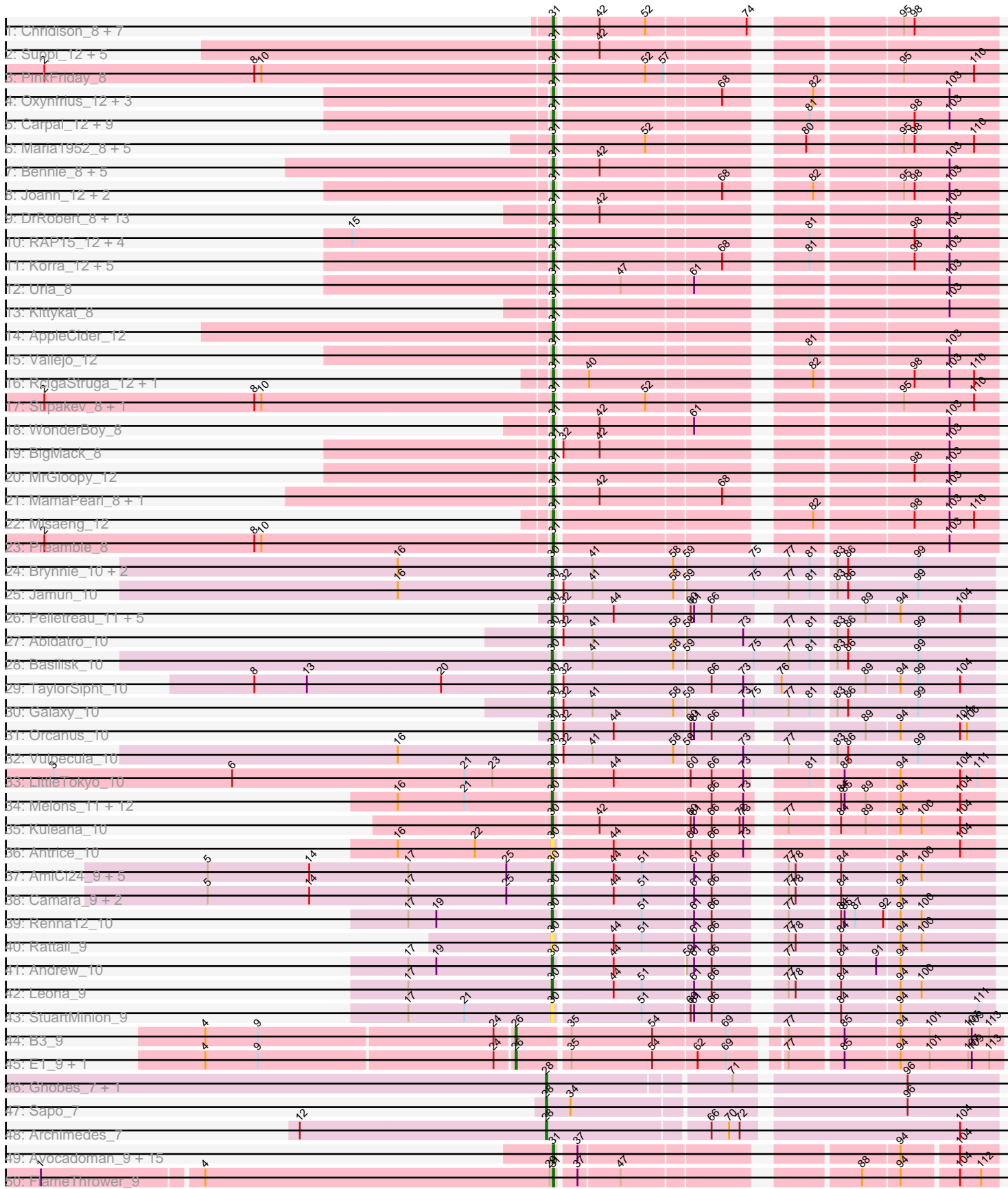
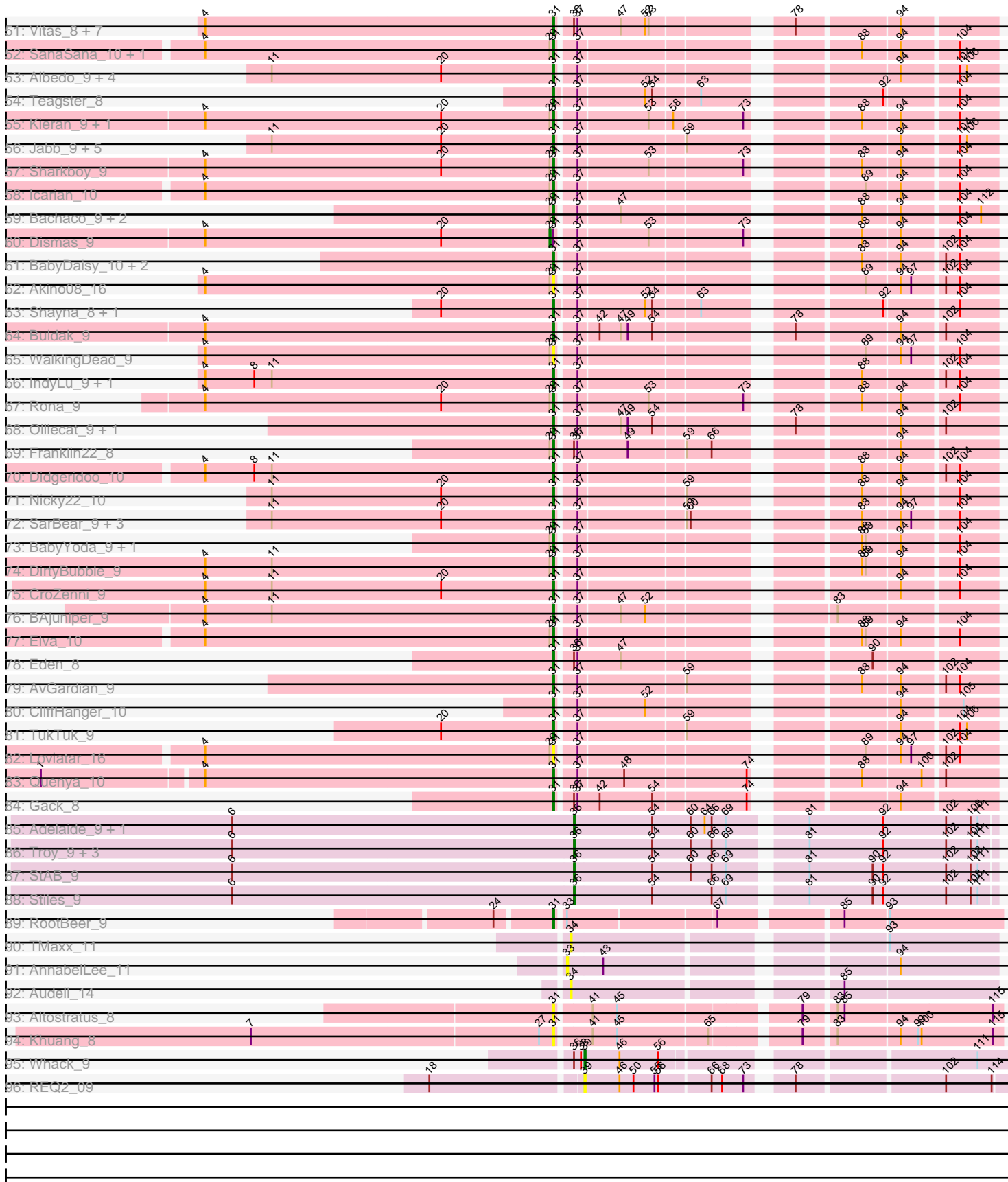


Pham 202657



Pham 202657



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 202657 Report

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

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

Pham number 202657 has 233 members, 37 are drafts.

Phages represented in each track:

- Track 1 : Chridison_8, Vulture_8, HunterDalle_8, Eunoia_8, Aledel_8, OMalley_8, Riovina_8, AustinPowers_8
- Track 2 : Suppi_12, Canowicakte_12, Litotes_12, PartyCup_12, Wayne_12, CallieOMalley_12
- Track 3 : PinkFriday_8
- Track 4 : Oxynfrius_12, Lakshmi_12, Albanese_12, GreenHearts_12
- Track 5 : Carpal_12, Rozby_12, Potatoes_12, Cholula_12, Fluke_12, Glenn_12, TattModd_12, Riverdale_12, Beethoven_12, Immaculata_12
- Track 6 : Maria1952_8, KingBob_8, Sergei_8, Daiboju_8, Temper16_8, Herb_8
- Track 7 : Bennie_8, HeadNerd_8, Moki_8, Huckleberry_8, DreamTeam_8, Gisselle_8
- Track 8 : Joann_12, Greenhouse_12, Nubia_12
- Track 9 : DrRobert_8, Lennox_8, Nancia_8, Christian_8, Lucy_8, Bodacious_8, PitaDog_8, Pterodactyl_8, CristinaYang_8, LilStuart_8, Makoto_8, Lasagna_8, ChewChew_8, OurGirlNessie_8
- Track 10 : RAP15_12, Savage2526_12, Jumboset_12, MeganNoll_12, Scuttle_12
- Track 11 : Korra_12, Dino_12, Wawa_12, BrotherBLo_12, Kalizoi_12, Zorro_12
- Track 12 : Urla_8
- Track 13 : Kittykat_8
- Track 14 : AppleCider_12
- Track 15 : Vallejo_12
- Track 16 : RcigaStruga_12, Huntingdon_12
- Track 17 : Supakev_8, Pumancara_8
- Track 18 : WonderBoy_8
- Track 19 : BigMack_8
- Track 20 : MrGloopy_12
- Track 21 : MamaPearl_8, EstebanJulior_8
- Track 22 : Misaeng_12
- Track 23 : Preamble_8
- Track 24 : Brynnie_10, Chickaboom_9, Ruchi_10
- Track 25 : Jamun_10
- Track 26 : Pelletreau_11, Gravel_11, Toad24_11, Westrich_11, Eesa_10, KendraB23_11

- Track 27 : Abidatro_10
- Track 28 : Basilisk_10
- Track 29 : TaylorSipht_10
- Track 30 : Galaxy_10
- Track 31 : Orcanus_10
- Track 32 : Vulpecula_10
- Track 33 : LittleTokyo_10
- Track 34 : Melons_11, Bibble12_11, Polka_10, Cote_11, Bedetta_11, Lunar_11, Coral_10, Colusalem_10, Kepler_10, Jerole_11, Daob_11, HannahPhantana_11, Amelia_11
- Track 35 : Kuleana_10
- Track 36 : Antrice_10
- Track 37 : AmiCi24_9, Juno112_9, KHumphrey_9, Glotell_9, RedFox_9, Atlantica_9
- Track 38 : Camara_9, HamCheese_9, PhluffyCoco_9
- Track 39 : Renna12_10
- Track 40 : Rattail_9
- Track 41 : Andrew_10
- Track 42 : Leona_9
- Track 43 : StuartMinion_9
- Track 44 : B3_9
- Track 45 : E1_9, Anatole_9
- Track 46 : Ghobes_7, Frizzle_7
- Track 47 : Sapo_7
- Track 48 : Archimedes_7
- Track 49 : Avocadoman_9, Arroyo_10, Burritobowl_9, Johnathan_9, Cashington_9, Albright_9, Softsoap_9, Abigail_9, LimaBean_9, SansAfet_9, Doobus_9, DickRichards_9, PhigPhack_9, BelmontSKP_10, Bengal_9, AnnaLie_10
- Track 50 : FlameThrower_9
- Track 51 : Vitas_8, Clayda5_8, Brahms_8, Bernstein_8, Rollins_8, Coltrane_8, Armstrong_8, Skylord_8
- Track 52 : SanaSana_10, Stoor_9
- Track 53 : Albedo_9, Lynlen_9, Kenzers_9, BubbaBear_9, Phisb_9
- Track 54 : Teagster_8
- Track 55 : Kieran_9, ChiliPepper_9
- Track 56 : Jabb_9, CupcakePrincess_9, MsUbiquitous_9, Jovita_9, QMacho_10, Eula_9
- Track 57 : Sharkboy_9
- Track 58 : Icarian_10
- Track 59 : Bachaco_9, Celaena_9, Katzastrophic_9
- Track 60 : Dismas_9
- Track 61 : BabyDaisy_10, Lahqtemish_9, PastaFagioli_9
- Track 62 : Akino08_16
- Track 63 : Shayna_8, SunnyD_8
- Track 64 : Buldak_9
- Track 65 : WalkingDead_9
- Track 66 : IndyLu_9, Kate33_9
- Track 67 : Rona_9
- Track 68 : Olliecat_9, Squiracle_9
- Track 69 : Franklin22_8
- Track 70 : Didgeridoo_10
- Track 71 : Nicky22_10
- Track 72 : SarBear_9, Slay_9, Finalfrontier_10, Swervy_9
- Track 73 : BabyYoda_9, Stromboli_9

- Track 74 : DirtyBubble_9
- Track 75 : CroZenni_9
- Track 76 : BAjuniper_9
- Track 77 : Elva_10
- Track 78 : Eden_8
- Track 79 : AvGardian_9
- Track 80 : CliffHanger_10
- Track 81 : TukTuk_9
- Track 82 : Loviatar_16
- Track 83 : Quenya_10
- Track 84 : Gack_8
- Track 85 : Adelaide_9, Bran_9
- Track 86 : Troy_9, Lederberg_9, SamW_9, Dina_9
- Track 87 : StAB_9
- Track 88 : Stiles_9
- Track 89 : RootBeer_9
- Track 90 : TMaxx_11
- Track 91 : AnnabelLee_11
- Track 92 : Audell_14
- Track 93 : Altostratus_8
- Track 94 : Khuang_8
- Track 95 : Whack_9
- Track 96 : REQ2_09

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

The start number called the most often in the published annotations is 31, it was called in 151 of the 196 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abigail_9, Akino08_16, Albanese_12, Albedo_9, Albright_9, Aledel_8, Altostratus_8, AnnaLie_10, AppleCider_12, Armstrong_8, Arroyo_10, AustinPowers_8, AvGardian_9, Avocadoman_9, BAjuniper_9, BabyDaisy_10, BabyYoda_9, Bachaco_9, Beethoven_12, BelmontSKP_10, Bengal_9, Bennie_8, Bernstein_8, BigMack_8, Bodacious_8, Brahms_8, BrotherBLo_12, BubbaBear_9, Buldak_9, Burritobowl_9, CallieOMalley_12, Canowicakte_12, Carpal_12, Cashington_9, Celaena_9, ChewChew_8, ChiliPepper_9, Cholula_12, Chridison_8, Christian_8, Clayda5_8, CliffHanger_10, Coltrane_8, CristinaYang_8, CroZenni_9, CupcakePrincess_9, Daiboju_8, DickRichards_9, Didgeridoo_10, Dino_12, DirtyBubble_9, Doobus_9, DrRobert_8, DreamTeam_8, Eden_8, Elva_10, EstebanJulior_8, Eula_9, Eunoia_8, Finalfrontier_10, FlameThrower_9, Fluke_12, Franklin22_8, Gack_8, Gisselle_8, Glenn_12, GreenHearts_12, Greenhouse_12, HeadNerd_8, Herb_8, Huckleberry_8, HunterDalle_8, Huntingdon_12, Icarian_10, Immaculata_12, IndyLu_9, Jabb_9, Joann_12, Johnathan_9, Jovita_9, Jumboset_12, Kalizoi_12, Kate33_9, Katzastrophic_9, Kenzers_9, Khuang_8, Kieran_9, KingBob_8, Kittykat_8, Korra_12, Lahqtemish_9, Lakshmi_12, Lasagna_8, Lennox_8, LilStuart_8, LimaBean_9, Litotes_12, Loviatar_16, Lucy_8, Lynlen_9, Makoto_8, MamaPearl_8, Maria1952_8, MeganNoll_12, Misaeng_12, Moki_8, MrGloopy_12, MsUbiquitous_9, Nancia_8, Nicky22_10, Nubia_12, OMalley_8, Olliecat_9, OurGirlNessie_8, Oxynfrius_12, PartyCup_12, PastaFagioli_9, PhigPhack_9, Phisb_9, PinkFriday_8,

PitaDog_8, Potatoes_12, Preamble_8, Pterodactyl_8, Pumancara_8, QMacho_10, Quenya_10, RAP15_12, RcigaStruga_12, Riovina_8, Riverdale_12, Rollins_8, Rona_9, RootBeer_9, Rozby_12, SanaSana_10, SansAfet_9, SarBear_9, Savage2526_12, Scuttle_12, Sergei_8, Sharkboy_9, Shayna_8, Skylord_8, Slay_9, Softsoap_9, Squircle_9, Stoor_9, Stromboli_9, SunnyD_8, Supakev_8, Suppi_12, Swervy_9, TattModd_12, Teagster_8, Temper16_8, TukTuk_9, Urla_8, Vallejo_12, Vitas_8, Vulture_8, WalkingDead_9, Wawa_12, Wayne_12, WonderBoy_8, Zorro_12,

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

- Dismas_9,

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

- Abidatro_10, Adelaide_9, Amelia_11, AmiCi24_9, Anatole_9, Andrew_10, AnnabelLee_11, Antrice_10, Archimedes_7, Atlantica_9, Audell_14, B3_9, Basilisk_10, Bedetta_11, Bibble12_11, Bran_9, Brynnie_10, Camara_9, Chickaboom_9, Colusalem_10, Coral_10, Cote_11, Daob_11, Dina_9, E1_9, Eesa_10, Frizzle_7, Galaxy_10, Ghobes_7, Glotell_9, Gravel_11, HamCheese_9, HannahPhantana_11, Jamun_10, Jerole_11, Juno112_9, KHumphrey_9, KendraB23_11, Kepler_10, Kuleana_10, Lederberg_9, Leona_9, LittleTokyo_10, Lunar_11, Melons_11, Orcanus_10, Pelletreau_11, PhluffyCoco_9, Polka_10, REQ2_09, Rattail_9, RedFox_9, Renna12_10, Ruchi_10, SamW_9, Sapo_7, StAB_9, Stiles_9, StuartMinion_9, TMaxx_11, TaylorSipht_10, Toad24_11, Troy_9, Vulpecula_10, Westrich_11, Whack_9,

Summary by start number:

Start 26:

- Found in 3 of 233 (1.3%) of genes in pham
- Manual Annotations of this start: 3 of 196
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Anatole_9 (BV), B3_9 (BV), E1_9 (BV),

Start 28:

- Found in 4 of 233 (1.7%) of genes in pham
- Manual Annotations of this start: 3 of 196
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Archimedes_7 (DA), Frizzle_7 (DA), Ghobes_7 (DA), Sapo_7 (DA),

Start 29:

- Found in 20 of 233 (8.6%) of genes in pham
- Manual Annotations of this start: 1 of 196
- Called 5.0% of time when present
- Phage (with cluster) where this start called: Dismas_9 (EB),

Start 30:

- Found in 46 of 233 (19.7%) of genes in pham
- Manual Annotations of this start: 29 of 196
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abidatro_10 (AS1), Amelia_11 (AS2), AmiCi24_9 (AS3), Andrew_10 (AS3), Antrice_10 (AS2), Atlantica_9 (AS3), Basilisk_10 (AS1), Bedetta_11 (AS2), Bibble12_11 (AS2), Brynnie_10 (AS1), Camara_9 (AS3), Chickaboom_9 (AS1), Colusalem_10 (AS2), Coral_10 (AS2),

Cote_11 (AS2), Daob_11 (AS2), Eesa_10 (AS1), Galaxy_10 (AS1), Glotell_9 (AS3), Gravel_11 (AS1), HamCheese_9 (AS3), HannahPhantana_11 (AS2), Jamun_10 (AS1), Jerole_11 (AS2), Juno112_9 (AS3), KHumphrey_9 (AS3), KendraB23_11 (AS1), Kepler_10 (AS2), Kuleana_10 (AS2), Leona_9 (AS3), LittleTokyo_10 (AS2), Lunar_11 (AS2), Melons_11 (AS2), Orcanus_10 (AS1), Pelletreau_11 (AS1), PhluffyCoco_9 (AS3), Polka_10 (AS2), Rattail_9 (AS3), RedFox_9 (AS3), Renna12_10 (AS3), Ruchi_10 (AS1), StuartMinion_9 (AS3), TaylorSipt_10 (AS1), Toad24_11 (AS1), Vulpecula_10 (AS1), Westrich_11 (AS1),

Start 31:

- Found in 167 of 233 (71.7%) of genes in pham
- Manual Annotations of this start: 151 of 196
- Called 99.4% of time when present
- Phage (with cluster) where this start called: Abigail_9 (EB), Akino08_16 (EB), Albanese_12 (AK), Albedo_9 (EB), Albright_9 (EB), Aledel_8 (AK), Altostratus_8 (FS), AnnaLie_10 (EB), AppleCider_12 (AK), Armstrong_8 (EB), Arroyo_10 (EB), AustinPowers_8 (AK), AvGardian_9 (EB), Avocadoman_9 (EB), BAjuniper_9 (EB), BabyDaisy_10 (EB), BabyYoda_9 (EB), Bachaco_9 (EB), Beethoven_12 (AK), BelmontSKP_10 (EB), Bengal_9 (EB), Bennie_8 (AK), Bernstein_8 (EB), BigMack_8 (AK), Bodacious_8 (AK), Brahms_8 (EB), BrotherBLo_12 (AK), BubbaBear_9 (EB), Buldak_9 (EB), Burritobowl_9 (EB), CallieOMalley_12 (AK), Canowicakte_12 (AK), Carpal_12 (AK), Cashington_9 (EB), Celaena_9 (EB), ChewChew_8 (AK), ChiliPepper_9 (EB), Cholula_12 (AK), Chridison_8 (AK), Christian_8 (AK), Clayda5_8 (EB), CliffHanger_10 (EB), Coltrane_8 (EB), CristinaYang_8 (AK), CroZenni_9 (EB), CupcakePrincess_9 (EB), Daiboju_8 (AK), DickRichards_9 (EB), Didgeridoo_10 (EB), Dino_12 (AK), DirtyBubble_9 (EB), Doobus_9 (EB), DrRobert_8 (AK), DreamTeam_8 (AK), Eden_8 (EB), Elva_10 (EB), EstebanJulior_8 (AK), Eula_9 (EB), Eunoia_8 (AK), Finalfrontier_10 (EB), FlameThrower_9 (EB), Fluke_12 (AK), Franklin22_8 (EB), Gack_8 (EB), Gisselle_8 (AK), Glenn_12 (AK), GreenHearts_12 (AK), Greenhouse_12 (AK), HeadNerd_8 (AK), Herb_8 (AK), Huckleberry_8 (AK), HunterDalle_8 (AK), Huntingdon_12 (AK), Icarian_10 (EB), Immaculata_12 (AK), IndyLu_9 (EB), Jabb_9 (EB), Joann_12 (AK), Johnathan_9 (EB), Jovita_9 (EB), Jumboset_12 (AK), Kalizoi_12 (AK), Kate33_9 (EB), Katzastrophic_9 (EB), Kenzers_9 (EB), Khuang_8 (FS), Kieran_9 (EB), KingBob_8 (AK), Kittykat_8 (AK), Korra_12 (AK), Lahqtemish_9 (EB), Lakshmi_12 (AK), Lasagna_8 (AK), Lennox_8 (AK), LilStuart_8 (AK), LimaBean_9 (EB), Litotes_12 (AK), Loviatar_16 (EB), Lucy_8 (AK), Lynlen_9 (EB), Makoto_8 (AK), MamaPearl_8 (AK), Maria1952_8 (AK), MeganNoll_12 (AK), Misaeng_12 (AK), Moki_8 (AK), MrGloopy_12 (AK), MsUbiquitous_9 (EB), Nancia_8 (AK), Nicky22_10 (EB), Nubia_12 (AK), OMalley_8 (AK), Olliecat_9 (EB), OurGirlNessie_8 (AK), Oxynfrius_12 (AK), PartyCup_12 (AK), PastaFagioli_9 (EB), PhigPhack_9 (EB), Phisb_9 (EB), PinkFriday_8 (AK), PitaDog_8 (AK), Potatoes_12 (AK), Preamble_8 (AK), Pterodactyl_8 (AK), Pumancara_8 (AK), QMacho_10 (EB), Quenya_10 (EB), RAP15_12 (AK), RcigaStruga_12 (AK), Rivovina_8 (AK), Riverdale_12 (AK), Rollins_8 (EB), Rona_9 (EB), RootBeer_9 (FA), Rozby_12 (AK), SanaSana_10 (EB), SansAfet_9 (EB), SarBear_9 (EB), Savage2526_12 (AK), Scuttle_12 (AK), Sergei_8 (AK), Sharkboy_9 (EB), Shayna_8 (EB), Skylord_8 (EB), Slay_9 (EB), Softsoap_9 (EB), Squircle_9 (EB), Stoor_9 (EB), Stromboli_9 (EB), SunnyD_8 (EB), Supakev_8 (AK), Suppi_12 (AK), Swervy_9 (EB), TattModd_12 (AK), Teagster_8 (EB), Temper16_8 (AK), TukTuk_9 (EB), Urla_8 (AK), Vallejo_12 (AK), Vitas_8 (EB), Vulture_8 (AK), WalkingDead_9 (EB), Wawa_12 (AK), Wayne_12 (AK), WonderBoy_8 (AK), Zorro_12 (AK),

Start 33:

- Found in 2 of 233 (0.9%) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: AnnabelLee_11 (FR),

Start 34:

- Found in 3 of 233 (1.3%) of genes in pham
- No Manual Annotations of this start.
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Audell_14 (FR), TMaxx_11 (FR),

Start 36:

- Found in 20 of 233 (8.6%) of genes in pham
- Manual Annotations of this start: 8 of 196
- Called 40.0% of time when present
- Phage (with cluster) where this start called: Adelaide_9 (EP), Bran_9 (EP), Dina_9 (EP), Lederberg_9 (EP), SamW_9 (EP), StAB_9 (EP), Stiles_9 (EP), Troy_9 (EP),

Start 39:

- Found in 2 of 233 (0.9%) of genes in pham
- Manual Annotations of this start: 1 of 196
- Called 100.0% of time when present
- Phage (with cluster) where this start called: REQ2_09 (singleton), Whack_9 (singleton),

Summary by clusters:

There are 12 clusters represented in this pham: AS3, AS2, FR, FS, AK, AS1, EB, FA, BV, singleton, DA, EP,

Info for manual annotations of cluster AK:

- Start number 31 was manually annotated 83 times for cluster AK.

Info for manual annotations of cluster AS1:

- Start number 30 was manually annotated 11 times for cluster AS1.

Info for manual annotations of cluster AS2:

- Start number 30 was manually annotated 11 times for cluster AS2.

Info for manual annotations of cluster AS3:

- Start number 30 was manually annotated 7 times for cluster AS3.

Info for manual annotations of cluster BV:

- Start number 26 was manually annotated 3 times for cluster BV.

Info for manual annotations of cluster DA:

- Start number 28 was manually annotated 3 times for cluster DA.

Info for manual annotations of cluster EB:

- Start number 29 was manually annotated 1 time for cluster EB.
- Start number 31 was manually annotated 67 times for cluster EB.

Info for manual annotations of cluster EP:

- Start number 36 was manually annotated 8 times for cluster EP.

Info for manual annotations of cluster FA:

- Start number 31 was manually annotated 1 time for cluster FA.

Gene Information:

Gene: Abidatro_10 Start: 7704, Stop: 8066, Start Num: 30

Candidate Starts for Abidatro_10:

(Start: 30 @7704 has 29 MA's), (32, 7707), (41, 7731), (58, 7800), (59, 7809), (73, 7857), (77, 7896), (81, 7914), (83, 7932), (86, 7941), (99, 8001),

Gene: Abigail_9 Start: 7444, Stop: 7773, Start Num: 31

Candidate Starts for Abigail_9:

(Start: 31 @7444 has 151 MA's), (37, 7459), (94, 7696), (104, 7741),

Gene: Adelaide_9 Start: 6873, Stop: 7217, Start Num: 36

Candidate Starts for Adelaide_9:

(6, 6582), (Start: 36 @6873 has 8 MA's), (54, 6939), (60, 6972), (64, 6984), (66, 6990), (69, 7002), (81, 7059), (92, 7122), (102, 7176), (108, 7197), (111, 7203),

Gene: Akino08_16 Start: 7563, Stop: 7892, Start Num: 31

Candidate Starts for Akino08_16:

(4, 7266), (Start: 29 @7560 has 1 MA's), (Start: 31 @7563 has 151 MA's), (37, 7578), (89, 7788), (94, 7815), (97, 7824), (102, 7848), (104, 7860),

Gene: Albanese_12 Start: 9846, Stop: 10184, Start Num: 31

Candidate Starts for Albanese_12:

(Start: 31 @9846 has 151 MA's), (68, 9978), (82, 10035), (103, 10143),

Gene: Albedo_9 Start: 7316, Stop: 7645, Start Num: 31

Candidate Starts for Albedo_9:

(11, 7076), (20, 7220), (Start: 31 @7316 has 151 MA's), (37, 7331), (94, 7568), (104, 7613), (106, 7619),

Gene: Albright_9 Start: 7325, Stop: 7654, Start Num: 31

Candidate Starts for Albright_9:

(Start: 31 @7325 has 151 MA's), (37, 7340), (94, 7577), (104, 7622),

Gene: Aledel_8 Start: 6923, Stop: 7261, Start Num: 31

Candidate Starts for Aledel_8:

(Start: 31 @6923 has 151 MA's), (42, 6956), (52, 6995), (74, 7076), (95, 7181), (98, 7190),

Gene: Altostratus_8 Start: 6384, Stop: 6734, Start Num: 31

Candidate Starts for Altostratus_8:

(Start: 31 @6384 has 151 MA's), (41, 6411), (45, 6432), (79, 6573), (83, 6597), (85, 6603), (115, 6726),

Gene: Amelia_11 Start: 7903, Stop: 8244, Start Num: 30

Candidate Starts for Amelia_11:

(16, 7771), (21, 7828), (Start: 30 @7903 has 29 MA's), (66, 8029), (73, 8056), (84, 8116), (85, 8119), (89, 8137), (94, 8164), (104, 8215),

Gene: AmiCi24_9 Start: 7312, Stop: 7650, Start Num: 30

Candidate Starts for AmiCi24_9:

(5, 7018), (14, 7105), (17, 7189), (25, 7273), (Start: 30 @7312 has 29 MA's), (44, 7357), (51, 7381), (61, 7423), (66, 7438), (77, 7483), (78, 7489), (84, 7522), (94, 7570), (100, 7588),

Gene: Anatole_9 Start: 6977, Stop: 7360, Start Num: 26

Candidate Starts for Anatole_9:

(4, 6722), (9, 6767), (24, 6962), (Start: 26 @6977 has 3 MA's), (35, 7019), (54, 7088), (62, 7124), (69, 7148), (77, 7187), (85, 7229), (94, 7274), (101, 7298), (107, 7331), (109, 7334), (113, 7349),

Gene: Andrew_10 Start: 7691, Stop: 8029, Start Num: 30

Candidate Starts for Andrew_10:

(17, 7568), (19, 7592), (Start: 30 @7691 has 29 MA's), (44, 7736), (59, 7796), (61, 7802), (66, 7817), (77, 7862), (84, 7901), (91, 7931), (94, 7949),

Gene: AnnaLie_10 Start: 7671, Stop: 8000, Start Num: 31

Candidate Starts for AnnaLie_10:

(Start: 31 @7671 has 151 MA's), (37, 7686), (94, 7923), (104, 7968),

Gene: AnnabelLee_11 Start: 7129, Stop: 7464, Start Num: 33

Candidate Starts for AnnabelLee_11:

(33, 7129), (43, 7159), (94, 7381),

Gene: Antrice_10 Start: 7647, Stop: 7985, Start Num: 30

Candidate Starts for Antrice_10:

(16, 7515), (22, 7581), (Start: 30 @7647 has 29 MA's), (44, 7692), (60, 7755), (66, 7773), (73, 7800), (104, 7956),

Gene: AppleCider_12 Start: 9802, Stop: 10140, Start Num: 31

Candidate Starts for AppleCider_12:

(Start: 31 @9802 has 151 MA's),

Gene: Archimedes_7 Start: 6004, Stop: 6366, Start Num: 28

Candidate Starts for Archimedes_7:

(12, 5794), (Start: 28 @6004 has 3 MA's), (66, 6136), (70, 6151), (72, 6160), (104, 6334),

Gene: Armstrong_8 Start: 7093, Stop: 7425, Start Num: 31

Candidate Starts for Armstrong_8:

(4, 6796), (Start: 31 @7093 has 151 MA's), (Start: 36 @7105 has 8 MA's), (37, 7108), (47, 7144), (52, 7165), (53, 7168), (78, 7267), (94, 7348),

Gene: Arroyo_10 Start: 7795, Stop: 8124, Start Num: 31

Candidate Starts for Arroyo_10:

(Start: 31 @7795 has 151 MA's), (37, 7810), (94, 8047), (104, 8092),

Gene: Atlantica_9 Start: 7312, Stop: 7650, Start Num: 30

Candidate Starts for Atlantica_9:

(5, 7018), (14, 7105), (17, 7189), (25, 7273), (Start: 30 @7312 has 29 MA's), (44, 7357), (51, 7381), (61, 7423), (66, 7438), (77, 7483), (78, 7489), (84, 7522), (94, 7570), (100, 7588),

Gene: Audell_14 Start: 10469, Stop: 10801, Start Num: 34

Candidate Starts for Audell_14:

(34, 10469), (85, 10673),

Gene: AustinPowers_8 Start: 6924, Stop: 7262, Start Num: 31

Candidate Starts for AustinPowers_8:

(Start: 31 @6924 has 151 MA's), (42, 6957), (52, 6996), (74, 7077), (95, 7182), (98, 7191),

Gene: AvGardian_9 Start: 7373, Stop: 7702, Start Num: 31

Candidate Starts for AvGardian_9:

(Start: 31 @7373 has 151 MA's), (37, 7388), (59, 7472), (88, 7595), (94, 7625), (102, 7658), (104, 7670),

Gene: Avocadoman_9 Start: 7383, Stop: 7712, Start Num: 31

Candidate Starts for Avocadoman_9:

(Start: 31 @7383 has 151 MA's), (37, 7398), (94, 7635), (104, 7680),

Gene: B3_9 Start: 6977, Stop: 7360, Start Num: 26

Candidate Starts for B3_9:

(4, 6722), (9, 6767), (24, 6962), (Start: 26 @6977 has 3 MA's), (35, 7019), (54, 7088), (69, 7148), (77, 7187), (85, 7229), (94, 7274), (101, 7298), (107, 7331), (109, 7334), (113, 7349),

Gene: BAjuniper_9 Start: 7266, Stop: 7598, Start Num: 31

Candidate Starts for BAjuniper_9:

(4, 6969), (11, 7026), (Start: 31 @7266 has 151 MA's), (37, 7281), (47, 7314), (52, 7335), (83, 7470),

Gene: BabyDaisy_10 Start: 7544, Stop: 7873, Start Num: 31

Candidate Starts for BabyDaisy_10:

(Start: 31 @7544 has 151 MA's), (37, 7559), (88, 7766), (94, 7796), (102, 7829), (104, 7841),

Gene: BabyYoda_9 Start: 7566, Stop: 7895, Start Num: 31

Candidate Starts for BabyYoda_9:

(Start: 29 @7563 has 1 MA's), (Start: 31 @7566 has 151 MA's), (37, 7581), (88, 7788), (89, 7791), (94, 7818), (104, 7863),

Gene: Bachaco_9 Start: 7457, Stop: 7786, Start Num: 31

Candidate Starts for Bachaco_9:

(Start: 29 @7454 has 1 MA's), (Start: 31 @7457 has 151 MA's), (37, 7472), (47, 7505), (88, 7679), (94, 7709), (104, 7754), (112, 7772),

Gene: Basilisk_10 Start: 8028, Stop: 8390, Start Num: 30

Candidate Starts for Basilisk_10:

(Start: 30 @8028 has 29 MA's), (41, 8055), (58, 8124), (59, 8133), (75, 8190), (77, 8220), (81, 8238), (83, 8256), (86, 8265), (99, 8325),

Gene: Bedetta_11 Start: 7903, Stop: 8244, Start Num: 30

Candidate Starts for Bedetta_11:

(16, 7771), (21, 7828), (Start: 30 @7903 has 29 MA's), (66, 8029), (73, 8056), (84, 8116), (85, 8119), (89, 8137), (94, 8164), (104, 8215),

Gene: Beethoven_12 Start: 9762, Stop: 10100, Start Num: 31

Candidate Starts for Beethoven_12:

(Start: 31 @9762 has 151 MA's), (81, 9948), (98, 10029), (103, 10059),

Gene: BelmontSKP_10 Start: 7671, Stop: 8000, Start Num: 31
Candidate Starts for BelmontSKP_10:
(Start: 31 @7671 has 151 MA's), (37, 7686), (94, 7923), (104, 7968),

Gene: Bengal_9 Start: 7325, Stop: 7654, Start Num: 31
Candidate Starts for Bengal_9:
(Start: 31 @7325 has 151 MA's), (37, 7340), (94, 7577), (104, 7622),

Gene: Bennie_8 Start: 6907, Stop: 7245, Start Num: 31
Candidate Starts for Bennie_8:
(Start: 31 @6907 has 151 MA's), (42, 6940), (103, 7204),

Gene: Bernstein_8 Start: 7153, Stop: 7485, Start Num: 31
Candidate Starts for Bernstein_8:
(4, 6856), (Start: 31 @7153 has 151 MA's), (Start: 36 @7165 has 8 MA's), (37, 7168), (47, 7204), (52, 7225), (53, 7228), (78, 7327), (94, 7408),

Gene: Bible12_11 Start: 7906, Stop: 8247, Start Num: 30
Candidate Starts for Bible12_11:
(16, 7774), (21, 7831), (Start: 30 @7906 has 29 MA's), (66, 8032), (73, 8059), (84, 8119), (85, 8122), (89, 8140), (94, 8167), (104, 8218),

Gene: BigMack_8 Start: 6907, Stop: 7245, Start Num: 31
Candidate Starts for BigMack_8:
(Start: 31 @6907 has 151 MA's), (32, 6910), (42, 6940), (103, 7204),

Gene: Bodacious_8 Start: 6905, Stop: 7243, Start Num: 31
Candidate Starts for Bodacious_8:
(Start: 31 @6905 has 151 MA's), (42, 6938), (103, 7202),

Gene: Brahms_8 Start: 7093, Stop: 7425, Start Num: 31
Candidate Starts for Brahms_8:
(4, 6796), (Start: 31 @7093 has 151 MA's), (Start: 36 @7105 has 8 MA's), (37, 7108), (47, 7144), (52, 7165), (53, 7168), (78, 7267), (94, 7348),

Gene: Bran_9 Start: 6878, Stop: 7222, Start Num: 36
Candidate Starts for Bran_9:
(6, 6587), (Start: 36 @6878 has 8 MA's), (54, 6944), (60, 6977), (64, 6989), (66, 6995), (69, 7007), (81, 7064), (92, 7127), (102, 7181), (108, 7202), (111, 7208),

Gene: BrotherBLo_12 Start: 9769, Stop: 10107, Start Num: 31
Candidate Starts for BrotherBLo_12:
(Start: 31 @9769 has 151 MA's), (68, 9901), (81, 9955), (98, 10036), (103, 10066),

Gene: Brynnie_10 Start: 7840, Stop: 8202, Start Num: 30
Candidate Starts for Brynnie_10:
(16, 7708), (Start: 30 @7840 has 29 MA's), (41, 7867), (58, 7936), (59, 7945), (75, 8002), (77, 8032), (81, 8050), (83, 8068), (86, 8077), (99, 8137),

Gene: BubbaBear_9 Start: 7316, Stop: 7645, Start Num: 31
Candidate Starts for BubbaBear_9:

(11, 7076), (20, 7220), (Start: 31 @7316 has 151 MA's), (37, 7331), (94, 7568), (104, 7613), (106, 7619),

Gene: Buldak_9 Start: 7601, Stop: 7930, Start Num: 31

Candidate Starts for Buldak_9:

(4, 7304), (Start: 31 @7601 has 151 MA's), (37, 7616), (42, 7631), (47, 7649), (49, 7655), (54, 7676), (78, 7772), (94, 7853), (102, 7886),

Gene: Burritobowl_9 Start: 7352, Stop: 7681, Start Num: 31

Candidate Starts for Burritobowl_9:

(Start: 31 @7352 has 151 MA's), (37, 7367), (94, 7604), (104, 7649),

Gene: CallieOMalley_12 Start: 9802, Stop: 10140, Start Num: 31

Candidate Starts for CallieOMalley_12:

(Start: 31 @9802 has 151 MA's), (42, 9835),

Gene: Camara_9 Start: 7313, Stop: 7651, Start Num: 30

Candidate Starts for Camara_9:

(5, 7019), (14, 7106), (17, 7190), (25, 7274), (Start: 30 @7313 has 29 MA's), (44, 7358), (51, 7382), (61, 7424), (66, 7439), (77, 7484), (78, 7490), (84, 7523), (94, 7571),

Gene: Canowicakte_12 Start: 9837, Stop: 10175, Start Num: 31

Candidate Starts for Canowicakte_12:

(Start: 31 @9837 has 151 MA's), (42, 9870),

Gene: Carpal_12 Start: 9769, Stop: 10107, Start Num: 31

Candidate Starts for Carpal_12:

(Start: 31 @9769 has 151 MA's), (81, 9955), (98, 10036), (103, 10066),

Gene: Cashington_9 Start: 7342, Stop: 7671, Start Num: 31

Candidate Starts for Cashington_9:

(Start: 31 @7342 has 151 MA's), (37, 7357), (94, 7594), (104, 7639),

Gene: Celaena_9 Start: 7394, Stop: 7723, Start Num: 31

Candidate Starts for Celaena_9:

(Start: 29 @7391 has 1 MA's), (Start: 31 @7394 has 151 MA's), (37, 7409), (47, 7442), (88, 7616), (94, 7646), (104, 7691), (112, 7709),

Gene: ChewChew_8 Start: 6904, Stop: 7242, Start Num: 31

Candidate Starts for ChewChew_8:

(Start: 31 @6904 has 151 MA's), (42, 6937), (103, 7201),

Gene: Chickaboom_9 Start: 7385, Stop: 7747, Start Num: 30

Candidate Starts for Chickaboom_9:

(16, 7253), (Start: 30 @7385 has 29 MA's), (41, 7412), (58, 7481), (59, 7490), (75, 7547), (77, 7577), (81, 7595), (83, 7613), (86, 7622), (99, 7682),

Gene: ChiliPepper_9 Start: 7553, Stop: 7882, Start Num: 31

Candidate Starts for ChiliPepper_9:

(4, 7256), (20, 7457), (Start: 29 @7550 has 1 MA's), (Start: 31 @7553 has 151 MA's), (37, 7568), (53, 7625), (58, 7643), (73, 7700), (88, 7775), (94, 7805), (104, 7850),

Gene: Cholula_12 Start: 9814, Stop: 10152, Start Num: 31

Candidate Starts for Cholula_12:

(Start: 31 @9814 has 151 MA's), (81, 10000), (98, 10081), (103, 10111),

Gene: Chridison_8 Start: 6924, Stop: 7262, Start Num: 31

Candidate Starts for Chridison_8:

(Start: 31 @6924 has 151 MA's), (42, 6957), (52, 6996), (74, 7077), (95, 7182), (98, 7191),

Gene: Christian_8 Start: 6905, Stop: 7243, Start Num: 31

Candidate Starts for Christian_8:

(Start: 31 @6905 has 151 MA's), (42, 6938), (103, 7202),

Gene: Clayda5_8 Start: 7093, Stop: 7425, Start Num: 31

Candidate Starts for Clayda5_8:

(4, 6796), (Start: 31 @7093 has 151 MA's), (Start: 36 @7105 has 8 MA's), (37, 7108), (47, 7144), (52, 7165), (53, 7168), (78, 7267), (94, 7348),

Gene: CliffHanger_10 Start: 7300, Stop: 7629, Start Num: 31

Candidate Starts for CliffHanger_10:

(Start: 31 @7300 has 151 MA's), (37, 7315), (52, 7369), (94, 7552), (105, 7600),

Gene: Coltrane_8 Start: 7093, Stop: 7425, Start Num: 31

Candidate Starts for Coltrane_8:

(4, 6796), (Start: 31 @7093 has 151 MA's), (Start: 36 @7105 has 8 MA's), (37, 7108), (47, 7144), (52, 7165), (53, 7168), (78, 7267), (94, 7348),

Gene: Colusalem_10 Start: 7742, Stop: 8083, Start Num: 30

Candidate Starts for Colusalem_10:

(16, 7610), (21, 7667), (Start: 30 @7742 has 29 MA's), (66, 7868), (73, 7895), (84, 7955), (85, 7958), (89, 7976), (94, 8003), (104, 8054),

Gene: Coral_10 Start: 7742, Stop: 8083, Start Num: 30

Candidate Starts for Coral_10:

(16, 7610), (21, 7667), (Start: 30 @7742 has 29 MA's), (66, 7868), (73, 7895), (84, 7955), (85, 7958), (89, 7976), (94, 8003), (104, 8054),

Gene: Cote_11 Start: 7903, Stop: 8244, Start Num: 30

Candidate Starts for Cote_11:

(16, 7771), (21, 7828), (Start: 30 @7903 has 29 MA's), (66, 8029), (73, 8056), (84, 8116), (85, 8119), (89, 8137), (94, 8164), (104, 8215),

Gene: CristinaYang_8 Start: 6905, Stop: 7243, Start Num: 31

Candidate Starts for CristinaYang_8:

(Start: 31 @6905 has 151 MA's), (42, 6938), (103, 7202),

Gene: CroZenni_9 Start: 7325, Stop: 7654, Start Num: 31

Candidate Starts for CroZenni_9:

(4, 7028), (11, 7085), (20, 7229), (Start: 31 @7325 has 151 MA's), (37, 7340), (94, 7577), (104, 7622),

Gene: CupcakePrincess_9 Start: 7302, Stop: 7631, Start Num: 31

Candidate Starts for CupcakePrincess_9:

(11, 7062), (20, 7206), (Start: 31 @7302 has 151 MA's), (37, 7317), (59, 7401), (94, 7554), (104, 7599), (106, 7605),

Gene: Daiboju_8 Start: 6925, Stop: 7263, Start Num: 31

Candidate Starts for Daiboju_8:

(Start: 31 @6925 has 151 MA's), (52, 6997), (80, 7108), (95, 7183), (98, 7192), (110, 7243),

Gene: Daob_11 Start: 7906, Stop: 8247, Start Num: 30

Candidate Starts for Daob_11:

(16, 7774), (21, 7831), (Start: 30 @7906 has 29 MA's), (66, 8032), (73, 8059), (84, 8119), (85, 8122), (89, 8140), (94, 8167), (104, 8218),

Gene: DickRichards_9 Start: 7819, Stop: 8148, Start Num: 31

Candidate Starts for DickRichards_9:

(Start: 31 @7819 has 151 MA's), (37, 7834), (94, 8071), (104, 8116),

Gene: Didgeridoo_10 Start: 7544, Stop: 7873, Start Num: 31

Candidate Starts for Didgeridoo_10:

(4, 7247), (8, 7289), (11, 7304), (Start: 31 @7544 has 151 MA's), (37, 7559), (88, 7766), (94, 7796), (102, 7829), (104, 7841),

Gene: Dina_9 Start: 6861, Stop: 7205, Start Num: 36

Candidate Starts for Dina_9:

(6, 6570), (Start: 36 @6861 has 8 MA's), (54, 6927), (60, 6960), (66, 6978), (69, 6990), (81, 7047), (92, 7110), (102, 7164), (108, 7185), (111, 7191),

Gene: Dino_12 Start: 9768, Stop: 10106, Start Num: 31

Candidate Starts for Dino_12:

(Start: 31 @9768 has 151 MA's), (68, 9900), (81, 9954), (98, 10035), (103, 10065),

Gene: DirtyBubble_9 Start: 7574, Stop: 7903, Start Num: 31

Candidate Starts for DirtyBubble_9:

(4, 7277), (11, 7334), (Start: 29 @7571 has 1 MA's), (Start: 31 @7574 has 151 MA's), (37, 7589), (88, 7796), (89, 7799), (94, 7826), (104, 7871),

Gene: Dismas_9 Start: 7550, Stop: 7882, Start Num: 29

Candidate Starts for Dismas_9:

(4, 7256), (20, 7457), (Start: 29 @7550 has 1 MA's), (Start: 31 @7553 has 151 MA's), (37, 7568), (53, 7625), (73, 7700), (88, 7775), (94, 7805), (104, 7850),

Gene: Doobus_9 Start: 7556, Stop: 7885, Start Num: 31

Candidate Starts for Doobus_9:

(Start: 31 @7556 has 151 MA's), (37, 7571), (94, 7808), (104, 7853),

Gene: DrRobert_8 Start: 6905, Stop: 7243, Start Num: 31

Candidate Starts for DrRobert_8:

(Start: 31 @6905 has 151 MA's), (42, 6938), (103, 7202),

Gene: DreamTeam_8 Start: 6951, Stop: 7289, Start Num: 31

Candidate Starts for DreamTeam_8:

(Start: 31 @6951 has 151 MA's), (42, 6984), (103, 7248),

Gene: E1_9 Start: 6977, Stop: 7360, Start Num: 26

Candidate Starts for E1_9:

(4, 6722), (9, 6767), (24, 6962), (Start: 26 @6977 has 3 MA's), (35, 7019), (54, 7088), (62, 7124), (69, 7148), (77, 7187), (85, 7229), (94, 7274), (101, 7298), (107, 7331), (109, 7334), (113, 7349),

Gene: Eden_8 Start: 7182, Stop: 7514, Start Num: 31
Candidate Starts for Eden_8:
(Start: 31 @7182 has 151 MA's), (Start: 36 @7194 has 8 MA's), (37, 7197), (47, 7233), (90, 7416),

Gene: Eesa_10 Start: 7902, Stop: 8243, Start Num: 30
Candidate Starts for Eesa_10:
(Start: 30 @7902 has 29 MA's), (32, 7905), (44, 7947), (60, 8010), (61, 8013), (66, 8028), (89, 8136),
(94, 8163), (104, 8214),

Gene: Elva_10 Start: 7631, Stop: 7960, Start Num: 31
Candidate Starts for Elva_10:
(4, 7334), (Start: 29 @7628 has 1 MA's), (Start: 31 @7631 has 151 MA's), (37, 7646), (88, 7853), (89,
7856), (94, 7883), (104, 7928),

Gene: EstebanJulior_8 Start: 6949, Stop: 7287, Start Num: 31
Candidate Starts for EstebanJulior_8:
(Start: 31 @6949 has 151 MA's), (42, 6982), (68, 7081), (103, 7246),

Gene: Eula_9 Start: 7323, Stop: 7652, Start Num: 31
Candidate Starts for Eula_9:
(11, 7083), (20, 7227), (Start: 31 @7323 has 151 MA's), (37, 7338), (59, 7422), (94, 7575), (104, 7620),
(106, 7626),

Gene: Eunoia_8 Start: 6923, Stop: 7261, Start Num: 31
Candidate Starts for Eunoia_8:
(Start: 31 @6923 has 151 MA's), (42, 6956), (52, 6995), (74, 7076), (95, 7181), (98, 7190),

Gene: Finalfrontier_10 Start: 7834, Stop: 8163, Start Num: 31
Candidate Starts for Finalfrontier_10:
(11, 7594), (20, 7738), (Start: 31 @7834 has 151 MA's), (37, 7849), (59, 7933), (60, 7936), (88, 8056),
(94, 8086), (97, 8095), (104, 8131),

Gene: FlameThrower_9 Start: 7282, Stop: 7611, Start Num: 31
Candidate Starts for FlameThrower_9:
(1, 6853), (4, 6985), (Start: 29 @7279 has 1 MA's), (Start: 31 @7282 has 151 MA's), (37, 7297), (47,
7330), (88, 7504), (94, 7534), (104, 7579), (112, 7597),

Gene: Fluke_12 Start: 9810, Stop: 10148, Start Num: 31
Candidate Starts for Fluke_12:
(Start: 31 @9810 has 151 MA's), (81, 9996), (98, 10077), (103, 10107),

Gene: Franklin22_8 Start: 7163, Stop: 7495, Start Num: 31
Candidate Starts for Franklin22_8:
(Start: 29 @7160 has 1 MA's), (Start: 31 @7163 has 151 MA's), (Start: 36 @7175 has 8 MA's), (37,
7178), (49, 7220), (59, 7265), (66, 7286), (94, 7418),

Gene: Frizzle_7 Start: 6056, Stop: 6415, Start Num: 28
Candidate Starts for Frizzle_7:
(Start: 28 @6056 has 3 MA's), (71, 6203), (96, 6338),

Gene: Gack_8 Start: 7233, Stop: 7565, Start Num: 31
Candidate Starts for Gack_8:

(Start: 31 @7233 has 151 MA's), (Start: 36 @7245 has 8 MA's), (37, 7248), (42, 7266), (54, 7311), (74, 7386), (94, 7488),

Gene: Galaxy_10 Start: 7711, Stop: 8073, Start Num: 30

Candidate Starts for Galaxy_10:

(Start: 30 @7711 has 29 MA's), (32, 7714), (41, 7738), (58, 7807), (59, 7816), (73, 7864), (75, 7873), (77, 7903), (81, 7921), (83, 7939), (86, 7948), (99, 8008),

Gene: Ghobes_7 Start: 6056, Stop: 6415, Start Num: 28

Candidate Starts for Ghobes_7:

(Start: 28 @6056 has 3 MA's), (71, 6203), (96, 6338),

Gene: Gisselle_8 Start: 6951, Stop: 7289, Start Num: 31

Candidate Starts for Gisselle_8:

(Start: 31 @6951 has 151 MA's), (42, 6984), (103, 7248),

Gene: Glenn_12 Start: 9820, Stop: 10158, Start Num: 31

Candidate Starts for Glenn_12:

(Start: 31 @9820 has 151 MA's), (81, 10006), (98, 10087), (103, 10117),

Gene: Glotell_9 Start: 7312, Stop: 7650, Start Num: 30

Candidate Starts for Glotell_9:

(5, 7018), (14, 7105), (17, 7189), (25, 7273), (Start: 30 @7312 has 29 MA's), (44, 7357), (51, 7381), (61, 7423), (66, 7438), (77, 7483), (78, 7489), (84, 7522), (94, 7570), (100, 7588),

Gene: Gravel_11 Start: 7898, Stop: 8239, Start Num: 30

Candidate Starts for Gravel_11:

(Start: 30 @7898 has 29 MA's), (32, 7901), (44, 7943), (60, 8006), (61, 8009), (66, 8024), (89, 8132), (94, 8159), (104, 8210),

Gene: GreenHearts_12 Start: 9892, Stop: 10230, Start Num: 31

Candidate Starts for GreenHearts_12:

(Start: 31 @9892 has 151 MA's), (68, 10024), (82, 10081), (103, 10189),

Gene: Greenhouse_12 Start: 9817, Stop: 10155, Start Num: 31

Candidate Starts for Greenhouse_12:

(Start: 31 @9817 has 151 MA's), (68, 9949), (82, 10006), (95, 10075), (98, 10084), (103, 10114),

Gene: HamCheese_9 Start: 7312, Stop: 7650, Start Num: 30

Candidate Starts for HamCheese_9:

(5, 7018), (14, 7105), (17, 7189), (25, 7273), (Start: 30 @7312 has 29 MA's), (44, 7357), (51, 7381), (61, 7423), (66, 7438), (77, 7483), (78, 7489), (84, 7522), (94, 7570),

Gene: HannahPhantana_11 Start: 7906, Stop: 8247, Start Num: 30

Candidate Starts for HannahPhantana_11:

(16, 7774), (21, 7831), (Start: 30 @7906 has 29 MA's), (66, 8032), (73, 8059), (84, 8119), (85, 8122), (89, 8140), (94, 8167), (104, 8218),

Gene: HeadNerd_8 Start: 6907, Stop: 7245, Start Num: 31

Candidate Starts for HeadNerd_8:

(Start: 31 @6907 has 151 MA's), (42, 6940), (103, 7204),

Gene: Herb_8 Start: 6925, Stop: 7263, Start Num: 31

Candidate Starts for Herb_8:

(Start: 31 @6925 has 151 MA's), (52, 6997), (80, 7108), (95, 7183), (98, 7192), (110, 7243),

Gene: Huckleberry_8 Start: 6907, Stop: 7245, Start Num: 31

Candidate Starts for Huckleberry_8:

(Start: 31 @6907 has 151 MA's), (42, 6940), (103, 7204),

Gene: HunterDalle_8 Start: 6923, Stop: 7261, Start Num: 31

Candidate Starts for HunterDalle_8:

(Start: 31 @6923 has 151 MA's), (42, 6956), (52, 6995), (74, 7076), (95, 7181), (98, 7190),

Gene: Huntingdon_12 Start: 9803, Stop: 10141, Start Num: 31

Candidate Starts for Huntingdon_12:

(Start: 31 @9803 has 151 MA's), (40, 9827), (82, 9992), (98, 10070), (103, 10100), (110, 10121),

Gene: Icarian_10 Start: 7557, Stop: 7886, Start Num: 31

Candidate Starts for Icarian_10:

(4, 7260), (Start: 29 @7554 has 1 MA's), (Start: 31 @7557 has 151 MA's), (37, 7572), (89, 7782), (94, 7809), (104, 7854),

Gene: Immaculata_12 Start: 9814, Stop: 10152, Start Num: 31

Candidate Starts for Immaculata_12:

(Start: 31 @9814 has 151 MA's), (81, 10000), (98, 10081), (103, 10111),

Gene: IndyLu_9 Start: 7368, Stop: 7697, Start Num: 31

Candidate Starts for IndyLu_9:

(4, 7071), (8, 7113), (11, 7128), (Start: 31 @7368 has 151 MA's), (37, 7383), (88, 7590), (102, 7653), (104, 7665),

Gene: Jabb_9 Start: 7302, Stop: 7631, Start Num: 31

Candidate Starts for Jabb_9:

(11, 7062), (20, 7206), (Start: 31 @7302 has 151 MA's), (37, 7317), (59, 7401), (94, 7554), (104, 7599), (106, 7605),

Gene: Jamun_10 Start: 8052, Stop: 8414, Start Num: 30

Candidate Starts for Jamun_10:

(16, 7920), (Start: 30 @8052 has 29 MA's), (32, 8055), (41, 8079), (58, 8148), (59, 8157), (75, 8214), (77, 8244), (81, 8262), (83, 8280), (86, 8289), (99, 8349),

Gene: Jerole_11 Start: 7903, Stop: 8244, Start Num: 30

Candidate Starts for Jerole_11:

(16, 7771), (21, 7828), (Start: 30 @7903 has 29 MA's), (66, 8029), (73, 8056), (84, 8116), (85, 8119), (89, 8137), (94, 8164), (104, 8215),

Gene: Joann_12 Start: 9795, Stop: 10133, Start Num: 31

Candidate Starts for Joann_12:

(Start: 31 @9795 has 151 MA's), (68, 9927), (82, 9984), (95, 10053), (98, 10062), (103, 10092),

Gene: Johnathan_9 Start: 7325, Stop: 7654, Start Num: 31

Candidate Starts for Johnathan_9:

(Start: 31 @7325 has 151 MA's), (37, 7340), (94, 7577), (104, 7622),

Gene: Jovita_9 Start: 7424, Stop: 7753, Start Num: 31

Candidate Starts for Jovita_9:

(11, 7184), (20, 7328), (Start: 31 @7424 has 151 MA's), (37, 7439), (59, 7523), (94, 7676), (104, 7721), (106, 7727),

Gene: Jumboset_12 Start: 9763, Stop: 10101, Start Num: 31

Candidate Starts for Jumboset_12:

(15, 9598), (Start: 31 @9763 has 151 MA's), (81, 9949), (98, 10030), (103, 10060),

Gene: Juno112_9 Start: 7313, Stop: 7651, Start Num: 30

Candidate Starts for Juno112_9:

(5, 7019), (14, 7106), (17, 7190), (25, 7274), (Start: 30 @7313 has 29 MA's), (44, 7358), (51, 7382), (61, 7424), (66, 7439), (77, 7484), (78, 7490), (84, 7523), (94, 7571), (100, 7589),

Gene: KHumphrey_9 Start: 7312, Stop: 7650, Start Num: 30

Candidate Starts for KHumphrey_9:

(5, 7018), (14, 7105), (17, 7189), (25, 7273), (Start: 30 @7312 has 29 MA's), (44, 7357), (51, 7381), (61, 7423), (66, 7438), (77, 7483), (78, 7489), (84, 7522), (94, 7570), (100, 7588),

Gene: Kalizoi_12 Start: 9762, Stop: 10100, Start Num: 31

Candidate Starts for Kalizoi_12:

(Start: 31 @9762 has 151 MA's), (68, 9894), (81, 9948), (98, 10029), (103, 10059),

Gene: Kate33_9 Start: 7367, Stop: 7696, Start Num: 31

Candidate Starts for Kate33_9:

(4, 7070), (8, 7112), (11, 7127), (Start: 31 @7367 has 151 MA's), (37, 7382), (88, 7589), (102, 7652), (104, 7664),

Gene: Katzastrophic_9 Start: 7457, Stop: 7786, Start Num: 31

Candidate Starts for Katzastrophic_9:

(Start: 29 @7454 has 1 MA's), (Start: 31 @7457 has 151 MA's), (37, 7472), (47, 7505), (88, 7679), (94, 7709), (104, 7754), (112, 7772),

Gene: KendraB23_11 Start: 7899, Stop: 8240, Start Num: 30

Candidate Starts for KendraB23_11:

(Start: 30 @7899 has 29 MA's), (32, 7902), (44, 7944), (60, 8007), (61, 8010), (66, 8025), (89, 8133), (94, 8160), (104, 8211),

Gene: Kenzers_9 Start: 7339, Stop: 7668, Start Num: 31

Candidate Starts for Kenzers_9:

(11, 7099), (20, 7243), (Start: 31 @7339 has 151 MA's), (37, 7354), (94, 7591), (104, 7636), (106, 7642),

Gene: Kepler_10 Start: 7741, Stop: 8082, Start Num: 30

Candidate Starts for Kepler_10:

(16, 7609), (21, 7666), (Start: 30 @7741 has 29 MA's), (66, 7867), (73, 7894), (84, 7954), (85, 7957), (89, 7975), (94, 8002), (104, 8053),

Gene: Khuang_8 Start: 6379, Stop: 6729, Start Num: 31

Candidate Starts for Khuang_8:

(7, 6124), (27, 6367), (Start: 31 @6379 has 151 MA's), (41, 6406), (45, 6427), (65, 6502), (79, 6568), (83, 6592), (94, 6643), (99, 6658), (100, 6661), (115, 6721),

Gene: Kieran_9 Start: 7556, Stop: 7885, Start Num: 31

Candidate Starts for Kieran_9:

(4, 7259), (20, 7460), (Start: 29 @7553 has 1 MA's), (Start: 31 @7556 has 151 MA's), (37, 7571), (53, 7628), (58, 7646), (73, 7703), (88, 7778), (94, 7808), (104, 7853),

Gene: KingBob_8 Start: 6925, Stop: 7263, Start Num: 31

Candidate Starts for KingBob_8:

(Start: 31 @6925 has 151 MA's), (52, 6997), (80, 7108), (95, 7183), (98, 7192), (110, 7243),

Gene: Kittykat_8 Start: 6948, Stop: 7286, Start Num: 31

Candidate Starts for Kittykat_8:

(Start: 31 @6948 has 151 MA's), (103, 7245),

Gene: Korra_12 Start: 9768, Stop: 10106, Start Num: 31

Candidate Starts for Korra_12:

(Start: 31 @9768 has 151 MA's), (68, 9900), (81, 9954), (98, 10035), (103, 10065),

Gene: Kuleana_10 Start: 7701, Stop: 8042, Start Num: 30

Candidate Starts for Kuleana_10:

(Start: 30 @7701 has 29 MA's), (42, 7734), (60, 7809), (61, 7812), (66, 7827), (72, 7851), (73, 7854), (77, 7875), (84, 7914), (89, 7935), (94, 7962), (100, 7980), (104, 8013),

Gene: Lahqtemish_9 Start: 7412, Stop: 7741, Start Num: 31

Candidate Starts for Lahqtemish_9:

(Start: 31 @7412 has 151 MA's), (37, 7427), (88, 7634), (94, 7664), (102, 7697), (104, 7709),

Gene: Lakshmi_12 Start: 9822, Stop: 10160, Start Num: 31

Candidate Starts for Lakshmi_12:

(Start: 31 @9822 has 151 MA's), (68, 9954), (82, 10011), (103, 10119),

Gene: Lasagna_8 Start: 6905, Stop: 7243, Start Num: 31

Candidate Starts for Lasagna_8:

(Start: 31 @6905 has 151 MA's), (42, 6938), (103, 7202),

Gene: Lederberg_9 Start: 6861, Stop: 7205, Start Num: 36

Candidate Starts for Lederberg_9:

(6, 6570), (Start: 36 @6861 has 8 MA's), (54, 6927), (60, 6960), (66, 6978), (69, 6990), (81, 7047), (92, 7110), (102, 7164), (108, 7185), (111, 7191),

Gene: Lennox_8 Start: 6905, Stop: 7243, Start Num: 31

Candidate Starts for Lennox_8:

(Start: 31 @6905 has 151 MA's), (42, 6938), (103, 7202),

Gene: Leona_9 Start: 7363, Stop: 7701, Start Num: 30

Candidate Starts for Leona_9:

(17, 7240), (Start: 30 @7363 has 29 MA's), (44, 7408), (51, 7432), (61, 7474), (66, 7489), (77, 7534), (78, 7540), (84, 7573), (94, 7621), (100, 7639),

Gene: LilStuart_8 Start: 6905, Stop: 7243, Start Num: 31

Candidate Starts for LilStuart_8:

(Start: 31 @6905 has 151 MA's), (42, 6938), (103, 7202),

Gene: LimaBean_9 Start: 7325, Stop: 7654, Start Num: 31

Candidate Starts for LimaBean_9:

(Start: 31 @7325 has 151 MA's), (37, 7340), (94, 7577), (104, 7622),

Gene: Litotes_12 Start: 9790, Stop: 10128, Start Num: 31

Candidate Starts for Litotes_12:

(Start: 31 @9790 has 151 MA's), (42, 9823),

Gene: LittleTokyo_10 Start: 7645, Stop: 7983, Start Num: 30

Candidate Starts for LittleTokyo_10:

(3, 7219), (6, 7372), (21, 7570), (23, 7594), (Start: 30 @7645 has 29 MA's), (44, 7690), (60, 7753), (66, 7771), (73, 7798), (81, 7834), (85, 7858), (94, 7903), (104, 7954), (111, 7969),

Gene: Loviatar_16 Start: 7578, Stop: 7907, Start Num: 31

Candidate Starts for Loviatar_16:

(4, 7281), (Start: 29 @7575 has 1 MA's), (Start: 31 @7578 has 151 MA's), (37, 7593), (89, 7803), (94, 7830), (97, 7839), (102, 7863), (104, 7875),

Gene: Lucy_8 Start: 6896, Stop: 7234, Start Num: 31

Candidate Starts for Lucy_8:

(Start: 31 @6896 has 151 MA's), (42, 6929), (103, 7193),

Gene: Lunar_11 Start: 7903, Stop: 8244, Start Num: 30

Candidate Starts for Lunar_11:

(16, 7771), (21, 7828), (Start: 30 @7903 has 29 MA's), (66, 8029), (73, 8056), (84, 8116), (85, 8119), (89, 8137), (94, 8164), (104, 8215),

Gene: Lynlen_9 Start: 7339, Stop: 7668, Start Num: 31

Candidate Starts for Lynlen_9:

(11, 7099), (20, 7243), (Start: 31 @7339 has 151 MA's), (37, 7354), (94, 7591), (104, 7636), (106, 7642),

Gene: Makoto_8 Start: 6905, Stop: 7243, Start Num: 31

Candidate Starts for Makoto_8:

(Start: 31 @6905 has 151 MA's), (42, 6938), (103, 7202),

Gene: MamaPearl_8 Start: 6949, Stop: 7287, Start Num: 31

Candidate Starts for MamaPearl_8:

(Start: 31 @6949 has 151 MA's), (42, 6982), (68, 7081), (103, 7246),

Gene: Maria1952_8 Start: 6925, Stop: 7263, Start Num: 31

Candidate Starts for Maria1952_8:

(Start: 31 @6925 has 151 MA's), (52, 6997), (80, 7108), (95, 7183), (98, 7192), (110, 7243),

Gene: MeganNoll_12 Start: 9820, Stop: 10158, Start Num: 31

Candidate Starts for MeganNoll_12:

(15, 9655), (Start: 31 @9820 has 151 MA's), (81, 10006), (98, 10087), (103, 10117),

Gene: Melons_11 Start: 7903, Stop: 8244, Start Num: 30

Candidate Starts for Melons_11:

(16, 7771), (21, 7828), (Start: 30 @7903 has 29 MA's), (66, 8029), (73, 8056), (84, 8116), (85, 8119), (89, 8137), (94, 8164), (104, 8215),

Gene: Misaeng_12 Start: 9868, Stop: 10206, Start Num: 31

Candidate Starts for Misaeng_12:

(Start: 31 @9868 has 151 MA's), (82, 10057), (98, 10135), (103, 10165), (110, 10186),

Gene: Moki_8 Start: 6907, Stop: 7245, Start Num: 31

Candidate Starts for Moki_8:

(Start: 31 @6907 has 151 MA's), (42, 6940), (103, 7204),

Gene: MrGloopy_12 Start: 9753, Stop: 10091, Start Num: 31

Candidate Starts for MrGloopy_12:

(Start: 31 @9753 has 151 MA's), (98, 10020), (103, 10050),

Gene: MsUbiquitous_9 Start: 7302, Stop: 7631, Start Num: 31

Candidate Starts for MsUbiquitous_9:

(11, 7062), (20, 7206), (Start: 31 @7302 has 151 MA's), (37, 7317), (59, 7401), (94, 7554), (104, 7599), (106, 7605),

Gene: Nancia_8 Start: 6905, Stop: 7243, Start Num: 31

Candidate Starts for Nancia_8:

(Start: 31 @6905 has 151 MA's), (42, 6938), (103, 7202),

Gene: Nicky22_10 Start: 7773, Stop: 8102, Start Num: 31

Candidate Starts for Nicky22_10:

(11, 7533), (20, 7677), (Start: 31 @7773 has 151 MA's), (37, 7788), (59, 7872), (88, 7995), (94, 8025), (104, 8070),

Gene: Nubia_12 Start: 9782, Stop: 10120, Start Num: 31

Candidate Starts for Nubia_12:

(Start: 31 @9782 has 151 MA's), (68, 9914), (82, 9971), (95, 10040), (98, 10049), (103, 10079),

Gene: OMalley_8 Start: 6923, Stop: 7261, Start Num: 31

Candidate Starts for OMalley_8:

(Start: 31 @6923 has 151 MA's), (42, 6956), (52, 6995), (74, 7076), (95, 7181), (98, 7190),

Gene: Olliecat_9 Start: 7556, Stop: 7885, Start Num: 31

Candidate Starts for Olliecat_9:

(Start: 31 @7556 has 151 MA's), (37, 7571), (47, 7604), (49, 7610), (54, 7631), (78, 7727), (94, 7808), (102, 7841),

Gene: Orcanus_10 Start: 7692, Stop: 8033, Start Num: 30

Candidate Starts for Orcanus_10:

(Start: 30 @7692 has 29 MA's), (32, 7695), (44, 7737), (60, 7800), (61, 7803), (66, 7818), (89, 7926), (94, 7953), (104, 8004), (106, 8010),

Gene: OurGirlNessie_8 Start: 6896, Stop: 7234, Start Num: 31

Candidate Starts for OurGirlNessie_8:

(Start: 31 @6896 has 151 MA's), (42, 6929), (103, 7193),

Gene: Oxynfrius_12 Start: 9795, Stop: 10133, Start Num: 31

Candidate Starts for Oxynfrius_12:

(Start: 31 @9795 has 151 MA's), (68, 9927), (82, 9984), (103, 10092),

Gene: PartyCup_12 Start: 9837, Stop: 10175, Start Num: 31

Candidate Starts for PartyCup_12:

(Start: 31 @9837 has 151 MA's), (42, 9870),

Gene: PastaFagioli_9 Start: 7400, Stop: 7729, Start Num: 31

Candidate Starts for PastaFagioli_9:

(Start: 31 @7400 has 151 MA's), (37, 7415), (88, 7622), (94, 7652), (102, 7685), (104, 7697),

Gene: Pelletreau_11 Start: 7898, Stop: 8239, Start Num: 30

Candidate Starts for Pelletreau_11:

(Start: 30 @7898 has 29 MA's), (32, 7901), (44, 7943), (60, 8006), (61, 8009), (66, 8024), (89, 8132), (94, 8159), (104, 8210),

Gene: PhigPhack_9 Start: 7354, Stop: 7683, Start Num: 31

Candidate Starts for PhigPhack_9:

(Start: 31 @7354 has 151 MA's), (37, 7369), (94, 7606), (104, 7651),

Gene: Phisb_9 Start: 7316, Stop: 7645, Start Num: 31

Candidate Starts for Phisb_9:

(11, 7076), (20, 7220), (Start: 31 @7316 has 151 MA's), (37, 7331), (94, 7568), (104, 7613), (106, 7619),

Gene: PhluffyCoco_9 Start: 7312, Stop: 7650, Start Num: 30

Candidate Starts for PhluffyCoco_9:

(5, 7018), (14, 7105), (17, 7189), (25, 7273), (Start: 30 @7312 has 29 MA's), (44, 7357), (51, 7381), (61, 7423), (66, 7438), (77, 7483), (78, 7489), (84, 7522), (94, 7570),

Gene: PinkFriday_8 Start: 6926, Stop: 7264, Start Num: 31

Candidate Starts for PinkFriday_8:

(2, 6494), (8, 6674), (10, 6680), (Start: 31 @6926 has 151 MA's), (52, 6998), (57, 7013), (95, 7184), (110, 7244),

Gene: PitaDog_8 Start: 6896, Stop: 7234, Start Num: 31

Candidate Starts for PitaDog_8:

(Start: 31 @6896 has 151 MA's), (42, 6929), (103, 7193),

Gene: Polka_10 Start: 7742, Stop: 8083, Start Num: 30

Candidate Starts for Polka_10:

(16, 7610), (21, 7667), (Start: 30 @7742 has 29 MA's), (66, 7868), (73, 7895), (84, 7955), (85, 7958), (89, 7976), (94, 8003), (104, 8054),

Gene: Potatoes_12 Start: 9814, Stop: 10152, Start Num: 31

Candidate Starts for Potatoes_12:

(Start: 31 @9814 has 151 MA's), (81, 10000), (98, 10081), (103, 10111),

Gene: Preamble_8 Start: 6906, Stop: 7244, Start Num: 31

Candidate Starts for Preamble_8:

(2, 6477), (8, 6657), (10, 6663), (Start: 31 @6906 has 151 MA's), (103, 7203),

Gene: Pterodactyl_8 Start: 6897, Stop: 7235, Start Num: 31

Candidate Starts for Pterodactyl_8:

(Start: 31 @6897 has 151 MA's), (42, 6930), (103, 7194),

Gene: Pumancara_8 Start: 6925, Stop: 7263, Start Num: 31

Candidate Starts for Pumancara_8:

(2, 6493), (8, 6673), (10, 6679), (Start: 31 @6925 has 151 MA's), (52, 6997), (95, 7183), (110, 7243),

Gene: QMacho_10 Start: 7806, Stop: 8135, Start Num: 31

Candidate Starts for QMacho_10:

(11, 7566), (20, 7710), (Start: 31 @7806 has 151 MA's), (37, 7821), (59, 7905), (94, 8058), (104, 8103), (106, 8109),

Gene: Quenya_10 Start: 7452, Stop: 7781, Start Num: 31

Candidate Starts for Quenya_10:

(1, 7023), (4, 7155), (Start: 31 @7452 has 151 MA's), (37, 7467), (48, 7503), (74, 7602), (88, 7674), (100, 7722), (102, 7737),

Gene: RAP15_12 Start: 9820, Stop: 10158, Start Num: 31

Candidate Starts for RAP15_12:

(15, 9655), (Start: 31 @9820 has 151 MA's), (81, 10006), (98, 10087), (103, 10117),

Gene: REQ2_09 Start: 6642, Stop: 6971, Start Num: 39

Candidate Starts for REQ2_09:

(18, 6519), (Start: 39 @6642 has 1 MA's), (46, 6672), (50, 6684), (55, 6702), (56, 6705), (66, 6747), (68, 6756), (73, 6774), (78, 6801), (102, 6918), (114, 6957),

Gene: Rattail_9 Start: 7363, Stop: 7701, Start Num: 30

Candidate Starts for Rattail_9:

(Start: 30 @7363 has 29 MA's), (44, 7408), (51, 7432), (61, 7474), (66, 7489), (77, 7534), (78, 7540), (84, 7573), (94, 7621), (100, 7639),

Gene: RcigaStruga_12 Start: 9803, Stop: 10141, Start Num: 31

Candidate Starts for RcigaStruga_12:

(Start: 31 @9803 has 151 MA's), (40, 9827), (82, 9992), (98, 10070), (103, 10100), (110, 10121),

Gene: RedFox_9 Start: 7312, Stop: 7650, Start Num: 30

Candidate Starts for RedFox_9:

(5, 7018), (14, 7105), (17, 7189), (25, 7273), (Start: 30 @7312 has 29 MA's), (44, 7357), (51, 7381), (61, 7423), (66, 7438), (77, 7483), (78, 7489), (84, 7522), (94, 7570), (100, 7588),

Gene: Renna12_10 Start: 7512, Stop: 7850, Start Num: 30

Candidate Starts for Renna12_10:

(17, 7389), (19, 7413), (Start: 30 @7512 has 29 MA's), (51, 7581), (61, 7623), (66, 7638), (77, 7683), (84, 7722), (85, 7725), (87, 7734), (92, 7758), (94, 7770), (100, 7788),

Gene: Riovina_8 Start: 6923, Stop: 7261, Start Num: 31

Candidate Starts for Riovina_8:

(Start: 31 @6923 has 151 MA's), (42, 6956), (52, 6995), (74, 7076), (95, 7181), (98, 7190),

Gene: Riverdale_12 Start: 9751, Stop: 10089, Start Num: 31

Candidate Starts for Riverdale_12:

(Start: 31 @9751 has 151 MA's), (81, 9937), (98, 10018), (103, 10048),

Gene: Rollins_8 Start: 7153, Stop: 7485, Start Num: 31

Candidate Starts for Rollins_8:

(4, 6856), (Start: 31 @7153 has 151 MA's), (Start: 36 @7165 has 8 MA's), (37, 7168), (47, 7204), (52, 7225), (53, 7228), (78, 7327), (94, 7408),

Gene: Rona_9 Start: 7553, Stop: 7882, Start Num: 31

Candidate Starts for Rona_9:

(4, 7256), (20, 7457), (Start: 29 @7550 has 1 MA's), (Start: 31 @7553 has 151 MA's), (37, 7568), (53, 7625), (73, 7700), (88, 7775), (94, 7805), (104, 7850),

Gene: RootBeer_9 Start: 6513, Stop: 6860, Start Num: 31

Candidate Starts for RootBeer_9:

(24, 6468), (Start: 31 @6513 has 151 MA's), (33, 6519), (67, 6639), (85, 6729), (93, 6765),

Gene: Rozby_12 Start: 9751, Stop: 10089, Start Num: 31

Candidate Starts for Rozby_12:

(Start: 31 @9751 has 151 MA's), (81, 9937), (98, 10018), (103, 10048),

Gene: Ruchi_10 Start: 7974, Stop: 8336, Start Num: 30

Candidate Starts for Ruchi_10:

(16, 7842), (Start: 30 @7974 has 29 MA's), (41, 8001), (58, 8070), (59, 8079), (75, 8136), (77, 8166), (81, 8184), (83, 8202), (86, 8211), (99, 8271),

Gene: SamW_9 Start: 6861, Stop: 7205, Start Num: 36

Candidate Starts for SamW_9:

(6, 6570), (Start: 36 @6861 has 8 MA's), (54, 6927), (60, 6960), (66, 6978), (69, 6990), (81, 7047), (92, 7110), (102, 7164), (108, 7185), (111, 7191),

Gene: SanaSana_10 Start: 7567, Stop: 7896, Start Num: 31

Candidate Starts for SanaSana_10:

(4, 7270), (Start: 29 @7564 has 1 MA's), (Start: 31 @7567 has 151 MA's), (37, 7582), (88, 7789), (94, 7819), (104, 7864),

Gene: SansAfet_9 Start: 7336, Stop: 7665, Start Num: 31

Candidate Starts for SansAfet_9:

(Start: 31 @7336 has 151 MA's), (37, 7351), (94, 7588), (104, 7633),

Gene: Sapo_7 Start: 6047, Stop: 6409, Start Num: 28

Candidate Starts for Sapo_7:

(Start: 28 @6047 has 3 MA's), (34, 6068), (96, 6332),

Gene: SarBear_9 Start: 7299, Stop: 7628, Start Num: 31

Candidate Starts for SarBear_9:

(11, 7059), (20, 7203), (Start: 31 @7299 has 151 MA's), (37, 7314), (59, 7398), (60, 7401), (88, 7521), (94, 7551), (97, 7560), (104, 7596),

Gene: Savage2526_12 Start: 9814, Stop: 10152, Start Num: 31

Candidate Starts for Savage2526_12:

(15, 9649), (Start: 31 @9814 has 151 MA's), (81, 10000), (98, 10081), (103, 10111),

Gene: Scuttle_12 Start: 9820, Stop: 10158, Start Num: 31

Candidate Starts for Scuttle_12:

(15, 9655), (Start: 31 @9820 has 151 MA's), (81, 10006), (98, 10087), (103, 10117),

Gene: Sergei_8 Start: 6925, Stop: 7263, Start Num: 31

Candidate Starts for Sergei_8:

(Start: 31 @6925 has 151 MA's), (52, 6997), (80, 7108), (95, 7183), (98, 7192), (110, 7243),

Gene: Sharkboy_9 Start: 7552, Stop: 7881, Start Num: 31

Candidate Starts for Sharkboy_9:

(4, 7255), (20, 7456), (Start: 29 @7549 has 1 MA's), (Start: 31 @7552 has 151 MA's), (37, 7567), (53, 7624), (73, 7699), (88, 7774), (94, 7804), (104, 7849),

Gene: Shayna_8 Start: 7158, Stop: 7490, Start Num: 31

Candidate Starts for Shayna_8:

(20, 7062), (Start: 31 @7158 has 151 MA's), (37, 7176), (52, 7230), (54, 7236), (63, 7272), (92, 7401), (104, 7458),

Gene: Skylord_8 Start: 7093, Stop: 7425, Start Num: 31

Candidate Starts for Skylord_8:

(4, 6796), (Start: 31 @7093 has 151 MA's), (Start: 36 @7105 has 8 MA's), (37, 7108), (47, 7144), (52, 7165), (53, 7168), (78, 7267), (94, 7348),

Gene: Slay_9 Start: 7775, Stop: 8104, Start Num: 31

Candidate Starts for Slay_9:

(11, 7535), (20, 7679), (Start: 31 @7775 has 151 MA's), (37, 7790), (59, 7874), (60, 7877), (88, 7997), (94, 8027), (97, 8036), (104, 8072),

Gene: Softsoap_9 Start: 7325, Stop: 7654, Start Num: 31

Candidate Starts for Softsoap_9:

(Start: 31 @7325 has 151 MA's), (37, 7340), (94, 7577), (104, 7622),

Gene: Squircle_9 Start: 7555, Stop: 7884, Start Num: 31

Candidate Starts for Squircle_9:

(Start: 31 @7555 has 151 MA's), (37, 7570), (47, 7603), (49, 7609), (54, 7630), (78, 7726), (94, 7807), (102, 7840),

Gene: StAB_9 Start: 6866, Stop: 7210, Start Num: 36

Candidate Starts for StAB_9:

(6, 6575), (Start: 36 @6866 has 8 MA's), (54, 6932), (60, 6965), (66, 6983), (69, 6995), (81, 7052), (90, 7106), (92, 7115), (102, 7169), (108, 7190), (111, 7196),

Gene: Stiles_9 Start: 6860, Stop: 7204, Start Num: 36

Candidate Starts for Stiles_9:

(6, 6569), (Start: 36 @6860 has 8 MA's), (54, 6926), (66, 6977), (69, 6989), (81, 7046), (90, 7100), (92, 7109), (102, 7163), (108, 7184), (111, 7190),

Gene: Stoor_9 Start: 7564, Stop: 7893, Start Num: 31

Candidate Starts for Stoor_9:

(4, 7267), (Start: 29 @7561 has 1 MA's), (Start: 31 @7564 has 151 MA's), (37, 7579), (88, 7786), (94, 7816), (104, 7861),

Gene: Stromboli_9 Start: 7565, Stop: 7894, Start Num: 31

Candidate Starts for Stromboli_9:

(Start: 29 @7562 has 1 MA's), (Start: 31 @7565 has 151 MA's), (37, 7580), (88, 7787), (89, 7790), (94, 7817), (104, 7862),

Gene: StuartMinion_9 Start: 7338, Stop: 7676, Start Num: 30

Candidate Starts for StuartMinion_9:

(17, 7215), (21, 7263), (Start: 30 @7338 has 29 MA's), (51, 7407), (60, 7446), (61, 7449), (66, 7464), (84, 7548), (94, 7596), (111, 7662),

Gene: SunnyD_8 Start: 7158, Stop: 7490, Start Num: 31

Candidate Starts for SunnyD_8:

(20, 7062), (Start: 31 @7158 has 151 MA's), (37, 7176), (52, 7230), (54, 7236), (63, 7272), (92, 7401), (104, 7458),

Gene: Supakev_8 Start: 6925, Stop: 7263, Start Num: 31

Candidate Starts for Supakev_8:

(2, 6493), (8, 6673), (10, 6679), (Start: 31 @6925 has 151 MA's), (52, 6997), (95, 7183), (110, 7243),

Gene: Suppi_12 Start: 9837, Stop: 10175, Start Num: 31

Candidate Starts for Suppi_12:

(Start: 31 @9837 has 151 MA's), (42, 9870),

Gene: Swervy_9 Start: 7299, Stop: 7628, Start Num: 31

Candidate Starts for Swervy_9:

(11, 7059), (20, 7203), (Start: 31 @7299 has 151 MA's), (37, 7314), (59, 7398), (60, 7401), (88, 7521), (94, 7551), (97, 7560), (104, 7596),

Gene: TMaxx_11 Start: 7008, Stop: 7340, Start Num: 34

Candidate Starts for TMaxx_11:

(34, 7008), (93, 7248),

Gene: TattModd_12 Start: 9814, Stop: 10152, Start Num: 31

Candidate Starts for TattModd_12:

(Start: 31 @9814 has 151 MA's), (81, 10000), (98, 10081), (103, 10111),

Gene: TaylorSipht_10 Start: 7777, Stop: 8118, Start Num: 30

Candidate Starts for TaylorSipht_10:

(8, 7525), (13, 7570), (20, 7684), (Start: 30 @7777 has 29 MA's), (32, 7780), (66, 7903), (73, 7930), (76, 7945), (89, 8011), (94, 8038), (99, 8053), (104, 8089),

Gene: Teagster_8 Start: 7158, Stop: 7490, Start Num: 31

Candidate Starts for Teagster_8:

(Start: 31 @7158 has 151 MA's), (37, 7176), (52, 7230), (54, 7236), (63, 7272), (92, 7401), (104, 7458),

Gene: Temper16_8 Start: 6925, Stop: 7263, Start Num: 31

Candidate Starts for Temper16_8:

(Start: 31 @6925 has 151 MA's), (52, 6997), (80, 7108), (95, 7183), (98, 7192), (110, 7243),

Gene: Toad24_11 Start: 7899, Stop: 8240, Start Num: 30

Candidate Starts for Toad24_11:

(Start: 30 @7899 has 29 MA's), (32, 7902), (44, 7944), (60, 8007), (61, 8010), (66, 8025), (89, 8133), (94, 8160), (104, 8211),

Gene: Troy_9 Start: 6861, Stop: 7205, Start Num: 36

Candidate Starts for Troy_9:

(6, 6570), (Start: 36 @6861 has 8 MA's), (54, 6927), (60, 6960), (66, 6978), (69, 6990), (81, 7047), (92, 7110), (102, 7164), (108, 7185), (111, 7191),

Gene: TukTuk_9 Start: 7299, Stop: 7628, Start Num: 31

Candidate Starts for TukTuk_9:

(20, 7203), (Start: 31 @7299 has 151 MA's), (37, 7314), (59, 7398), (94, 7551), (104, 7596), (106, 7602),

Gene: Urla_8 Start: 6952, Stop: 7290, Start Num: 31
Candidate Starts for Urla_8:
(Start: 31 @6952 has 151 MA's), (47, 7003), (61, 7060), (103, 7249),

Gene: Vallejo_12 Start: 9752, Stop: 10090, Start Num: 31
Candidate Starts for Vallejo_12:
(Start: 31 @9752 has 151 MA's), (81, 9938), (103, 10049),

Gene: Vitas_8 Start: 7093, Stop: 7425, Start Num: 31
Candidate Starts for Vitas_8:
(4, 6796), (Start: 31 @7093 has 151 MA's), (Start: 36 @7105 has 8 MA's), (37, 7108), (47, 7144), (52, 7165), (53, 7168), (78, 7267), (94, 7348),

Gene: Vulpecula_10 Start: 8050, Stop: 8412, Start Num: 30
Candidate Starts for Vulpecula_10:
(16, 7918), (Start: 30 @8050 has 29 MA's), (32, 8053), (41, 8077), (58, 8146), (59, 8155), (73, 8203), (77, 8242), (83, 8278), (86, 8287), (99, 8347),

Gene: Vulture_8 Start: 6923, Stop: 7261, Start Num: 31
Candidate Starts for Vulture_8:
(Start: 31 @6923 has 151 MA's), (42, 6956), (52, 6995), (74, 7076), (95, 7181), (98, 7190),

Gene: WalkingDead_9 Start: 7553, Stop: 7882, Start Num: 31
Candidate Starts for WalkingDead_9:
(4, 7256), (Start: 29 @7550 has 1 MA's), (Start: 31 @7553 has 151 MA's), (37, 7568), (89, 7778), (94, 7805), (97, 7814), (104, 7850),

Gene: Wawa_12 Start: 9789, Stop: 10127, Start Num: 31
Candidate Starts for Wawa_12:
(Start: 31 @9789 has 151 MA's), (68, 9921), (81, 9975), (98, 10056), (103, 10086),

Gene: Wayne_12 Start: 9883, Stop: 10221, Start Num: 31
Candidate Starts for Wayne_12:
(Start: 31 @9883 has 151 MA's), (42, 9916),

Gene: Westrich_11 Start: 7887, Stop: 8228, Start Num: 30
Candidate Starts for Westrich_11:
(Start: 30 @7887 has 29 MA's), (32, 7890), (44, 7932), (60, 7995), (61, 7998), (66, 8013), (89, 8121), (94, 8148), (104, 8199),

Gene: Whack_9 Start: 6628, Stop: 6957, Start Num: 39
Candidate Starts for Whack_9:
(Start: 36 @6619 has 8 MA's), (38, 6625), (Start: 39 @6628 has 1 MA's), (46, 6658), (56, 6691), (111, 6928),

Gene: WonderBoy_8 Start: 6905, Stop: 7243, Start Num: 31
Candidate Starts for WonderBoy_8:
(Start: 31 @6905 has 151 MA's), (42, 6938), (61, 7013), (103, 7202),

Gene: Zorro_12 Start: 9768, Stop: 10106, Start Num: 31
Candidate Starts for Zorro_12:
(Start: 31 @9768 has 151 MA's), (68, 9900), (81, 9954), (98, 10035), (103, 10065),

