Gene: Riovina_13 Start: 8974, Stop: 9731, Start Num: 8

Candidate Starts for Riovina_13:

(Start: 7 @8965 has 13 MA's), (Start: 8 @8974 has 62 MA's), (16, 9067), (26, 9181), (34, 9208), (37, 9223), (50, 9295), (66, 9433), (74, 9487), (90, 9574), (91, 9577), (98, 9619), (99, 9649),

Gene: Riverdale_17 Start: 11782, Stop: 12548, Start Num: 8

Candidate Starts for Riverdale_17:

(3, 11599), (Start: 7 @11773 has 13 MA's), (Start: 8 @11782 has 62 MA's), (36, 12028), (37, 12037), (50, 12109), (62, 12214), (71, 12280), (94, 12406), (96, 12424), (98, 12436),

Gene: Rollins_12 Start: 8845, Stop: 9554, Start Num: 20

Candidate Starts for Rollins_12:

(Start: 20 @8845 has 126 MA's), (28, 8953), (54, 9085), (57, 9118), (95, 9385),

Gene: Rona_14 Start: 9439, Stop: 10115, Start Num: 20

Candidate Starts for Rona_14:

(Start: 20 @9439 has 126 MA's), (52, 9670), (54, 9679), (57, 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: 8 @11783 has 62 MA's), (Start: 21 @11903 has 1 MA's), (36, 12029), (37, 12038), (50, 12110), (62, 12215), (71, 12281), (94, 12407), (96, 12425), (98, 12437),

Gene: Ruchi_15 Start: 10010, Stop: 10740, Start Num: 20

Candidate Starts for Ruchi_15:

(Start: 20 @10010 has 126 MA's), (26, 10106), (30, 10139), (42, 10214), (55, 10301), (57, 10331), (60, 10376), (65, 10409), (72, 10466),

Gene: SanaSana_15 Start: 9463, Stop: 10154, Start Num: 20

Candidate Starts for SanaSana_15:

(Start: 20 @9463 has 126 MA's), (39, 9613), (47, 9667), (54, 9703), (95, 10003),

Gene: SansAfet_14 Start: 9254, Stop: 9945, Start Num: 20

Candidate Starts for SansAfet_14:

(Start: 20 @9254 has 126 MA's), (28, 9365), (43, 9428), (52, 9485), (54, 9494), (57, 9527), (82, 9719),

Gene: SarBear_14 Start: 9220, Stop: 9911, Start Num: 20

Candidate Starts for SarBear_14:

(Start: 20 @9220 has 126 MA's), (28, 9331), (43, 9394), (52, 9451), (54, 9460), (57, 9493), (75, 9652), (84, 9703), (92, 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: 8 @11846 has 62 MA's), (Start: 21 @11966 has 1 MA's), (36, 12092), (37, 12101), (50, 12173), (62, 12278), (71, 12344), (94, 12470), (96, 12488), (98, 12500),

Gene: Scuttle_17 Start: 11851, Stop: 12617, Start Num: 8

Candidate Starts for Scuttle_17:

(3, 11668), (Start: 7 @11842 has 13 MA's), (Start: 8 @11851 has 62 MA's), (36, 12097), (37, 12106), (50, 12178), (62, 12283), (71, 12349), (94, 12475), (96, 12493), (98, 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: 8 @8974 has 62 MA's), (16, 9073), (26, 9187), (37, 9229), (50, 9301), (62, 9406), (70, 9460), (81, 9532), (90, 9580), (96, 9613), (98, 9625), (103, 9706), (104, 9712),

Gene: Sharkboy_14 Start: 9438, Stop: 10114, Start Num: 20

Candidate Starts for Sharkboy_14:

(Start: 20 @9438 has 126 MA's), (52, 9669), (54, 9678), (57, 9711), (82, 9903),

Gene: Shayna_13 Start: 8829, Stop: 9529, Start Num: 20

Candidate Starts for Shayna_13:

(Start: 20 @8829 has 126 MA's), (35, 8958), (54, 9081), (61, 9165), (79, 9297),

Gene: Skylord_13 Start: 8785, Stop: 9494, Start Num: 20

Candidate Starts for Skylord_13:

(Start: 20 @8785 has 126 MA's), (28, 8893), (54, 9025), (57, 9058), (95, 9325),

Gene: Slay_14 Start: 9696, Stop: 10387, Start Num: 20

Candidate Starts for Slay_14:

(Start: 20 @9696 has 126 MA's), (28, 9807), (43, 9870), (52, 9927), (54, 9936), (57, 9969), (75, 10128), (84, 10179),

Gene: Softsoap_14 Start: 9243, Stop: 9934, Start Num: 20

Candidate Starts for Softsoap_14:

(Start: 20 @9243 has 126 MA's), (28, 9354), (43, 9417), (52, 9474), (54, 9483), (57, 9516), (76, 9684), (82, 9708),

Gene: Squircle_14 Start: 9270, Stop: 9961, Start Num: 20
Candidate Starts for Squircle_14:
(Start: 20 @9270 has 126 MA's), (45, 9462), (54, 9522), (57, 9555), (61, 9606), (103, 9918), (105, 9927),

Gene: Stoor_14 Start: 9460, Stop: 10151, Start Num: 20
Candidate Starts for Stoor_14:
(Start: 20 @9460 has 126 MA's), (39, 9610), (47, 9664), (54, 9700), (95, 10000),

Gene: Stromboli_14 Start: 9463, Stop: 10154, Start Num: 20
Candidate Starts for Stromboli_14:
(Start: 20 @9463 has 126 MA's), (39, 9613), (47, 9667), (54, 9703), (87, 9961), (95, 10003),

Gene: StuartMinion_14 Start: 9092, Stop: 9816, Start Num: 20
Candidate Starts for StuartMinion_14:
(Start: 20 @9092 has 126 MA's), (24, 9152), (46, 9341), (54, 9380), (57, 9413), (85, 9617),

Gene: SunnyD_13 Start: 8829, Stop: 9529, Start Num: 20
Candidate Starts for SunnyD_13:
(Start: 20 @8829 has 126 MA's), (35, 8958), (54, 9081), (61, 9165), (79, 9297),

Gene: Supakev_13 Start: 8976, Stop: 9733, Start Num: 8
Candidate Starts for Supakev_13:
(Start: 7 @8967 has 13 MA's), (Start: 8 @8976 has 62 MA's), (16, 9069), (26, 9183), (34, 9210), (37, 9225), (50, 9297), (66, 9435), (74, 9489), (90, 9576), (98, 9621), (99, 9651),

Gene: Suppi_17 Start: 11875, Stop: 12641, Start Num: 8
Candidate Starts for Suppi_17:
(Start: 6 @11863 has 2 MA's), (Start: 8 @11875 has 62 MA's), (16, 11974), (Start: 18 @11986 has 1 MA's), (37, 12130), (50, 12202), (62, 12307), (77, 12418), (94, 12499), (96, 12517),

Gene: Swervy_14 Start: 9220, Stop: 9911, Start Num: 20
Candidate Starts for Swervy_14:
(Start: 20 @9220 has 126 MA's), (28, 9331), (43, 9394), (52, 9451), (54, 9460), (57, 9493), (75, 9652), (84, 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: 8 @11845 has 62 MA's), (36, 12091), (37, 12100), (50, 12172), (62, 12277), (71, 12343), (94, 12469), (96, 12487), (98, 12499),

Gene: TaylorSipht_15 Start: 9540, Stop: 10261, Start Num: 20
Candidate Starts for TaylorSipht_15:
(14, 9516), (15, 9522), (Start: 20 @9540 has 126 MA's), (22, 9552), (29, 9660), (47, 9795), (57, 9864),

Gene: Teagster_13 Start: 8829, Stop: 9529, Start Num: 20
Candidate Starts for Teagster_13:
(Start: 20 @8829 has 126 MA's), (35, 8958), (54, 9081), (61, 9165), (79, 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: 8 @8974 has 62 MA's), (16, 9073), (26, 9187), (37, 9229), (50, 9301), (62, 9406), (70, 9460), (81, 9532), (90, 9580), (96, 9613), (98, 9625),

(103, 9706), (104, 9712),

Gene: Toad24_16 Start: 9656, Stop: 10377, Start Num: 20

Candidate Starts for Toad24_16:

(Start: 20 @9656 has 126 MA's), (22, 9668), (28, 9767), (53, 9941), (55, 9947), (57, 9977), (59, 9995), (67, 10064), (68, 10070), (83, 10163), (104, 10346),

Gene: TukTuk_14 Start: 9280, Stop: 9971, Start Num: 20

Candidate Starts for TukTuk_14:

(Start: 20 @9280 has 126 MA's), (28, 9391), (43, 9454), (52, 9511), (54, 9520), (57, 9553), (67, 9649), (75, 9712),

Gene: Urla_12 Start: 8980, Stop: 9749, Start Num: 8

Candidate Starts for Urla_12:

(Start: 7 @8971 has 13 MA's), (Start: 8 @8980 has 62 MA's), (11, 9022), (34, 9223), (37, 9238), (50, 9310), (51, 9319), (62, 9415), (89, 9589), (96, 9625), (98, 9637),

Gene: Vallejo_17 Start: 11784, Stop: 12550, Start Num: 8

Candidate Starts for Vallejo_17:

(2, 11502), (Start: 7 @11775 has 13 MA's), (Start: 8 @11784 has 62 MA's), (Start: 21 @11904 has 1 MA's), (36, 12030), (37, 12039), (50, 12111), (62, 12216), (71, 12282), (94, 12408), (96, 12426), (98, 12438),

Gene: Vitas_13 Start: 8785, Stop: 9494, Start Num: 20

Candidate Starts for Vitas_13:

(Start: 20 @8785 has 126 MA's), (28, 8893), (54, 9025), (57, 9058), (95, 9325),

Gene: Vulpecula_15 Start: 10086, Stop: 10810, Start Num: 20

Candidate Starts for Vulpecula_15:

(Start: 20 @10086 has 126 MA's), (26, 10182), (30, 10215), (42, 10290), (55, 10377), (73, 10539),

Gene: Vulture_13 Start: 8974, Stop: 9731, Start Num: 8

Candidate Starts for Vulture_13:

(Start: 7 @8965 has 13 MA's), (Start: 8 @8974 has 62 MA's), (16, 9067), (26, 9181), (34, 9208), (37, 9223), (50, 9295), (66, 9433), (74, 9487), (90, 9574), (98, 9619), (99, 9649), (103, 9700),

Gene: Wawa_17 Start: 11821, Stop: 12587, Start Num: 8

Candidate Starts for Wawa_17:

(1, 11326), (2, 11539), (Start: 7 @11812 has 13 MA's), (Start: 8 @11821 has 62 MA's), (Start: 21 @11941 has 1 MA's), (36, 12067), (37, 12076), (50, 12148), (62, 12253), (71, 12319), (94, 12445), (96, 12463), (98, 12475),

Gene: Wayne_16 Start: 11921, Stop: 12687, Start Num: 8

Candidate Starts for Wayne_16:

(Start: 6 @11909 has 2 MA's), (Start: 8 @11921 has 62 MA's), (16, 12020), (Start: 18 @12032 has 1 MA's), (37, 12176), (50, 12248), (62, 12353), (77, 12464), (94, 12545), (96, 12563),

Gene: WileyE_14 Start: 9421, Stop: 10145, Start Num: 20

Candidate Starts for WileyE_14:

(Start: 20 @9421 has 126 MA's), (30, 9550), (42, 9625), (55, 9712), (57, 9742),

Gene: WonderBoy_13 Start: 8935, Stop: 9704, Start Num: 8

Candidate Starts for WonderBoy_13:

(Start: 8 @8935 has 62 MA's), (23, 9088), (37, 9193), (50, 9265), (62, 9370), (91, 9550), (94, 9562), (96, 9580), (98, 9592),

Gene: Zhuangyuan_16 Start: 9822, Stop: 10546, Start Num: 19

Candidate Starts for Zhuangyuan_16:

(Start: 19 @9822 has 2 MA's), (30, 9951), (44, 10047), (47, 10074), (49, 10083), (57, 10143), (60, 10182), (62, 10194), (63, 10200), (67, 10230), (71, 10260), (89, 10377), (98, 10425), (105, 10515), (107, 10539),

Gene: Zixiang_15 Start: 9448, Stop: 10169, Start Num: 20

Candidate Starts for Zixiang_15:

(10, 9370), (14, 9427), (15, 9433), (Start: 20 @9448 has 126 MA's), (22, 9460), (29, 9568), (33, 9604), (48, 9709), (53, 9736), (55, 9742), (57, 9772), (64, 9838), (67, 9859), (83, 9958), (94, 10024), (104, 10141),

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: 8 @11800 has 62 MA's), (Start: 21 @11920 has 1 MA's), (36, 12046), (37, 12055), (50, 12127), (62, 12232), (71, 12298), (94, 12424), (96, 12442), (98, 12454),