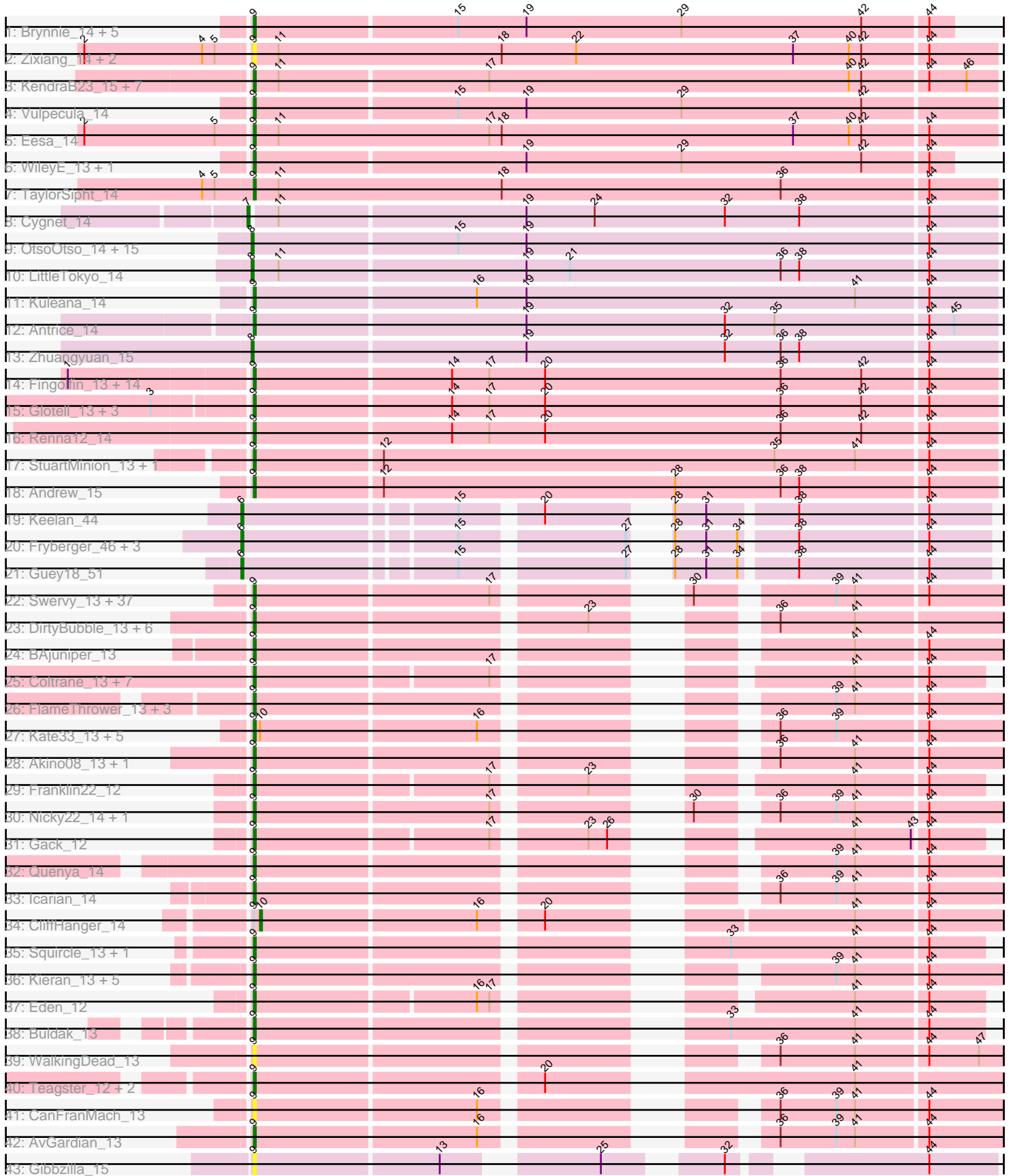


Pham 292474



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 292474 Report

This analysis was run 04/18/26 on database version 643.

Pham number 292474 has 162 members, 32 are drafts.

Phages represented in each track:

- Track 1 : Brynnie_14, Galaxy_14, Abidatro_14, Ruchi_14, Jamun_14, Basilisk_14
- Track 2 : Zixiang_14, Niblet_14, Chicken_14
- Track 3 : KendraB23_15, Amanises_15, Pelletreau_15, Gravel_15, Toad24_15, Shen_15, Westrich_15, Orcanus_14
- Track 4 : Vulpecula_14
- Track 5 : Eesa_14
- Track 6 : WileyE_13, Chickaboom_13
- Track 7 : TaylorSipht_14
- Track 8 : Cygnet_14
- Track 9 : OtsoOtso_14, Pineda_15, Bibble12_15, Jerole_15, Polka_14, Cote_15, Bedetta_15, PhirstandPhine_15, Lunar_16, Daob_15, Melons_15, Coral_14, Colusalem_14, Kepler_14, HannahPhantana_15, Amelia_15
- Track 10 : LittleTokyo_14
- Track 11 : Kuleana_14
- Track 12 : Antrice_14
- Track 13 : Zhuangyuan_15
- Track 14 : Fingolfin_13, HamCheese_14, PhluffyCoco_13, Juno112_13, DanHam62_13, Leona_13, AdoptaAdorbs_13, Azaz_13, Babushka_13, Amphitrite_13, Atlantica_13, RedFox_13, Camara_13, Rattail_13, Laphuphu24k_13
- Track 15 : Glotell_13, Oppalora_13, KHumphrey_13, AmiCi24_13
- Track 16 : Renna12_14
- Track 17 : StuartMinion_13, AlexMinion_13
- Track 18 : Andrew_15
- Track 19 : Keelan_44
- Track 20 : Fryberger_46, Ziko_49, Ronaldo_49, Volt_48
- Track 21 : Guey18_51
- Track 22 : Swervy_13, Jovita_13, Cashington_13, MsUbiquitous_13, Arroyo_14, Burritobowl_13, DickRichards_13, SirBeanington_13, Jabb_13, PhigPhack_13, AylexOG_14, BubbaBear_13, BelmontSKP_14, Albedo_13, CupcakePrincess_13, Doobus_13, Albright_13, Softsoap_13, Slay_13, Johnathan_13, CroZenni_13, Abigail_13, QMacho_14, Phisb_13, SansAfet_13, TukTuk_13, Finalfrontier_14, LimaBean_13, Avocadoman_13, Solea_14, Pecas_13, SarBear_13, Kenzers_13, Eula_13, Bengal_13, Lynlen_13, Milomuff_14, AnnaLie_14
- Track 23 : DirtyBubble_13, Stoor_13, Stromboli_13, PondAmelia_16, Elva_14, SanaSana_14, BabyYoda_13
- Track 24 : BAjuniper_13

- Track 25 : Coltrane_13, Armstrong_13, Clayda5_12, Rollins_13, Vitas_12, Brahms_13, Bernstein_13, Skylord_12
- Track 26 : FlameThrower_13, Celaena_13, Katzastrophic_13, Bachaco_13
- Track 27 : Kate33_13, Lahqtemish_13, BabyDaisy_14, Didgeridoo_14, IndyLu_13, PastaFagioli_13
- Track 28 : Akino08_13, Loviatar_13
- Track 29 : Franklin22_12
- Track 30 : Nicky22_14, Lilo27_13
- Track 31 : Gack_12
- Track 32 : Quenya_14
- Track 33 : Icarian_14
- Track 34 : CliffHanger_14
- Track 35 : Squircl_13, Olliecat_13
- Track 36 : Kieran_13, ChiliPepper_13, Kamdara_13, Sharkboy_13, Dismas_13, Rona_13
- Track 37 : Eden_12
- Track 38 : Buldak_13
- Track 39 : WalkingDead_13
- Track 40 : Teagster_12, Shayna_12, SunnyD_12
- Track 41 : CanFranMach_13
- Track 42 : AvGardian_13
- Track 43 : Gibbzilla_15

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

The start number called the most often in the published annotations is 9, it was called in 108 of the 130 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abidatro_14, Abigail_13, AdoptaAdorbs_13, Akino08_13, Albedo_13, Albright_13, AlexMinion_13, Amanises_15, AmiCi24_13, Amphitrite_13, Andrew_15, AnnaLie_14, Antrice_14, Armstrong_13, Arroyo_14, Atlantica_13, AvGardian_13, Avocadoman_13, AylexOG_14, Azaz_13, BAjuniper_13, Babushka_13, BabyDaisy_14, BabyYoda_13, Bachaco_13, Basilisk_14, BelmontSKP_14, Bengal_13, Bernstein_13, Brahms_13, Brynnie_14, BubbaBear_13, Buldak_13, Burritobowl_13, Camara_13, CanFranMach_13, Cashington_13, Celaena_13, Chickaboom_13, Chicken_14, ChiliPepper_13, Clayda5_12, Coltrane_13, CroZenni_13, CupcakePrincess_13, DanHam62_13, DickRichards_13, Didgeridoo_14, DirtyBubble_13, Dismas_13, Doobus_13, Eden_12, Eesa_14, Elva_14, Eula_13, Finalfrontier_14, Fingolfin_13, FlameThrower_13, Franklin22_12, Gack_12, Galaxy_14, Gibbzilla_15, Glotell_13, Gravel_15, HamCheese_14, Icarian_14, IndyLu_13, Jabb_13, Jamun_14, Johnathan_13, Jovita_13, Juno112_13, KHumphrey_13, Kamdara_13, Kate33_13, Katzastrophic_13, KendraB23_15, Kenzers_13, Kieran_13, Kuleana_14, Lahqtemish_13, Laphuphu24k_13, Leona_13, Lilo27_13, LimaBean_13, Loviatar_13, Lynlen_13, Milomuff_14, MsUbiquitous_13, Niblet_14, Nicky22_14, Olliecat_13, Oppalora_13, Orcanus_14, PastaFagioli_13, Pecas_13, Pelletreau_15, PhigPhack_13, Phisb_13, PhluffyCoco_13, PondAmelia_16, QMacho_14, Quenya_14, Rattail_13, RedFox_13, Renna12_14, Rollins_13, Rona_13, Ruchi_14, SanaSana_14, SansAfet_13, SarBear_13, Sharkboy_13, Shayna_12, Shen_15, SirBeanington_13, Skylord_12, Slay_13,

Softsoap_13, Solea_14, Squircle_13, Stoor_13, Stromboli_13, StuartMinion_13, SunnyD_12, Swervy_13, TaylorSipht_14, Teagster_12, Toad24_15, TukTuk_13, Vitas_12, Vulpecula_14, WalkingDead_13, Westrich_15, WileyE_13, Zixiang_14,

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

- CliffHanger_14,

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

- Amelia_15, Bedetta_15, Bibble12_15, Colusalem_14, Coral_14, Cote_15, Cygnet_14, Daob_15, Fryberger_46, Guey18_51, HannahPhantana_15, Jerole_15, Keelan_44, Kepler_14, LittleTokyo_14, Lunar_16, Melons_15, OtsoOtso_14, PhirstandPhine_15, Pineda_15, Polka_14, Ronaldo_49, Volt_48, Zhuangyuan_15, Ziko_49,

Summary by start number:

Start 6:

- Found in 6 of 162 (3.7%) of genes in pham
- Manual Annotations of this start: 6 of 130
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Fryberger_46 (DP), Guey18_51 (DP), Keelan_44 (DP), Ronaldo_49 (DP), Volt_48 (DP), Ziko_49 (DP),

Start 7:

- Found in 1 of 162 (0.6%) of genes in pham
- Manual Annotations of this start: 1 of 130
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cygnet_14 (AS2),

Start 8:

- Found in 18 of 162 (11.1%) of genes in pham
- Manual Annotations of this start: 14 of 130
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Amelia_15 (AS2), Bedetta_15 (AS2), Bibble12_15 (AS2), Colusalem_14 (AS2), Coral_14 (AS2), Cote_15 (AS2), Daob_15 (AS2), HannahPhantana_15 (AS2), Jerole_15 (AS2), Kepler_14 (AS2), LittleTokyo_14 (AS2), Lunar_16 (AS2), Melons_15 (AS2), OtsoOtso_14 (AS2), PhirstandPhine_15 (AS2), Pineda_15 (AS2), Polka_14 (AS2), Zhuangyuan_15 (AS2),

Start 9:

- Found in 137 of 162 (84.6%) of genes in pham
- Manual Annotations of this start: 108 of 130
- Called 99.3% of time when present
- Phage (with cluster) where this start called: Abidatro_14 (AS1), Abigail_13 (EB), AdoptaAdorbs_13 (AS3), Akino08_13 (EB), Albedo_13 (EB), Albright_13 (EB), AlexMinion_13 (AS3), Amanises_15 (AS1), AmiCi24_13 (AS3), Amphitrite_13 (AS3), Andrew_15 (AS3), AnnaLie_14 (EB), Antrice_14 (AS2), Armstrong_13 (EB), Arroyo_14 (EB), Atlantica_13 (AS3), AvGardian_13 (EB), Avocadoman_13 (EB), AylexOG_14 (EB), Azaz_13 (AS3), BAjuniper_13 (EB), Babushka_13 (AS3), BabyDaisy_14 (EB), BabyYoda_13 (EB), Bachaco_13 (EB), Basilisk_14 (AS1), BelmontSKP_14 (EB), Bengal_13 (EB), Bernstein_13 (EB), Brahms_13 (EB), Brynnie_14 (AS1), BubbaBear_13 (EB), Buldak_13 (EB), Burritobowl_13 (EB), Camara_13 (AS3), CanFranMach_13 (EB), Cashington_13 (EB), Celaena_13 (EB),

Chickaboom_13 (AS1), Chicken_14 (AS1), ChiliPepper_13 (EB), Clayda5_12 (EB), Coltrane_13 (EB), CroZenni_13 (EB), CupcakePrincess_13 (EB), DanHam62_13 (AS3), DickRichards_13 (EB), Didgeridoo_14 (EB), DirtyBubble_13 (EB), Dismas_13 (EB), Doobus_13 (EB), Eden_12 (EB), Eesa_14 (AS1), Elva_14 (EB), Eula_13 (EB), Finalfrontier_14 (EB), Fingolfin_13 (AS3), FlameThrower_13 (EB), Franklin22_12 (EB), Gack_12 (EB), Galaxy_14 (AS1), Gibbzilla_15 (FB), Glotell_13 (AS3), Gravel_15 (AS1), HamCheese_14 (AS3), Icarian_14 (EB), IndyLu_13 (EB), Jabb_13 (EB), Jamun_14 (AS1), Johnathan_13 (EB), Jovita_13 (EB), Juno112_13 (AS3), KHumphrey_13 (AS3), Kamdara_13 (EB), Kate33_13 (EB), Katzastrophic_13 (EB), KendraB23_15 (AS1), Kenzers_13 (EB), Kieran_13 (EB), Kuleana_14 (AS2), Lahqtemish_13 (EB), Laphuphu24k_13 (AS3), Leona_13 (AS3), Lilo27_13 (EB), LimaBean_13 (EB), Loviatar_13 (EB), Lynlen_13 (EB), Milomuff_14 (EB), MsUbiquitous_13 (EB), Niblet_14 (AS1), Nicky22_14 (EB), Olliecat_13 (EB), Oppalora_13 (AS3), Orcanus_14 (AS1), PastaFagioli_13 (EB), Pecas_13 (EB), Pelletreau_15 (AS1), PhigPhack_13 (EB), Phisb_13 (EB), PhluffyCoco_13 (AS3), PondAmelia_16 (EB), QMacho_14 (EB), Quenya_14 (EB), Rattail_13 (AS3), RedFox_13 (AS3), Renna12_14 (AS3), Rollins_13 (EB), Rona_13 (EB), Ruchi_14 (AS1), SanaSana_14 (EB), SansAfet_13 (EB), SarBear_13 (EB), Sharkboy_13 (EB), Shayna_12 (EB), Shen_15 (AS1), SirBeanington_13 (EB), Skylord_12 (EB), Slay_13 (EB), Softsoap_13 (EB), Solea_14 (EB), Squircle_13 (EB), Stoor_13 (EB), Stromboli_13 (EB), StuartMinion_13 (AS3), SunnyD_12 (EB), Swervy_13 (EB), TaylorSipht_14 (AS1), Teagster_12 (EB), Toad24_15 (AS1), TukTuk_13 (EB), Vitas_12 (EB), Vulpecula_14 (AS1), WalkingDead_13 (EB), Westrich_15 (AS1), WileyE_13 (AS1), Zixiang_14 (AS1),

Start 10:

- Found in 7 of 162 (4.3%) of genes in pham
- Manual Annotations of this start: 1 of 130
- Called 14.3% of time when present
- Phage (with cluster) where this start called: CliffHanger_14 (EB),

Summary by clusters:

There are 6 clusters represented in this pham: AS3, AS2, AS1, EB, FB, DP,

Info for manual annotations of cluster AS1:

- Start number 9 was manually annotated 13 times for cluster AS1.

Info for manual annotations of cluster AS2:

- Start number 7 was manually annotated 1 time for cluster AS2.
- Start number 8 was manually annotated 14 times for cluster AS2.
- Start number 9 was manually annotated 2 times for cluster AS2.

Info for manual annotations of cluster AS3:

- Start number 9 was manually annotated 14 times for cluster AS3.

Info for manual annotations of cluster DP:

- Start number 6 was manually annotated 6 times for cluster DP.

Info for manual annotations of cluster EB:

- Start number 9 was manually annotated 79 times for cluster EB.
- Start number 10 was manually annotated 1 time for cluster EB.

Gene Information:

Gene: Abidatro_14 Start: 9744, Stop: 10076, Start Num: 9

Candidate Starts for Abidatro_14:

(Start: 9 @9744 has 108 MA's), (15, 9840), (19, 9873), (29, 9948), (42, 10035), (44, 10065),

Gene: Abigail_13 Start: 9362, Stop: 9670, Start Num: 9

Candidate Starts for Abigail_13:

(Start: 9 @9362 has 108 MA's), (17, 9473), (30, 9536), (39, 9593), (41, 9602), (44, 9635),

Gene: AdoptaAdorbs_13 Start: 9060, Stop: 9413, Start Num: 9

Candidate Starts for AdoptaAdorbs_13:

(1, 8976), (Start: 9 @9060 has 108 MA's), (14, 9153), (17, 9171), (20, 9198), (36, 9312), (42, 9351), (44, 9381),

Gene: Akino08_13 Start: 9518, Stop: 9826, Start Num: 9

Candidate Starts for Akino08_13:

(Start: 9 @9518 has 108 MA's), (36, 9722), (41, 9758), (44, 9791),

Gene: Albedo_13 Start: 9208, Stop: 9516, Start Num: 9

Candidate Starts for Albedo_13:

(Start: 9 @9208 has 108 MA's), (17, 9319), (30, 9382), (39, 9439), (41, 9448), (44, 9481),

Gene: Albright_13 Start: 9243, Stop: 9551, Start Num: 9

Candidate Starts for Albright_13:

(Start: 9 @9243 has 108 MA's), (17, 9354), (30, 9417), (39, 9474), (41, 9483), (44, 9516),

Gene: AlexMinion_13 Start: 9092, Stop: 9445, Start Num: 9

Candidate Starts for AlexMinion_13:

(Start: 9 @9092 has 108 MA's), (12, 9152), (35, 9341), (41, 9380), (44, 9413),

Gene: Amanises_15 Start: 9656, Stop: 10009, Start Num: 9

Candidate Starts for Amanises_15:

(Start: 9 @9656 has 108 MA's), (11, 9668), (17, 9767), (40, 9941), (42, 9947), (44, 9977), (46, 9995),

Gene: Amelia_15 Start: 9644, Stop: 9997, Start Num: 8

Candidate Starts for Amelia_15:

(Start: 8 @9644 has 14 MA's), (15, 9740), (19, 9773), (44, 9965),

Gene: AmiCi24_13 Start: 9058, Stop: 9411, Start Num: 9

Candidate Starts for AmiCi24_13:

(3, 9016), (Start: 9 @9058 has 108 MA's), (14, 9151), (17, 9169), (20, 9196), (36, 9310), (42, 9349), (44, 9379),

Gene: Amphitrite_13 Start: 9058, Stop: 9411, Start Num: 9

Candidate Starts for Amphitrite_13:

(1, 8974), (Start: 9 @9058 has 108 MA's), (14, 9151), (17, 9169), (20, 9196), (36, 9310), (42, 9349), (44, 9379),

Gene: Andrew_15 Start: 9438, Stop: 9791, Start Num: 9

Candidate Starts for Andrew_15:

(Start: 9 @9438 has 108 MA's), (12, 9498), (28, 9639), (36, 9690), (38, 9699), (44, 9759),

Gene: AnnaLie_14 Start: 9652, Stop: 9960, Start Num: 9

Candidate Starts for AnnaLie_14:

(Start: 9 @9652 has 108 MA's), (17, 9763), (30, 9826), (39, 9883), (41, 9892), (44, 9925),

Gene: Antrice_14 Start: 9399, Stop: 9752, Start Num: 9

Candidate Starts for Antrice_14:

(Start: 9 @9399 has 108 MA's), (19, 9528), (32, 9624), (35, 9648), (44, 9720), (45, 9732),

Gene: Armstrong_13 Start: 8785, Stop: 9084, Start Num: 9

Candidate Starts for Armstrong_13:

(Start: 9 @8785 has 108 MA's), (17, 8893), (41, 9025), (44, 9058),

Gene: Arroyo_14 Start: 9713, Stop: 10021, Start Num: 9

Candidate Starts for Arroyo_14:

(Start: 9 @9713 has 108 MA's), (17, 9824), (30, 9887), (39, 9944), (41, 9953), (44, 9986),

Gene: Atlantica_13 Start: 9060, Stop: 9413, Start Num: 9

Candidate Starts for Atlantica_13:

(1, 8976), (Start: 9 @9060 has 108 MA's), (14, 9153), (17, 9171), (20, 9198), (36, 9312), (42, 9351), (44, 9381),

Gene: AvGardian_13 Start: 9267, Stop: 9575, Start Num: 9

Candidate Starts for AvGardian_13:

(Start: 9 @9267 has 108 MA's), (16, 9372), (36, 9471), (39, 9498), (41, 9507), (44, 9540),

Gene: Avocadoman_13 Start: 9305, Stop: 9613, Start Num: 9

Candidate Starts for Avocadoman_13:

(Start: 9 @9305 has 108 MA's), (17, 9416), (30, 9479), (39, 9536), (41, 9545), (44, 9578),

Gene: AylexOG_14 Start: 9588, Stop: 9896, Start Num: 9

Candidate Starts for AylexOG_14:

(Start: 9 @9588 has 108 MA's), (17, 9699), (30, 9762), (39, 9819), (41, 9828), (44, 9861),

Gene: Azaz_13 Start: 9111, Stop: 9464, Start Num: 9

Candidate Starts for Azaz_13:

(1, 9027), (Start: 9 @9111 has 108 MA's), (14, 9204), (17, 9222), (20, 9249), (36, 9363), (42, 9402), (44, 9432),

Gene: BAjuniper_13 Start: 8933, Stop: 9241, Start Num: 9

Candidate Starts for BAjuniper_13:

(Start: 9 @8933 has 108 MA's), (41, 9173), (44, 9206),

Gene: Babushka_13 Start: 9108, Stop: 9461, Start Num: 9

Candidate Starts for Babushka_13:

(1, 9024), (Start: 9 @9108 has 108 MA's), (14, 9201), (17, 9219), (20, 9246), (36, 9360), (42, 9399), (44, 9429),

Gene: BabyDaisy_14 Start: 9464, Stop: 9772, Start Num: 9

Candidate Starts for BabyDaisy_14:

(Start: 9 @9464 has 108 MA's), (Start: 10 @9467 has 1 MA's), (16, 9569), (36, 9668), (39, 9695), (44, 9737),

Gene: BabyYoda_13 Start: 9464, Stop: 9772, Start Num: 9

Candidate Starts for BabyYoda_13:

(Start: 9 @9464 has 108 MA's), (23, 9614), (36, 9668), (41, 9704),

Gene: Bachaco_13 Start: 9138, Stop: 9446, Start Num: 9

Candidate Starts for Bachaco_13:

(Start: 9 @9138 has 108 MA's), (39, 9369), (41, 9378), (44, 9411),

Gene: Basilisk_14 Start: 10064, Stop: 10396, Start Num: 9

Candidate Starts for Basilisk_14:

(Start: 9 @10064 has 108 MA's), (15, 10160), (19, 10193), (29, 10268), (42, 10355), (44, 10385),

Gene: Bedetta_15 Start: 9644, Stop: 9997, Start Num: 8

Candidate Starts for Bedetta_15:

(Start: 8 @9644 has 14 MA's), (15, 9740), (19, 9773), (44, 9965),

Gene: BelmontSKP_14 Start: 9652, Stop: 9960, Start Num: 9

Candidate Starts for BelmontSKP_14:

(Start: 9 @9652 has 108 MA's), (17, 9763), (30, 9826), (39, 9883), (41, 9892), (44, 9925),

Gene: Bengal_13 Start: 9243, Stop: 9551, Start Num: 9

Candidate Starts for Bengal_13:

(Start: 9 @9243 has 108 MA's), (17, 9354), (30, 9417), (39, 9474), (41, 9483), (44, 9516),

Gene: Bernstein_13 Start: 8845, Stop: 9144, Start Num: 9

Candidate Starts for Bernstein_13:

(Start: 9 @8845 has 108 MA's), (17, 8953), (41, 9085), (44, 9118),

Gene: Bible12_15 Start: 9647, Stop: 10000, Start Num: 8

Candidate Starts for Bible12_15:

(Start: 8 @9647 has 14 MA's), (15, 9743), (19, 9776), (44, 9968),

Gene: Brahms_13 Start: 8785, Stop: 9084, Start Num: 9

Candidate Starts for Brahms_13:

(Start: 9 @8785 has 108 MA's), (17, 8893), (41, 9025), (44, 9058),

Gene: Brynnie_14 Start: 9876, Stop: 10208, Start Num: 9

Candidate Starts for Brynnie_14:

(Start: 9 @9876 has 108 MA's), (15, 9972), (19, 10005), (29, 10080), (42, 10167), (44, 10197),

Gene: BubbaBear_13 Start: 9208, Stop: 9516, Start Num: 9

Candidate Starts for BubbaBear_13:

(Start: 9 @9208 has 108 MA's), (17, 9319), (30, 9382), (39, 9439), (41, 9448), (44, 9481),

Gene: Buldak_13 Start: 9315, Stop: 9626, Start Num: 9

Candidate Starts for Buldak_13:

(Start: 9 @9315 has 108 MA's), (33, 9507), (41, 9567), (44, 9600),

Gene: Burritobowl_13 Start: 9270, Stop: 9578, Start Num: 9

Candidate Starts for Burritobowl_13:

(Start: 9 @9270 has 108 MA's), (17, 9381), (30, 9444), (39, 9501), (41, 9510), (44, 9543),

Gene: Camara_13 Start: 9061, Stop: 9414, Start Num: 9

Candidate Starts for Camara_13:

(1, 8977), (Start: 9 @9061 has 108 MA's), (14, 9154), (17, 9172), (20, 9199), (36, 9313), (42, 9352), (44, 9382),

Gene: CanFranMach_13 Start: 9260, Stop: 9568, Start Num: 9

Candidate Starts for CanFranMach_13:

(Start: 9 @9260 has 108 MA's), (16, 9365), (36, 9464), (39, 9491), (41, 9500), (44, 9533),

Gene: Cashington_13 Start: 9260, Stop: 9568, Start Num: 9

Candidate Starts for Cashington_13:

(Start: 9 @9260 has 108 MA's), (17, 9371), (30, 9434), (39, 9491), (41, 9500), (44, 9533),

Gene: Celaena_13 Start: 9074, Stop: 9382, Start Num: 9

Candidate Starts for Celaena_13:

(Start: 9 @9074 has 108 MA's), (39, 9305), (41, 9314), (44, 9347),

Gene: Chickaboom_13 Start: 9421, Stop: 9753, Start Num: 9

Candidate Starts for Chickaboom_13:

(Start: 9 @9421 has 108 MA's), (19, 9550), (29, 9625), (42, 9712), (44, 9742),

Gene: Chicken_14 Start: 9448, Stop: 9804, Start Num: 9

Candidate Starts for Chicken_14:

(2, 9370), (4, 9427), (5, 9433), (Start: 9 @9448 has 108 MA's), (11, 9460), (18, 9568), (22, 9604), (37, 9709), (40, 9736), (42, 9742), (44, 9772),

Gene: ChiliPepper_13 Start: 9439, Stop: 9747, Start Num: 9

Candidate Starts for ChiliPepper_13:

(Start: 9 @9439 has 108 MA's), (39, 9670), (41, 9679), (44, 9712),

Gene: Clayda5_12 Start: 8785, Stop: 9084, Start Num: 9

Candidate Starts for Clayda5_12:

(Start: 9 @8785 has 108 MA's), (17, 8893), (41, 9025), (44, 9058),

Gene: CliffHanger_14 Start: 8971, Stop: 9285, Start Num: 10

Candidate Starts for CliffHanger_14:

(Start: 9 @8968 has 108 MA's), (Start: 10 @8971 has 1 MA's), (16, 9073), (20, 9097), (41, 9217), (44, 9250),

Gene: Coltrane_13 Start: 8785, Stop: 9084, Start Num: 9

Candidate Starts for Coltrane_13:

(Start: 9 @8785 has 108 MA's), (17, 8893), (41, 9025), (44, 9058),

Gene: Colusalem_14 Start: 9483, Stop: 9836, Start Num: 8

Candidate Starts for Colusalem_14:

(Start: 8 @9483 has 14 MA's), (15, 9579), (19, 9612), (44, 9804),

Gene: Coral_14 Start: 9483, Stop: 9836, Start Num: 8

Candidate Starts for Coral_14:

(Start: 8 @9483 has 14 MA's), (15, 9579), (19, 9612), (44, 9804),

Gene: Cote_15 Start: 9644, Stop: 9997, Start Num: 8

Candidate Starts for Cote_15:

(Start: 8 @9644 has 14 MA's), (15, 9740), (19, 9773), (44, 9965),

Gene: CroZenni_13 Start: 9243, Stop: 9551, Start Num: 9

Candidate Starts for CroZenni_13:

(Start: 9 @9243 has 108 MA's), (17, 9354), (30, 9417), (39, 9474), (41, 9483), (44, 9516),

Gene: CupcakePrincess_13 Start: 9283, Stop: 9591, Start Num: 9

Candidate Starts for CupcakePrincess_13:

(Start: 9 @9283 has 108 MA's), (17, 9394), (30, 9457), (39, 9514), (41, 9523), (44, 9556),

Gene: Cygnet_14 Start: 9436, Stop: 9789, Start Num: 7

Candidate Starts for Cygnet_14:

(Start: 7 @9436 has 1 MA's), (11, 9448), (19, 9565), (24, 9598), (32, 9661), (38, 9697), (44, 9757),

Gene: DanHam62_13 Start: 9060, Stop: 9413, Start Num: 9

Candidate Starts for DanHam62_13:

(1, 8976), (Start: 9 @9060 has 108 MA's), (14, 9153), (17, 9171), (20, 9198), (36, 9312), (42, 9351), (44, 9381),

Gene: Daob_15 Start: 9647, Stop: 10000, Start Num: 8

Candidate Starts for Daob_15:

(Start: 8 @9647 has 14 MA's), (15, 9743), (19, 9776), (44, 9968),

Gene: DickRichards_13 Start: 9737, Stop: 10045, Start Num: 9

Candidate Starts for DickRichards_13:

(Start: 9 @9737 has 108 MA's), (17, 9848), (30, 9911), (39, 9968), (41, 9977), (44, 10010),

Gene: Didgeridoo_14 Start: 9466, Stop: 9774, Start Num: 9

Candidate Starts for Didgeridoo_14:

(Start: 9 @9466 has 108 MA's), (Start: 10 @9469 has 1 MA's), (16, 9571), (36, 9670), (39, 9697), (44, 9739),

Gene: DirtyBubble_13 Start: 9472, Stop: 9780, Start Num: 9

Candidate Starts for DirtyBubble_13:

(Start: 9 @9472 has 108 MA's), (23, 9622), (36, 9676), (41, 9712),

Gene: Dismas_13 Start: 9439, Stop: 9747, Start Num: 9

Candidate Starts for Dismas_13:

(Start: 9 @9439 has 108 MA's), (39, 9670), (41, 9679), (44, 9712),

Gene: Doobus_13 Start: 9474, Stop: 9782, Start Num: 9

Candidate Starts for Doobus_13:

(Start: 9 @9474 has 108 MA's), (17, 9585), (30, 9648), (39, 9705), (41, 9714), (44, 9747),

Gene: Eden_12 Start: 8899, Stop: 9198, Start Num: 9

Candidate Starts for Eden_12:

(Start: 9 @8899 has 108 MA's), (16, 9001), (17, 9007), (41, 9139), (44, 9172),

Gene: Eesa_14 Start: 9662, Stop: 10018, Start Num: 9

Candidate Starts for Eesa_14:

(2, 9584), (5, 9647), (Start: 9 @9662 has 108 MA's), (11, 9674), (17, 9776), (18, 9782), (37, 9923), (40, 9950), (42, 9956), (44, 9986),

Gene: Elva_14 Start: 9524, Stop: 9832, Start Num: 9

Candidate Starts for Elva_14:

(Start: 9 @9524 has 108 MA's), (23, 9674), (36, 9728), (41, 9764),

Gene: Eula_13 Start: 9244, Stop: 9552, Start Num: 9

Candidate Starts for Eula_13:

(Start: 9 @9244 has 108 MA's), (17, 9355), (30, 9418), (39, 9475), (41, 9484), (44, 9517),

Gene: Finalfrontier_14 Start: 9756, Stop: 10064, Start Num: 9

Candidate Starts for Finalfrontier_14:

(Start: 9 @9756 has 108 MA's), (17, 9867), (30, 9930), (39, 9987), (41, 9996), (44, 10029),

Gene: Fingolfin_13 Start: 9061, Stop: 9414, Start Num: 9

Candidate Starts for Fingolfin_13:

(1, 8977), (Start: 9 @9061 has 108 MA's), (14, 9154), (17, 9172), (20, 9199), (36, 9313), (42, 9352), (44, 9382),

Gene: FlameThrower_13 Start: 8962, Stop: 9270, Start Num: 9

Candidate Starts for FlameThrower_13:

(Start: 9 @8962 has 108 MA's), (39, 9193), (41, 9202), (44, 9235),

Gene: Franklin22_12 Start: 8878, Stop: 9177, Start Num: 9

Candidate Starts for Franklin22_12:

(Start: 9 @8878 has 108 MA's), (17, 8986), (23, 9025), (41, 9118), (44, 9151),

Gene: Fryberger_46 Start: 17619, Stop: 17933, Start Num: 6

Candidate Starts for Fryberger_46:

(Start: 6 @17619 has 6 MA's), (15, 17715), (27, 17787), (28, 17790), (31, 17805), (34, 17820), (38, 17844), (44, 17904),

Gene: Gack_12 Start: 8940, Stop: 9239, Start Num: 9

Candidate Starts for Gack_12:

(Start: 9 @8940 has 108 MA's), (17, 9048), (23, 9087), (26, 9096), (41, 9180), (43, 9207), (44, 9213),

Gene: Galaxy_14 Start: 9750, Stop: 10082, Start Num: 9

Candidate Starts for Galaxy_14:

(Start: 9 @9750 has 108 MA's), (15, 9846), (19, 9879), (29, 9954), (42, 10041), (44, 10071),

Gene: Gibbzilla_15 Start: 8885, Stop: 9184, Start Num: 9

Candidate Starts for Gibbzilla_15:

(Start: 9 @8885 has 108 MA's), (13, 8972), (25, 9032), (32, 9074), (44, 9152),

Gene: Glotell_13 Start: 9058, Stop: 9411, Start Num: 9

Candidate Starts for Glotell_13:

(3, 9016), (Start: 9 @9058 has 108 MA's), (14, 9151), (17, 9169), (20, 9196), (36, 9310), (42, 9349), (44, 9379),

Gene: Gravel_15 Start: 9655, Stop: 10008, Start Num: 9

Candidate Starts for Gravel_15:

(Start: 9 @9655 has 108 MA's), (11, 9667), (17, 9766), (40, 9940), (42, 9946), (44, 9976), (46, 9994),

Gene: Guey18_51 Start: 18811, Stop: 19125, Start Num: 6

Candidate Starts for Guey18_51:

(Start: 6 @18811 has 6 MA's), (15, 18907), (27, 18979), (28, 18982), (31, 18997), (34, 19012), (38, 19036), (44, 19096),

Gene: HamCheese_14 Start: 9060, Stop: 9413, Start Num: 9

Candidate Starts for HamCheese_14:

(1, 8976), (Start: 9 @9060 has 108 MA's), (14, 9153), (17, 9171), (20, 9198), (36, 9312), (42, 9351), (44, 9381),

Gene: HannahPhantana_15 Start: 9647, Stop: 10000, Start Num: 8

Candidate Starts for HannahPhantana_15:

(Start: 8 @9647 has 14 MA's), (15, 9743), (19, 9776), (44, 9968),

Gene: Icarian_14 Start: 9446, Stop: 9754, Start Num: 9

Candidate Starts for Icarian_14:

(Start: 9 @9446 has 108 MA's), (36, 9650), (39, 9677), (41, 9686), (44, 9719),

Gene: IndyLu_13 Start: 9288, Stop: 9596, Start Num: 9

Candidate Starts for IndyLu_13:

(Start: 9 @9288 has 108 MA's), (Start: 10 @9291 has 1 MA's), (16, 9393), (36, 9492), (39, 9519), (44, 9561),

Gene: Jabb_13 Start: 9283, Stop: 9591, Start Num: 9

Candidate Starts for Jabb_13:

(Start: 9 @9283 has 108 MA's), (17, 9394), (30, 9457), (39, 9514), (41, 9523), (44, 9556),

Gene: Jamun_14 Start: 10088, Stop: 10441, Start Num: 9

Candidate Starts for Jamun_14:

(Start: 9 @10088 has 108 MA's), (15, 10184), (19, 10217), (29, 10292), (42, 10379), (44, 10409),

Gene: Jerole_15 Start: 9644, Stop: 9997, Start Num: 8

Candidate Starts for Jerole_15:

(Start: 8 @9644 has 14 MA's), (15, 9740), (19, 9773), (44, 9965),

Gene: Johnathan_13 Start: 9243, Stop: 9551, Start Num: 9

Candidate Starts for Johnathan_13:

(Start: 9 @9243 has 108 MA's), (17, 9354), (30, 9417), (39, 9474), (41, 9483), (44, 9516),

Gene: Jovita_13 Start: 9345, Stop: 9653, Start Num: 9

Candidate Starts for Jovita_13:

(Start: 9 @9345 has 108 MA's), (17, 9456), (30, 9519), (39, 9576), (41, 9585), (44, 9618),

Gene: Juno112_13 Start: 9061, Stop: 9414, Start Num: 9

Candidate Starts for Juno112_13:

(1, 8977), (Start: 9 @9061 has 108 MA's), (14, 9154), (17, 9172), (20, 9199), (36, 9313), (42, 9352), (44, 9382),

Gene: KHumphrey_13 Start: 9058, Stop: 9411, Start Num: 9

Candidate Starts for KHumphrey_13:

(3, 9016), (Start: 9 @9058 has 108 MA's), (14, 9151), (17, 9169), (20, 9196), (36, 9310), (42, 9349), (44, 9379),

Gene: Kamdara_13 Start: 9438, Stop: 9746, Start Num: 9
Candidate Starts for Kamdara_13:
(Start: 9 @9438 has 108 MA's), (39, 9669), (41, 9678), (44, 9711),

Gene: Kate33_13 Start: 9287, Stop: 9595, Start Num: 9
Candidate Starts for Kate33_13:
(Start: 9 @9287 has 108 MA's), (Start: 10 @9290 has 1 MA's), (16, 9392), (36, 9491), (39, 9518), (44, 9560),

Gene: Katzastrophic_13 Start: 9137, Stop: 9445, Start Num: 9
Candidate Starts for Katzastrophic_13:
(Start: 9 @9137 has 108 MA's), (39, 9368), (41, 9377), (44, 9410),

Gene: Keelan_44 Start: 17620, Stop: 17934, Start Num: 6
Candidate Starts for Keelan_44:
(Start: 6 @17620 has 6 MA's), (15, 17716), (20, 17749), (28, 17791), (31, 17806), (38, 17845), (44, 17905),

Gene: KendraB23_15 Start: 9656, Stop: 10009, Start Num: 9
Candidate Starts for KendraB23_15:
(Start: 9 @9656 has 108 MA's), (11, 9668), (17, 9767), (40, 9941), (42, 9947), (44, 9977), (46, 9995),

Gene: Kenzers_13 Start: 9260, Stop: 9568, Start Num: 9
Candidate Starts for Kenzers_13:
(Start: 9 @9260 has 108 MA's), (17, 9371), (30, 9434), (39, 9491), (41, 9500), (44, 9533),

Gene: Kepler_14 Start: 9482, Stop: 9835, Start Num: 8
Candidate Starts for Kepler_14:
(Start: 8 @9482 has 14 MA's), (15, 9578), (19, 9611), (44, 9803),

Gene: Kieran_13 Start: 9442, Stop: 9750, Start Num: 9
Candidate Starts for Kieran_13:
(Start: 9 @9442 has 108 MA's), (39, 9673), (41, 9682), (44, 9715),

Gene: Kuleana_14 Start: 9441, Stop: 9794, Start Num: 9
Candidate Starts for Kuleana_14:
(Start: 9 @9441 has 108 MA's), (16, 9546), (19, 9570), (41, 9729), (44, 9762),

Gene: Lahqtemish_13 Start: 9360, Stop: 9668, Start Num: 9
Candidate Starts for Lahqtemish_13:
(Start: 9 @9360 has 108 MA's), (Start: 10 @9363 has 1 MA's), (16, 9465), (36, 9564), (39, 9591), (44, 9633),

Gene: Laphuphu24k_13 Start: 9060, Stop: 9413, Start Num: 9
Candidate Starts for Laphuphu24k_13:
(1, 8976), (Start: 9 @9060 has 108 MA's), (14, 9153), (17, 9171), (20, 9198), (36, 9312), (42, 9351), (44, 9381),

Gene: Leona_13 Start: 9111, Stop: 9464, Start Num: 9
Candidate Starts for Leona_13:
(1, 9027), (Start: 9 @9111 has 108 MA's), (14, 9204), (17, 9222), (20, 9249), (36, 9363), (42, 9402), (44, 9432),

Gene: Lilo27_13 Start: 9220, Stop: 9528, Start Num: 9
Candidate Starts for Lilo27_13:
(Start: 9 @9220 has 108 MA's), (17, 9331), (30, 9394), (36, 9424), (39, 9451), (41, 9460), (44, 9493),

Gene: LimaBean_13 Start: 9243, Stop: 9551, Start Num: 9
Candidate Starts for LimaBean_13:
(Start: 9 @9243 has 108 MA's), (17, 9354), (30, 9417), (39, 9474), (41, 9483), (44, 9516),

Gene: LittleTokyo_14 Start: 9395, Stop: 9748, Start Num: 8
Candidate Starts for LittleTokyo_14:
(Start: 8 @9395 has 14 MA's), (11, 9407), (19, 9524), (21, 9545), (36, 9647), (38, 9656), (44, 9716),

Gene: Loviatar_13 Start: 9533, Stop: 9841, Start Num: 9
Candidate Starts for Loviatar_13:
(Start: 9 @9533 has 108 MA's), (36, 9737), (41, 9773), (44, 9806),

Gene: Lunar_16 Start: 9644, Stop: 9997, Start Num: 8
Candidate Starts for Lunar_16:
(Start: 8 @9644 has 14 MA's), (15, 9740), (19, 9773), (44, 9965),

Gene: Lynlen_13 Start: 9260, Stop: 9568, Start Num: 9
Candidate Starts for Lynlen_13:
(Start: 9 @9260 has 108 MA's), (17, 9371), (30, 9434), (39, 9491), (41, 9500), (44, 9533),

Gene: Melons_15 Start: 9644, Stop: 9997, Start Num: 8
Candidate Starts for Melons_15:
(Start: 8 @9644 has 14 MA's), (15, 9740), (19, 9773), (44, 9965),

Gene: Milomuff_14 Start: 9629, Stop: 9937, Start Num: 9
Candidate Starts for Milomuff_14:
(Start: 9 @9629 has 108 MA's), (17, 9740), (30, 9803), (39, 9860), (41, 9869), (44, 9902),

Gene: MsUbiquitous_13 Start: 9283, Stop: 9591, Start Num: 9
Candidate Starts for MsUbiquitous_13:
(Start: 9 @9283 has 108 MA's), (17, 9394), (30, 9457), (39, 9514), (41, 9523), (44, 9556),

Gene: Niblet_14 Start: 9448, Stop: 9804, Start Num: 9
Candidate Starts for Niblet_14:
(2, 9370), (4, 9427), (5, 9433), (Start: 9 @9448 has 108 MA's), (11, 9460), (18, 9568), (22, 9604), (37, 9709), (40, 9736), (42, 9742), (44, 9772),

Gene: Nicky22_14 Start: 9691, Stop: 9999, Start Num: 9
Candidate Starts for Nicky22_14:
(Start: 9 @9691 has 108 MA's), (17, 9802), (30, 9865), (36, 9895), (39, 9922), (41, 9931), (44, 9964),

Gene: Olliecat_13 Start: 9271, Stop: 9582, Start Num: 9
Candidate Starts for Olliecat_13:
(Start: 9 @9271 has 108 MA's), (33, 9463), (41, 9523), (44, 9556),

Gene: Oppalora_13 Start: 9058, Stop: 9411, Start Num: 9
Candidate Starts for Oppalora_13:

(3, 9016), (Start: 9 @9058 has 108 MA's), (14, 9151), (17, 9169), (20, 9196), (36, 9310), (42, 9349), (44, 9379),

Gene: Orcanus_14 Start: 9449, Stop: 9802, Start Num: 9

Candidate Starts for Orcanus_14:

(Start: 9 @9449 has 108 MA's), (11, 9461), (17, 9560), (40, 9734), (42, 9740), (44, 9770), (46, 9788),

Gene: OtsoOtso_14 Start: 9483, Stop: 9836, Start Num: 8

Candidate Starts for OtsoOtso_14:

(Start: 8 @9483 has 14 MA's), (15, 9579), (19, 9612), (44, 9804),

Gene: PastaFagioli_13 Start: 9348, Stop: 9656, Start Num: 9

Candidate Starts for PastaFagioli_13:

(Start: 9 @9348 has 108 MA's), (Start: 10 @9351 has 1 MA's), (16, 9453), (36, 9552), (39, 9579), (44, 9621),

Gene: Pecas_13 Start: 9244, Stop: 9552, Start Num: 9

Candidate Starts for Pecas_13:

(Start: 9 @9244 has 108 MA's), (17, 9355), (30, 9418), (39, 9475), (41, 9484), (44, 9517),

Gene: Pelletreau_15 Start: 9655, Stop: 10008, Start Num: 9

Candidate Starts for Pelletreau_15:

(Start: 9 @9655 has 108 MA's), (11, 9667), (17, 9766), (40, 9940), (42, 9946), (44, 9976), (46, 9994),

Gene: PhigPhack_13 Start: 9272, Stop: 9580, Start Num: 9

Candidate Starts for PhigPhack_13:

(Start: 9 @9272 has 108 MA's), (17, 9383), (30, 9446), (39, 9503), (41, 9512), (44, 9545),

Gene: PhirstandPhine_15 Start: 9644, Stop: 9997, Start Num: 8

Candidate Starts for PhirstandPhine_15:

(Start: 8 @9644 has 14 MA's), (15, 9740), (19, 9773), (44, 9965),

Gene: Phisb_13 Start: 9208, Stop: 9516, Start Num: 9

Candidate Starts for Phisb_13:

(Start: 9 @9208 has 108 MA's), (17, 9319), (30, 9382), (39, 9439), (41, 9448), (44, 9481),

Gene: PhluffyCoco_13 Start: 9060, Stop: 9413, Start Num: 9

Candidate Starts for PhluffyCoco_13:

(1, 8976), (Start: 9 @9060 has 108 MA's), (14, 9153), (17, 9171), (20, 9198), (36, 9312), (42, 9351), (44, 9381),

Gene: Pineda_15 Start: 9644, Stop: 9997, Start Num: 8

Candidate Starts for Pineda_15:

(Start: 8 @9644 has 14 MA's), (15, 9740), (19, 9773), (44, 9965),

Gene: Polka_14 Start: 9483, Stop: 9836, Start Num: 8

Candidate Starts for Polka_14:

(Start: 8 @9483 has 14 MA's), (15, 9579), (19, 9612), (44, 9804),

Gene: PondAmelia_16 Start: 9462, Stop: 9770, Start Num: 9

Candidate Starts for PondAmelia_16:

(Start: 9 @9462 has 108 MA's), (23, 9612), (36, 9666), (41, 9702),

Gene: QMacho_14 Start: 9727, Stop: 10035, Start Num: 9
Candidate Starts for QMacho_14:
(Start: 9 @9727 has 108 MA's), (17, 9838), (30, 9901), (39, 9958), (41, 9967), (44, 10000),

Gene: Quenya_14 Start: 9138, Stop: 9446, Start Num: 9
Candidate Starts for Quenya_14:
(Start: 9 @9138 has 108 MA's), (39, 9369), (41, 9378), (44, 9411),

Gene: Rattail_13 Start: 9111, Stop: 9464, Start Num: 9
Candidate Starts for Rattail_13:
(1, 9027), (Start: 9 @9111 has 108 MA's), (14, 9204), (17, 9222), (20, 9249), (36, 9363), (42, 9402),
(44, 9432),

Gene: RedFox_13 Start: 9060, Stop: 9413, Start Num: 9
Candidate Starts for RedFox_13:
(1, 8976), (Start: 9 @9060 has 108 MA's), (14, 9153), (17, 9171), (20, 9198), (36, 9312), (42, 9351),
(44, 9381),

Gene: Renna12_14 Start: 9269, Stop: 9622, Start Num: 9
Candidate Starts for Renna12_14:
(Start: 9 @9269 has 108 MA's), (14, 9362), (17, 9380), (20, 9407), (36, 9521), (42, 9560), (44, 9590),

Gene: Rollins_13 Start: 8845, Stop: 9144, Start Num: 9
Candidate Starts for Rollins_13:
(Start: 9 @8845 has 108 MA's), (17, 8953), (41, 9085), (44, 9118),

Gene: Rona_13 Start: 9439, Stop: 9747, Start Num: 9
Candidate Starts for Rona_13:
(Start: 9 @9439 has 108 MA's), (39, 9670), (41, 9679), (44, 9712),

Gene: Ronaldo_49 Start: 18576, Stop: 18890, Start Num: 6
Candidate Starts for Ronaldo_49:
(Start: 6 @18576 has 6 MA's), (15, 18672), (27, 18744), (28, 18747), (31, 18762), (34, 18777), (38,
18801), (44, 18861),

Gene: Ruchi_14 Start: 10010, Stop: 10342, Start Num: 9
Candidate Starts for Ruchi_14:
(Start: 9 @10010 has 108 MA's), (15, 10106), (19, 10139), (29, 10214), (42, 10301), (44, 10331),

Gene: SanaSana_14 Start: 9463, Stop: 9771, Start Num: 9
Candidate Starts for SanaSana_14:
(Start: 9 @9463 has 108 MA's), (23, 9613), (36, 9667), (41, 9703),

Gene: SansAfet_13 Start: 9254, Stop: 9562, Start Num: 9
Candidate Starts for SansAfet_13:
(Start: 9 @9254 has 108 MA's), (17, 9365), (30, 9428), (39, 9485), (41, 9494), (44, 9527),

Gene: SarBear_13 Start: 9220, Stop: 9528, Start Num: 9
Candidate Starts for SarBear_13:
(Start: 9 @9220 has 108 MA's), (17, 9331), (30, 9394), (39, 9451), (41, 9460), (44, 9493),

Gene: Sharkboy_13 Start: 9438, Stop: 9746, Start Num: 9
Candidate Starts for Sharkboy_13:

(Start: 9 @9438 has 108 MA's), (39, 9669), (41, 9678), (44, 9711),

Gene: Shayna_12 Start: 8829, Stop: 9149, Start Num: 9

Candidate Starts for Shayna_12:

(Start: 9 @8829 has 108 MA's), (20, 8958), (41, 9081),

Gene: Shen_15 Start: 9656, Stop: 10009, Start Num: 9

Candidate Starts for Shen_15:

(Start: 9 @9656 has 108 MA's), (11, 9668), (17, 9767), (40, 9941), (42, 9947), (44, 9977), (46, 9995),

Gene: SirBeanington_13 Start: 9217, Stop: 9525, Start Num: 9

Candidate Starts for SirBeanington_13:

(Start: 9 @9217 has 108 MA's), (17, 9328), (30, 9391), (39, 9448), (41, 9457), (44, 9490),

Gene: Skylord_12 Start: 8785, Stop: 9084, Start Num: 9

Candidate Starts for Skylord_12:

(Start: 9 @8785 has 108 MA's), (17, 8893), (41, 9025), (44, 9058),

Gene: Slay_13 Start: 9696, Stop: 10004, Start Num: 9

Candidate Starts for Slay_13:

(Start: 9 @9696 has 108 MA's), (17, 9807), (30, 9870), (39, 9927), (41, 9936), (44, 9969),

Gene: Softsoap_13 Start: 9243, Stop: 9551, Start Num: 9

Candidate Starts for Softsoap_13:

(Start: 9 @9243 has 108 MA's), (17, 9354), (30, 9417), (39, 9474), (41, 9483), (44, 9516),

Gene: Solea_14 Start: 9629, Stop: 9937, Start Num: 9

Candidate Starts for Solea_14:

(Start: 9 @9629 has 108 MA's), (17, 9740), (30, 9803), (39, 9860), (41, 9869), (44, 9902),

Gene: Squircle_13 Start: 9270, Stop: 9581, Start Num: 9

Candidate Starts for Squircle_13:

(Start: 9 @9270 has 108 MA's), (33, 9462), (41, 9522), (44, 9555),

Gene: Stoor_13 Start: 9460, Stop: 9768, Start Num: 9

Candidate Starts for Stoor_13:

(Start: 9 @9460 has 108 MA's), (23, 9610), (36, 9664), (41, 9700),

Gene: Stromboli_13 Start: 9463, Stop: 9771, Start Num: 9

Candidate Starts for Stromboli_13:

(Start: 9 @9463 has 108 MA's), (23, 9613), (36, 9667), (41, 9703),

Gene: StuartMinion_13 Start: 9092, Stop: 9445, Start Num: 9

Candidate Starts for StuartMinion_13:

(Start: 9 @9092 has 108 MA's), (12, 9152), (35, 9341), (41, 9380), (44, 9413),

Gene: SunnyD_12 Start: 8829, Stop: 9149, Start Num: 9

Candidate Starts for SunnyD_12:

(Start: 9 @8829 has 108 MA's), (20, 8958), (41, 9081),

Gene: Swervy_13 Start: 9220, Stop: 9528, Start Num: 9

Candidate Starts for Swervy_13:

(Start: 9 @9220 has 108 MA's), (17, 9331), (30, 9394), (39, 9451), (41, 9460), (44, 9493),

Gene: TaylorSipt_14 Start: 9540, Stop: 9896, Start Num: 9
Candidate Starts for TaylorSipt_14:
(4, 9516), (5, 9522), (Start: 9 @9540 has 108 MA's), (11, 9552), (18, 9660), (36, 9795), (44, 9864),

Gene: Teagster_12 Start: 8829, Stop: 9149, Start Num: 9
Candidate Starts for Teagster_12:
(Start: 9 @8829 has 108 MA's), (20, 8958), (41, 9081),

Gene: Toad24_15 Start: 9656, Stop: 10009, Start Num: 9
Candidate Starts for Toad24_15:
(Start: 9 @9656 has 108 MA's), (11, 9668), (17, 9767), (40, 9941), (42, 9947), (44, 9977), (46, 9995),

Gene: TukTuk_13 Start: 9280, Stop: 9588, Start Num: 9
Candidate Starts for TukTuk_13:
(Start: 9 @9280 has 108 MA's), (17, 9391), (30, 9454), (39, 9511), (41, 9520), (44, 9553),

Gene: Vitas_12 Start: 8785, Stop: 9084, Start Num: 9
Candidate Starts for Vitas_12:
(Start: 9 @8785 has 108 MA's), (17, 8893), (41, 9025), (44, 9058),

Gene: Volt_48 Start: 18576, Stop: 18890, Start Num: 6
Candidate Starts for Volt_48:
(Start: 6 @18576 has 6 MA's), (15, 18672), (27, 18744), (28, 18747), (31, 18762), (34, 18777), (38, 18801), (44, 18861),

Gene: Vulpecula_14 Start: 10086, Stop: 10439, Start Num: 9
Candidate Starts for Vulpecula_14:
(Start: 9 @10086 has 108 MA's), (15, 10182), (19, 10215), (29, 10290), (42, 10377),

Gene: WalkingDead_13 Start: 9451, Stop: 9759, Start Num: 9
Candidate Starts for WalkingDead_13:
(Start: 9 @9451 has 108 MA's), (36, 9655), (41, 9691), (44, 9724), (47, 9748),

Gene: Westrich_15 Start: 9644, Stop: 9997, Start Num: 9
Candidate Starts for Westrich_15:
(Start: 9 @9644 has 108 MA's), (11, 9656), (17, 9755), (40, 9929), (42, 9935), (44, 9965), (46, 9983),

Gene: WileyE_13 Start: 9421, Stop: 9753, Start Num: 9
Candidate Starts for WileyE_13:
(Start: 9 @9421 has 108 MA's), (19, 9550), (29, 9625), (42, 9712), (44, 9742),

Gene: Zhuangyuan_15 Start: 9822, Stop: 10175, Start Num: 8
Candidate Starts for Zhuangyuan_15:
(Start: 8 @9822 has 14 MA's), (19, 9951), (32, 10047), (36, 10074), (38, 10083), (44, 10143),

Gene: Ziko_49 Start: 18516, Stop: 18830, Start Num: 6
Candidate Starts for Ziko_49:
(Start: 6 @18516 has 6 MA's), (15, 18612), (27, 18684), (28, 18687), (31, 18702), (34, 18717), (38, 18741), (44, 18801),

Gene: Zixiang_14 Start: 9448, Stop: 9804, Start Num: 9
Candidate Starts for Zixiang_14:

(2, 9370), (4, 9427), (5, 9433), (Start: 9 @9448 has 108 MA's), (11, 9460), (18, 9568), (22, 9604), (37, 9709), (40, 9736), (42, 9742), (44, 9772),