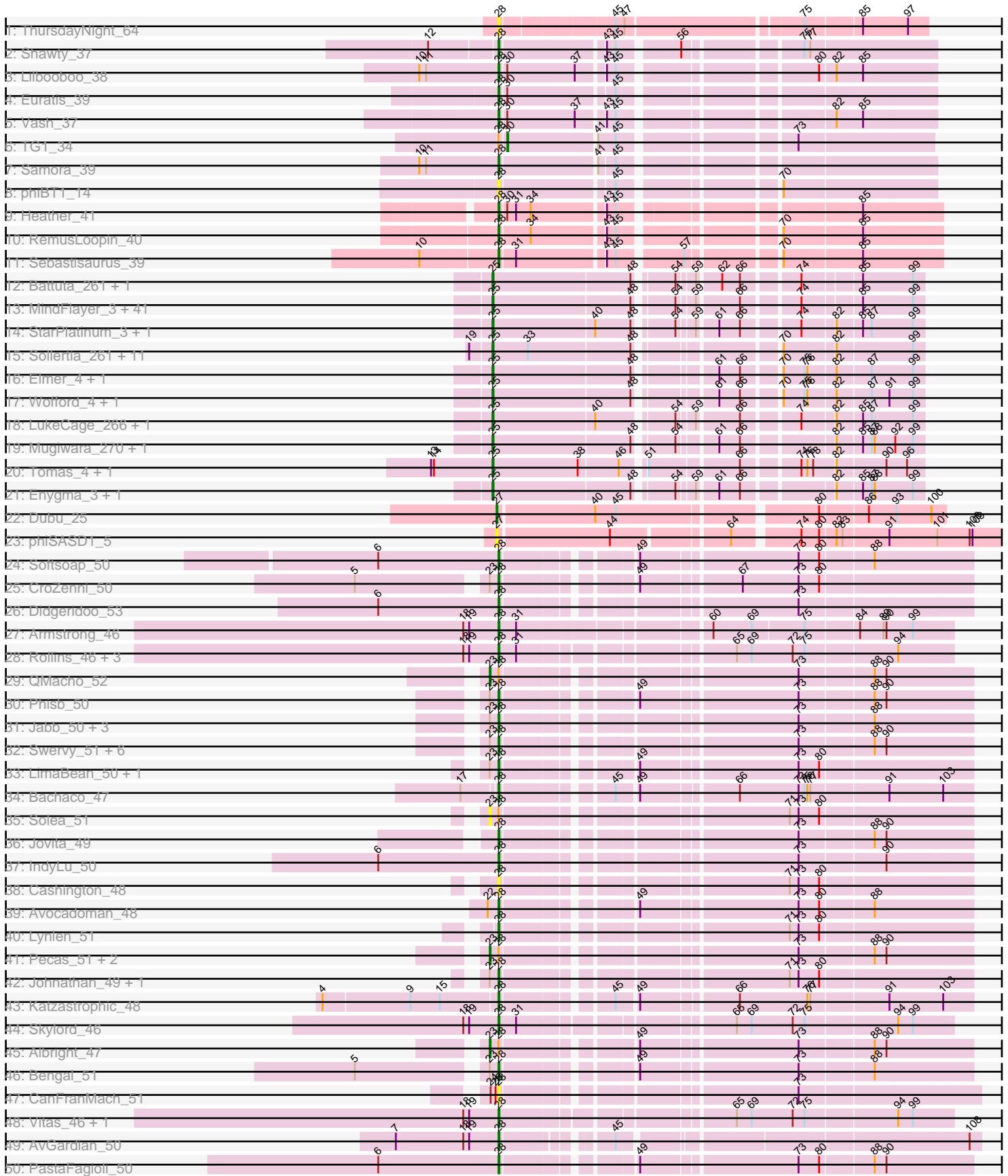
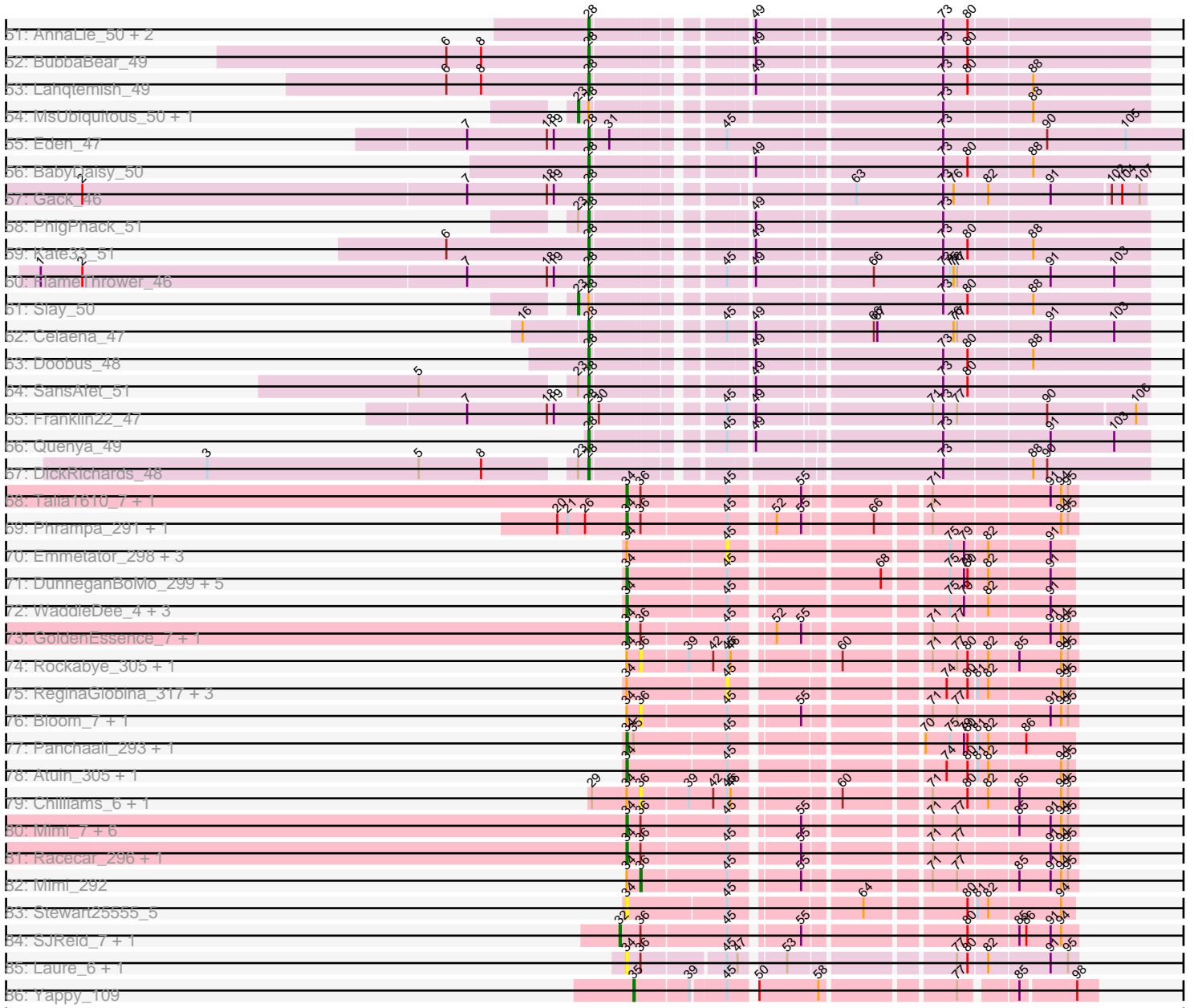


Pham 303111



Pham 303111



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 303111 Report

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

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 303111 has 197 members, 38 are drafts.

Phages represented in each track:

- Track 1 : ThursdayNight_64
- Track 2 : Shawty_37
- Track 3 : Lilbooboo_38
- Track 4 : Euratis_39
- Track 5 : Vash_37
- Track 6 : TG1_34
- Track 7 : Samora_39
- Track 8 : phiBT1_14
- Track 9 : Heather_41
- Track 10 : RemusLoopin_40
- Track 11 : Sebastisaurus_39
- Track 12 : Battuta_261, Battuta_4
- Track 13 : MindFlayer_3, Karimac_4, Rikishi_265, Gibbi_3, Jollison_261, Brizzy_3, KentuckyRacer_271, Spilled_3, JimJam_272, SaltySpitoon_4, PumpkinSpice_4, PumpkinSpice_268, MindFlayer_255, Starbow_261, Quarant19_265, Rikishi_3, TomSawyer_269, CeilingFan_269, KentuckyRacer_3, Bordeaux_4, AcciDwight_274, Wipeout_3, Starbow_4, TomSawyer_4, Spelly_270, Gibbi_274, Bordeaux_261, Brizzy_261, Amabiko_4, Spilled_271, SaltySpitoon_264, Wipeout_256, Jollison_4, JimJam_4, Spelly_4, CeilingFan_3, Karimac_262, Amabiko_268, Quarant19_4, IchabodCrane_3, AcciDwight_4, IchabodCrane_256
- Track 14 : StarPlatinum_3, StarPlatinum_273
- Track 15 : Sollertia_261, Yaboi_5, Genie2_260, Yaboi_266, BoomerJR_260, Stanimal_5, AngryGiraffe_261, AngryGiraffe_5, Genie2_5, Sollertia_5, BoomerJR_5, Stanimal_260
- Track 16 : Elmer_4, Elmer_271
- Track 17 : Wofford_4, Wofford_262
- Track 18 : LukeCage_266, LukeCage_3
- Track 19 : Mugiwara_270, Mugiwara_3
- Track 20 : Tomas_4, Tomas_260
- Track 21 : Enygma_3, Enygma_271
- Track 22 : Dubu_25
- Track 23 : phiSASD1_5
- Track 24 : Softsoap_50

- Track 25 : CroZenni_50
- Track 26 : Didgeridoo_53
- Track 27 : Armstrong_46
- Track 28 : Rollins_46, Bernstein_46, Brahms_46, Coltrane_46
- Track 29 : QMacho_52
- Track 30 : Phisb_50
- Track 31 : Jabb_50, TukTuk_51, Eula_50, CupcakePrincess_50
- Track 32 : Swervy_51, Finalfrontier_51, Kenzers_50, Lilo27_51, Albedo_51, Nicky22_51, Burritobowl_50
- Track 33 : LimaBean_50, Abigail_49
- Track 34 : Bachaco_47
- Track 35 : Solea_51
- Track 36 : Jovita_49
- Track 37 : IndyLu_50
- Track 38 : Cashington_48
- Track 39 : Avocadoman_48
- Track 40 : Lynlen_51
- Track 41 : Pecas_51, SarBear_50, SirBeanington_50
- Track 42 : Johnathan_49, Milomuff_50
- Track 43 : Katzastrophic_48
- Track 44 : Skylord_46
- Track 45 : Albright_47
- Track 46 : Bengal_51
- Track 47 : CanFranMach_51
- Track 48 : Vitas_46, Clayda5_47
- Track 49 : AvGardian_50
- Track 50 : PastaFagioli_50
- Track 51 : AnnaLie_50, Arroyo_50, BelmontSKP_50
- Track 52 : BubbaBear_49
- Track 53 : Lahqtemish_49
- Track 54 : MsUbiquitous_50, AylexOG_52
- Track 55 : Eden_47
- Track 56 : BabyDaisy_50
- Track 57 : Gack_46
- Track 58 : PhigPhack_51
- Track 59 : Kate33_51
- Track 60 : FlameThrower_46
- Track 61 : Slay_50
- Track 62 : Celaena_47
- Track 63 : Doobus_48
- Track 64 : SansAfet_51
- Track 65 : Franklin22_47
- Track 66 : Quenya_49
- Track 67 : DickRichards_48
- Track 68 : Talia1610_7, Talia1610_293
- Track 69 : Phrampa_291, Phrampa_7
- Track 70 : Emmetator_298, Artu_5, Emmetator_4, Artu_292
- Track 71 : DunneganBoMo_299, Ellewin_298, KSunshine22_298, DunneganBoMo_4, Ellewin_5, KSunshine22_6
- Track 72 : WaddleDee_4, BooTeria_4, BooTeria_303, WaddleDee_295
- Track 73 : GoldenEssence_7, GoldenEssence_288
- Track 74 : Rockabye_305, Rockabye_6
- Track 75 : ReginaGlobina_317, LeoJr_320, LeoJr_7, ReginaGlobina_6

- Track 76 : Bloom_7, Bloom_294
- Track 77 : Panchaali_293, Panchaali_6
- Track 78 : Atuin_305, Atuin_5
- Track 79 : Chilliams_6, Chilliams_297
- Track 80 : Mimi_7, Patbob_7, FrostedClock_292, FloraSnap32_7, FloraSnap32_292, Patbob_293, FrostedClock_7
- Track 81 : Racecar_296, Racecar_7
- Track 82 : Mimi_292
- Track 83 : Stewart25555_5
- Track 84 : SJReid_7, SJReid_316
- Track 85 : Laure_6, Laure_324
- Track 86 : Yappy_109

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

The start number called the most often in the published annotations is 25, it was called in 66 of the 159 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AcciDwight_274, AcciDwight_4, Amabiko_268, Amabiko_4, AngryGiraffe_261, AngryGiraffe_5, Battuta_261, Battuta_4, BoomerJR_260, BoomerJR_5, Bordeaux_261, Bordeaux_4, Brizzy_261, Brizzy_3, CeilingFan_269, CeilingFan_3, Elmer_271, Elmer_4, Enygma_271, Enygma_3, Genie2_260, Genie2_5, Gibbi_274, Gibbi_3, IchabodCrane_256, IchabodCrane_3, JimJam_272, JimJam_4, Jollison_261, Jollison_4, Karimac_262, Karimac_4, KentuckyRacer_271, KentuckyRacer_3, LukeCage_266, LukeCage_3, MindFlayer_255, MindFlayer_3, Mugiwara_270, Mugiwara_3, PumpkinSpice_268, PumpkinSpice_4, Quarant19_265, Quarant19_4, Rikishi_265, Rikishi_3, SaltySpittoon_264, SaltySpittoon_4, Sollertia_261, Sollertia_5, Spelly_270, Spelly_4, Spilled_271, Spilled_3, Stanimal_260, Stanimal_5, StarPlatinum_273, StarPlatinum_3, Starbow_261, Starbow_4, TomSawyer_269, TomSawyer_4, Tomas_260, Tomas_4, Wipeout_256, Wipeout_3, Wofford_262, Wofford_4, Yaboi_266, Yaboi_5,

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

-

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

- Abigail_49, Albedo_51, Albright_47, AnnaLie_50, Armstrong_46, Arroyo_50, Artu_292, Artu_5, Atuin_305, Atuin_5, AvGardian_50, Avocadoman_48, AylexOG_52, BabyDaisy_50, Bachaco_47, BelmontSKP_50, Bengal_51, Bernstein_46, Bloom_294, Bloom_7, BooTeria_303, BooTeria_4, Brahms_46, BubbaBear_49, Burritobowl_50, CanFranMach_51, Cashington_48, Celaena_47, Chilliams_297, Chilliams_6, Clayda5_47, Coltrane_46, CroZenni_50, CupcakePrincess_50, DickRichards_48, Didgeridoo_53, Doobus_48, Dubu_25, DunneganBoMo_299, DunneganBoMo_4, Eden_47, Ellewin_298, Ellewin_5, Emmetator_298, Emmetator_4, Eula_50, Euratis_39, Finalfrontier_51, FlameThrower_46, FloraSnap32_292, FloraSnap32_7, Franklin22_47, FrostedClock_292, FrostedClock_7, Gack_46, GoldenEssence_288, GoldenEssence_7, Heather_41, IndyLu_50, Jabb_50, Johnathan_49, Jovita_49, KSunshine22_298, KSunshine22_6, Kate33_51, Katzastrophic_48, Kenzers_50,

Lahqtemish_49, Laure_324, Laure_6, LeoJr_320, LeoJr_7, Lilbooboo_38, Lilo27_51, LimaBean_50, Lynlen_51, Milomuff_50, Mimi_292, Mimi_7, MsUbiquitous_50, Nicky22_51, Panchaali_293, Panchaali_6, PastaFagioli_50, Patbob_293, Patbob_7, Pecas_51, PhigPhack_51, Phisb_50, Phrampa_291, Phrampa_7, QMacho_52, Quenya_49, Racecar_296, Racecar_7, ReginaGlobina_317, ReginaGlobina_6, RemusLoopin_40, Rockabye_305, Rockabye_6, Rollins_46, SJReid_316, SJReid_7, Samora_39, SansAfet_51, SarBear_50, Sebastisaurus_39, Shawty_37, SirBeanington_50, Skylord_46, Slay_50, Softsoap_50, Solea_51, Stewart25555_5, Swervy_51, TG1_34, Talia1610_293, Talia1610_7, ThursdayNight_64, TukTuk_51, Vash_37, Vitas_46, WaddleDee_295, WaddleDee_4, Yappy_109, phiBT1_14, phiSASD1_5,

Summary by start number:

Start 23:

- Found in 30 of 197 (15.2%) of genes in pham
- Manual Annotations of this start: 5 of 159
- Called 30.0% of time when present
- Phage (with cluster) where this start called: Albright_47 (EB), AylexOG_52 (EB), MsUbiquitous_50 (EB), Pecas_51 (EB), QMacho_52 (EB), SarBear_50 (EB), SirBeanington_50 (EB), Slay_50 (EB), Solea_51 (EB),

Start 25:

- Found in 70 of 197 (35.5%) of genes in pham
- Manual Annotations of this start: 66 of 159
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AcciDwight_274 (BE2), AcciDwight_4 (BE2), Amabiko_268 (BE2), Amabiko_4 (BE2), AngryGiraffe_261 (BE2), AngryGiraffe_5 (BE2), Battuta_261 (BE2), Battuta_4 (BE2), BoomerJR_260 (BE2), BoomerJR_5 (BE2), Bordeaux_261 (BE2), Bordeaux_4 (BE2), Brizzy_261 (BE2), Brizzy_3 (BE2), CeilingFan_269 (BE2), CeilingFan_3 (BE2), Elmer_271 (BE2), Elmer_4 (BE2), Enygma_271 (BE2), Enygma_3 (BE2), Genie2_260 (BE2), Genie2_5 (BE2), Gibbi_274 (BE2), Gibbi_3 (BE2), IchabodCrane_256 (BE2), IchabodCrane_3 (BE2), JimJam_272 (BE2), JimJam_4 (BE2), Jollison_261 (BE2), Jollison_4 (BE2), Karimac_262 (BE2), Karimac_4 (BE2), KentuckyRacer_271 (BE2), KentuckyRacer_3 (BE2), LukeCage_266 (BE2), LukeCage_3 (BE2), MindFlayer_255 (BE2), MindFlayer_3 (BE2), Mugiwara_270 (BE2), Mugiwara_3 (BE2), PumpkinSpice_268 (BE2), PumpkinSpice_4 (BE2), Quarant19_265 (BE2), Quarant19_4 (BE2), Rikishi_265 (BE2), Rikishi_3 (BE2), SaltySpittoon_264 (BE2), SaltySpittoon_4 (BE2), Sollertia_261 (BE2), Sollertia_5 (BE2), Spelly_270 (BE2), Spelly_4 (BE2), Spilled_271 (BE2), Spilled_3 (BE2), Stanimal_260 (BE2), Stanimal_5 (BE2), StarPlatinum_273 (BE2), StarPlatinum_3 (BE2), Starbow_261 (BE2), Starbow_4 (BE2), TomSawyer_269 (BE2), TomSawyer_4 (BE2), Tomas_260 (BE2), Tomas_4 (BE2), Wipeout_256 (BE2), Wipeout_3 (BE2), Wofford_262 (BE2), Wofford_4 (BE2), Yaboi_266 (BE2), Yaboi_5 (BE2),

Start 27:

- Found in 2 of 197 (1.0%) of genes in pham
- Manual Annotations of this start: 1 of 159
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Dubu_25 (BJ), phiSASD1_5 (BJ),

Start 28:

- Found in 75 of 197 (38.1%) of genes in pham
- Manual Annotations of this start: 61 of 159
- Called 86.7% of time when present
- Phage (with cluster) where this start called: Abigail_49 (EB), Albedo_51 (EB), AnnaLie_50 (EB), Armstrong_46 (EB), Arroyo_50 (EB), AvGardian_50 (EB), Avocadoman_48 (EB), BabyDaisy_50 (EB), Bachaco_47 (EB), BelmontSKP_50 (EB), Bengal_51 (EB), Bernstein_46 (EB), Brahms_46 (EB), BubbaBear_49 (EB), Burritobowl_50 (EB), CanFranMach_51 (EB), Cashington_48 (EB), Celaena_47 (EB), Clayda5_47 (EB), Coltrane_46 (EB), CroZenni_50 (EB), CupcakePrincess_50 (EB), DickRichards_48 (EB), Didgeridoo_53 (EB), Doobus_48 (EB), Eden_47 (EB), Eula_50 (EB), Euratis_39 (BB1), Finalfrontier_51 (EB), FlameThrower_46 (EB), Franklin22_47 (EB), Gack_46 (EB), Heather_41 (BB2), IndyLu_50 (EB), Jabb_50 (EB), Johnathan_49 (EB), Jovita_49 (EB), Kate33_51 (EB), Katzastrophic_48 (EB), Kenzers_50 (EB), Lahqtemish_49 (EB), Lilbooboo_38 (BB1), Lilo27_51 (EB), LimaBean_50 (EB), Lynlen_51 (EB), Milomuff_50 (EB), Nicky22_51 (EB), PastaFagioli_50 (EB), PhigPhack_51 (EB), Phisb_50 (EB), Quenya_49 (EB), RemusLoopin_40 (BB2), Rollins_46 (EB), Samora_39 (BB1), SansAfet_51 (EB), Sebastisaurus_39 (BB2), Shawty_37 (BB1), Skylord_46 (EB), Softsoap_50 (EB), Swervy_51 (EB), ThursdayNight_64 (AZ), TukTuk_51 (EB), Vash_37 (BB1), Vitas_46 (EB), phiBT1_14 (BB1),

Start 30:

- Found in 6 of 197 (3.0%) of genes in pham
- Manual Annotations of this start: 1 of 159
- Called 16.7% of time when present
- Phage (with cluster) where this start called: TG1_34 (BB1),

Start 32:

- Found in 2 of 197 (1.0%) of genes in pham
- Manual Annotations of this start: 2 of 159
- Called 100.0% of time when present
- Phage (with cluster) where this start called: SJReid_316 (FC), SJReid_7 (FC),

Start 34:

- Found in 49 of 197 (24.9%) of genes in pham
- Manual Annotations of this start: 21 of 159
- Called 65.3% of time when present
- Phage (with cluster) where this start called: Atuin_305 (FC), Atuin_5 (FC), BooTeria_303 (FC), BooTeria_4 (FC), DunneganBoMo_299 (FC), DunneganBoMo_4 (FC), Ellewin_298 (FC), Ellewin_5 (FC), FloraSnap32_292 (FC), FloraSnap32_7 (FC), FrostedClock_292 (FC), FrostedClock_7 (FC), GoldenEssence_288 (FC), GoldenEssence_7 (FC), KSunshine22_298 (FC), KSunshine22_6 (FC), Laure_324 (UNK), Laure_6 (UNK), Mimi_7 (FC), Panchaali_293 (FC), Panchaali_6 (FC), Patbob_293 (FC), Patbob_7 (FC), Phrampa_291 (FC), Phrampa_7 (FC), Racecar_296 (FC), Racecar_7 (FC), Stewart25555_5 (FC), Talia1610_293 (FC), Talia1610_7 (FC), WaddleDee_295 (FC), WaddleDee_4 (FC),

Start 35:

- Found in 3 of 197 (1.5%) of genes in pham
- Manual Annotations of this start: 1 of 159
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Yappy_109 (singleton),

Start 36:

- Found in 26 of 197 (13.2%) of genes in pham
- Manual Annotations of this start: 1 of 159
- Called 26.9% of time when present
- Phage (with cluster) where this start called: Bloom_294 (FC), Bloom_7 (FC), Chilliams_297 (FC), Chilliams_6 (FC), Mimi_292 (FC), Rockabye_305 (FC), Rockabye_6 (FC),

Start 45:

- Found in 70 of 197 (35.5%) of genes in pham
- No Manual Annotations of this start.
- Called 11.4% of time when present
- Phage (with cluster) where this start called: Artu_292 (FC), Artu_5 (FC), Emmetator_298 (FC), Emmetator_4 (FC), LeoJr_320 (FC), LeoJr_7 (FC), ReginaGlobina_317 (FC), ReginaGlobina_6 (FC),

Summary by clusters:

There are 9 clusters represented in this pham: singleton, UNK, BJ, EB, FC, BE2, AZ, BB2, BB1,

Info for manual annotations of cluster BB1:

- Start number 28 was manually annotated 5 times for cluster BB1.
- Start number 30 was manually annotated 1 time for cluster BB1.

Info for manual annotations of cluster BB2:

- Start number 28 was manually annotated 3 times for cluster BB2.

Info for manual annotations of cluster BE2:

- Start number 25 was manually annotated 66 times for cluster BE2.

Info for manual annotations of cluster BJ:

- Start number 27 was manually annotated 1 time for cluster BJ.

Info for manual annotations of cluster EB:

- Start number 23 was manually annotated 5 times for cluster EB.
- Start number 28 was manually annotated 53 times for cluster EB.

Info for manual annotations of cluster FC:

- Start number 32 was manually annotated 2 times for cluster FC.
- Start number 34 was manually annotated 21 times for cluster FC.
- Start number 36 was manually annotated 1 time for cluster FC.

Gene Information:

Gene: Abigail_49 Start: 33436, Stop: 33870, Start Num: 28

Candidate Starts for Abigail_49:

(Start: 23 @33427 has 5 MA's), (Start: 28 @33436 has 61 MA's), (49, 33550), (73, 33700), (80, 33721),

Gene: AcciDwight_274 Start: 123335, Stop: 122943, Start Num: 25
Candidate Starts for AcciDwight_274:
(Start: 25 @123335 has 66 MA's), (48, 123197), (54, 123164), (59, 123149), (66, 123110), (74, 123059), (85, 123005), (99, 122954),

Gene: AcciDwight_4 Start: 3239, Stop: 2847, Start Num: 25
Candidate Starts for AcciDwight_4:
(Start: 25 @3239 has 66 MA's), (48, 3101), (54, 3068), (59, 3053), (66, 3014), (74, 2963), (85, 2909), (99, 2858),

Gene: Albedo_51 Start: 34047, Stop: 34481, Start Num: 28
Candidate Starts for Albedo_51:
(Start: 23 @34038 has 5 MA's), (Start: 28 @34047 has 61 MA's), (73, 34311), (88, 34383), (90, 34395),

Gene: Albright_47 Start: 32744, Stop: 33187, Start Num: 23
Candidate Starts for Albright_47:
(Start: 23 @32744 has 5 MA's), (Start: 28 @32753 has 61 MA's), (49, 32867), (73, 33017), (88, 33089), (90, 33101),

Gene: Amabiko_4 Start: 3239, Stop: 2847, Start Num: 25
Candidate Starts for Amabiko_4:
(Start: 25 @3239 has 66 MA's), (48, 3101), (54, 3068), (59, 3053), (66, 3014), (74, 2963), (85, 2909), (99, 2858),

Gene: Amabiko_268 Start: 122065, Stop: 121673, Start Num: 25
Candidate Starts for Amabiko_268:
(Start: 25 @122065 has 66 MA's), (48, 121927), (54, 121894), (59, 121879), (66, 121840), (74, 121789), (85, 121735), (99, 121684),

Gene: AngryGiraffe_261 Start: 121562, Stop: 121170, Start Num: 25
Candidate Starts for AngryGiraffe_261:
(19, 121583), (Start: 25 @121562 has 66 MA's), (33, 121526), (48, 121424), (70, 121304), (82, 121256), (99, 121181),

Gene: AngryGiraffe_5 Start: 3219, Stop: 2827, Start Num: 25
Candidate Starts for AngryGiraffe_5:
(19, 3240), (Start: 25 @3219 has 66 MA's), (33, 3183), (48, 3081), (70, 2961), (82, 2913), (99, 2838),

Gene: AnnaLie_50 Start: 34096, Stop: 34530, Start Num: 28
Candidate Starts for AnnaLie_50:
(Start: 28 @34096 has 61 MA's), (49, 34210), (73, 34360), (80, 34381),

Gene: Armstrong_46 Start: 31424, Stop: 31855, Start Num: 28
Candidate Starts for Armstrong_46:
(18, 31388), (19, 31394), (Start: 28 @31424 has 61 MA's), (31, 31442), (60, 31619), (69, 31658), (75, 31709), (84, 31760), (89, 31784), (90, 31787), (99, 31814),

Gene: Arroyo_50 Start: 34204, Stop: 34638, Start Num: 28
Candidate Starts for Arroyo_50:
(Start: 28 @34204 has 61 MA's), (49, 34318), (73, 34468), (80, 34489),

Gene: Artu_5 Start: 3027, Stop: 3290, Start Num: 45
Candidate Starts for Artu_5:

(Start: 34 @2943 has 21 MA's), (45, 3027), (75, 3189), (79, 3201), (82, 3219), (91, 3270),

Gene: Artu_292 Start: 182181, Stop: 182444, Start Num: 45

Candidate Starts for Artu_292:

(Start: 34 @182097 has 21 MA's), (45, 182181), (75, 182343), (79, 182355), (82, 182373), (91, 182424),

Gene: Atuin_305 Start: 180566, Stop: 180913, Start Num: 34

Candidate Starts for Atuin_305:

(Start: 34 @180566 has 21 MA's), (45, 180650), (74, 180809), (80, 180827), (81, 180833), (82, 180842), (94, 180902), (95, 180908),

Gene: Atuin_5 Start: 3678, Stop: 4025, Start Num: 34

Candidate Starts for Atuin_5:

(Start: 34 @3678 has 21 MA's), (45, 3762), (74, 3921), (80, 3939), (81, 3945), (82, 3954), (94, 4014), (95, 4020),

Gene: AvGardian_50 Start: 33876, Stop: 34307, Start Num: 28

Candidate Starts for AvGardian_50:

(7, 33771), (18, 33840), (19, 33846), (Start: 28 @33876 has 61 MA's), (45, 33966), (108, 34296),

Gene: Avocadoman_48 Start: 32960, Stop: 33394, Start Num: 28

Candidate Starts for Avocadoman_48:

(22, 32951), (Start: 28 @32960 has 61 MA's), (49, 33074), (73, 33224), (80, 33245), (88, 33296),

Gene: AylexOG_52 Start: 34087, Stop: 34530, Start Num: 23

Candidate Starts for AylexOG_52:

(Start: 23 @34087 has 5 MA's), (Start: 28 @34096 has 61 MA's), (73, 34360), (88, 34432),

Gene: BabyDaisy_50 Start: 34118, Stop: 34552, Start Num: 28

Candidate Starts for BabyDaisy_50:

(Start: 28 @34118 has 61 MA's), (49, 34232), (73, 34382), (80, 34403), (88, 34454),

Gene: Bachaco_47 Start: 34966, Stop: 35400, Start Num: 28

Candidate Starts for Bachaco_47:

(17, 34933), (Start: 28 @34966 has 61 MA's), (45, 35062), (49, 35080), (66, 35170), (73, 35230), (75, 35236), (76, 35239), (77, 35242), (91, 35317), (103, 35371),

Gene: Battuta_261 Start: 121394, Stop: 121002, Start Num: 25

Candidate Starts for Battuta_261:

(Start: 25 @121394 has 66 MA's), (48, 121256), (54, 121223), (59, 121208), (62, 121187), (66, 121169), (74, 121118), (85, 121064), (99, 121013),

Gene: Battuta_4 Start: 3239, Stop: 2847, Start Num: 25

Candidate Starts for Battuta_4:

(Start: 25 @3239 has 66 MA's), (48, 3101), (54, 3068), (59, 3053), (62, 3032), (66, 3014), (74, 2963), (85, 2909), (99, 2858),

Gene: BelmontSKP_50 Start: 34096, Stop: 34530, Start Num: 28

Candidate Starts for BelmontSKP_50:

(Start: 28 @34096 has 61 MA's), (49, 34210), (73, 34360), (80, 34381),

Gene: Bengal_51 Start: 33700, Stop: 34134, Start Num: 28

Candidate Starts for Bengal_51:

(5, 33571), (Start: 23 @33691 has 5 MA's), (Start: 28 @33700 has 61 MA's), (49, 33814), (73, 33964), (88, 34036),

Gene: Bernstein_46 Start: 31506, Stop: 31931, Start Num: 28

Candidate Starts for Bernstein_46:

(18, 31470), (19, 31476), (Start: 28 @31506 has 61 MA's), (31, 31524), (65, 31716), (69, 31731), (72, 31773), (75, 31785), (94, 31875),

Gene: Bloom_7 Start: 4103, Stop: 4438, Start Num: 36

Candidate Starts for Bloom_7:

(Start: 34 @4091 has 21 MA's), (Start: 36 @4103 has 1 MA's), (45, 4175), (55, 4226), (71, 4319), (77, 4340), (91, 4415), (94, 4424), (95, 4430),

Gene: Bloom_294 Start: 177578, Stop: 177913, Start Num: 36

Candidate Starts for Bloom_294:

(Start: 34 @177566 has 21 MA's), (Start: 36 @177578 has 1 MA's), (45, 177650), (55, 177701), (71, 177794), (77, 177815), (91, 177890), (94, 177899), (95, 177905),

Gene: BooTeria_4 Start: 2969, Stop: 3316, Start Num: 34

Candidate Starts for BooTeria_4:

(Start: 34 @2969 has 21 MA's), (45, 3053), (75, 3215), (79, 3227), (82, 3245), (91, 3296),

Gene: BooTeria_303 Start: 181878, Stop: 182225, Start Num: 34

Candidate Starts for BooTeria_303:

(Start: 34 @181878 has 21 MA's), (45, 181962), (75, 182124), (79, 182136), (82, 182154), (91, 182205),

Gene: BoomerJR_260 Start: 122007, Stop: 121615, Start Num: 25

Candidate Starts for BoomerJR_260:

(19, 122028), (Start: 25 @122007 has 66 MA's), (33, 121971), (48, 121869), (70, 121749), (82, 121701), (99, 121626),

Gene: BoomerJR_5 Start: 3219, Stop: 2827, Start Num: 25

Candidate Starts for BoomerJR_5:

(19, 3240), (Start: 25 @3219 has 66 MA's), (33, 3183), (48, 3081), (70, 2961), (82, 2913), (99, 2838),

Gene: Bordeaux_4 Start: 3239, Stop: 2847, Start Num: 25

Candidate Starts for Bordeaux_4:

(Start: 25 @3239 has 66 MA's), (48, 3101), (54, 3068), (59, 3053), (66, 3014), (74, 2963), (85, 2909), (99, 2858),

Gene: Bordeaux_261 Start: 121977, Stop: 121585, Start Num: 25

Candidate Starts for Bordeaux_261:

(Start: 25 @121977 has 66 MA's), (48, 121839), (54, 121806), (59, 121791), (66, 121752), (74, 121701), (85, 121647), (99, 121596),

Gene: Brahms_46 Start: 31426, Stop: 31851, Start Num: 28

Candidate Starts for Brahms_46:

(18, 31390), (19, 31396), (Start: 28 @31426 has 61 MA's), (31, 31444), (65, 31636), (69, 31651), (72, 31693), (75, 31705), (94, 31795),

Gene: Brizzy_3 Start: 2828, Stop: 2436, Start Num: 25

Candidate Starts for Brizzy_3:

(Start: 25 @2828 has 66 MA's), (48, 2690), (54, 2657), (59, 2642), (66, 2603), (74, 2552), (85, 2498), (99, 2447),

Gene: Brizzy_261 Start: 122096, Stop: 121704, Start Num: 25

Candidate Starts for Brizzy_261:

(Start: 25 @122096 has 66 MA's), (48, 121958), (54, 121925), (59, 121910), (66, 121871), (74, 121820), (85, 121766), (99, 121715),

Gene: BubbaBear_49 Start: 33737, Stop: 34171, Start Num: 28

Candidate Starts for BubbaBear_49:

(6, 33614), (8, 33644), (Start: 28 @33737 has 61 MA's), (49, 33851), (73, 34001), (80, 34022),

Gene: Burritobowl_50 Start: 33661, Stop: 34095, Start Num: 28

Candidate Starts for Burritobowl_50:

(Start: 23 @33652 has 5 MA's), (Start: 28 @33661 has 61 MA's), (73, 33925), (88, 33997), (90, 34009),

Gene: CanFranMach_51 Start: 33918, Stop: 34361, Start Num: 28

Candidate Starts for CanFranMach_51:

(24, 33912), (26, 33915), (Start: 28 @33918 has 61 MA's), (73, 34182),

Gene: Cashington_48 Start: 33017, Stop: 33451, Start Num: 28

Candidate Starts for Cashington_48:

(Start: 28 @33017 has 61 MA's), (71, 33272), (73, 33281), (80, 33302),

Gene: CeilingFan_269 Start: 123457, Stop: 123065, Start Num: 25

Candidate Starts for CeilingFan_269:

(Start: 25 @123457 has 66 MA's), (48, 123319), (54, 123286), (59, 123271), (66, 123232), (74, 123181), (85, 123127), (99, 123076),

Gene: CeilingFan_3 Start: 2850, Stop: 2458, Start Num: 25

Candidate Starts for CeilingFan_3:

(Start: 25 @2850 has 66 MA's), (48, 2712), (54, 2679), (59, 2664), (66, 2625), (74, 2574), (85, 2520), (99, 2469),

Gene: Celaena_47 Start: 34695, Stop: 35129, Start Num: 28

Candidate Starts for Celaena_47:

(16, 34641), (Start: 28 @34695 has 61 MA's), (45, 34791), (49, 34809), (66, 34899), (67, 34902), (76, 34968), (77, 34971), (91, 35046), (103, 35100),

Gene: Chilliams_6 Start: 3781, Stop: 4116, Start Num: 36

Candidate Starts for Chilliams_6:

(29, 3739), (Start: 34 @3769 has 21 MA's), (Start: 36 @3781 has 1 MA's), (39, 3820), (42, 3841), (45, 3853), (46, 3856), (60, 3931), (71, 3997), (80, 4027), (82, 4042), (85, 4066), (94, 4102), (95, 4108),

Gene: Chilliams_297 Start: 176515, Stop: 176850, Start Num: 36

Candidate Starts for Chilliams_297:

(29, 176473), (Start: 34 @176503 has 21 MA's), (Start: 36 @176515 has 1 MA's), (39, 176554), (42, 176575), (45, 176587), (46, 176590), (60, 176665), (71, 176731), (80, 176761), (82, 176776), (85, 176800), (94, 176836), (95, 176842),

Gene: Clayda5_47 Start: 31413, Stop: 31838, Start Num: 28

Candidate Starts for Clayda5_47:

(18, 31377), (19, 31383), (Start: 28 @31413 has 61 MA's), (65, 31623), (69, 31638), (72, 31680), (75, 31692), (94, 31782), (99, 31797),

Gene: Coltrane_46 Start: 31426, Stop: 31851, Start Num: 28

Candidate Starts for Coltrane_46:

(18, 31390), (19, 31396), (Start: 28 @31426 has 61 MA's), (31, 31444), (65, 31636), (69, 31651), (72, 31693), (75, 31705), (94, 31795),

Gene: CroZenni_50 Start: 33550, Stop: 33984, Start Num: 28

Candidate Starts for CroZenni_50:

(5, 33421), (Start: 23 @33541 has 5 MA's), (Start: 28 @33550 has 61 MA's), (49, 33664), (67, 33757), (73, 33814), (80, 33835),

Gene: CupcakePrincess_50 Start: 33567, Stop: 34001, Start Num: 28

Candidate Starts for CupcakePrincess_50:

(Start: 23 @33558 has 5 MA's), (Start: 28 @33567 has 61 MA's), (73, 33831), (88, 33903),

Gene: DickRichards_48 Start: 33773, Stop: 34207, Start Num: 28

Candidate Starts for DickRichards_48:

(3, 33461), (5, 33644), (8, 33698), (Start: 23 @33764 has 5 MA's), (Start: 28 @33773 has 61 MA's), (73, 34037), (88, 34109), (90, 34121),

Gene: Didgeridoo_53 Start: 34464, Stop: 34898, Start Num: 28

Candidate Starts for Didgeridoo_53:

(6, 34341), (Start: 28 @34464 has 61 MA's), (73, 34728),

Gene: Doobus_48 Start: 33211, Stop: 33645, Start Num: 28

Candidate Starts for Doobus_48:

(Start: 28 @33211 has 61 MA's), (49, 33325), (73, 33475), (80, 33496), (88, 33547),

Gene: Dubu_25 Start: 20964, Stop: 21389, Start Num: 27

Candidate Starts for Dubu_25:

(Start: 27 @20964 has 1 MA's), (40, 21060), (45, 21081), (80, 21267), (86, 21312), (93, 21339), (100, 21375),

Gene: DunneganBoMo_299 Start: 182381, Stop: 182728, Start Num: 34

Candidate Starts for DunneganBoMo_299:

(Start: 34 @182381 has 21 MA's), (45, 182465), (68, 182579), (75, 182627), (79, 182639), (80, 182642), (82, 182657), (91, 182708),

Gene: DunneganBoMo_4 Start: 2969, Stop: 3316, Start Num: 34

Candidate Starts for DunneganBoMo_4:

(Start: 34 @2969 has 21 MA's), (45, 3053), (68, 3167), (75, 3215), (79, 3227), (80, 3230), (82, 3245), (91, 3296),

Gene: Eden_47 Start: 32399, Stop: 32896, Start Num: 28

Candidate Starts for Eden_47:

(7, 32294), (18, 32363), (19, 32369), (Start: 28 @32399 has 61 MA's), (31, 32414), (45, 32495), (73, 32672), (90, 32756), (105, 32822),

Gene: Ellewin_298 Start: 182013, Stop: 182360, Start Num: 34

Candidate Starts for Ellewin_298:

(Start: 34 @182013 has 21 MA's), (45, 182097), (68, 182211), (75, 182259), (79, 182271), (80, 182274), (82, 182289), (91, 182340),

Gene: Ellewin_5 Start: 2899, Stop: 3246, Start Num: 34

Candidate Starts for Ellewin_5:

(Start: 34 @2899 has 21 MA's), (45, 2983), (68, 3097), (75, 3145), (79, 3157), (80, 3160), (82, 3175), (91, 3226),

Gene: Elmer_4 Start: 3119, Stop: 2724, Start Num: 25

Candidate Starts for Elmer_4:

(Start: 25 @3119 has 66 MA's), (48, 2981), (61, 2915), (66, 2894), (70, 2861), (75, 2840), (76, 2837), (82, 2810), (87, 2777), (99, 2735),

Gene: Elmer_271 Start: 125487, Stop: 125092, Start Num: 25

Candidate Starts for Elmer_271:

(Start: 25 @125487 has 66 MA's), (48, 125349), (61, 125283), (66, 125262), (70, 125229), (75, 125208), (76, 125205), (82, 125178), (87, 125145), (99, 125103),

Gene: Emmetator_298 Start: 181511, Stop: 181774, Start Num: 45

Candidate Starts for Emmetator_298:

(Start: 34 @181427 has 21 MA's), (45, 181511), (75, 181673), (79, 181685), (82, 181703), (91, 181754),

Gene: Emmetator_4 Start: 3211, Stop: 3474, Start Num: 45

Candidate Starts for Emmetator_4:

(Start: 34 @3127 has 21 MA's), (45, 3211), (75, 3373), (79, 3385), (82, 3403), (91, 3454),

Gene: Enygma_3 Start: 2800, Stop: 2408, Start Num: 25

Candidate Starts for Enygma_3:

(Start: 25 @2800 has 66 MA's), (48, 2662), (54, 2629), (59, 2614), (61, 2596), (66, 2575), (82, 2494), (85, 2470), (87, 2461), (88, 2458), (99, 2419),

Gene: Enygma_271 Start: 125224, Stop: 124832, Start Num: 25

Candidate Starts for Enygma_271:

(Start: 25 @125224 has 66 MA's), (48, 125086), (54, 125053), (59, 125038), (61, 125020), (66, 124999), (82, 124918), (85, 124894), (87, 124885), (88, 124882), (99, 124843),

Gene: Eula_50 Start: 33553, Stop: 33987, Start Num: 28

Candidate Starts for Eula_50:

(Start: 23 @33544 has 5 MA's), (Start: 28 @33553 has 61 MA's), (73, 33817), (88, 33889),

Gene: Euratis_39 Start: 30726, Stop: 31124, Start Num: 28

Candidate Starts for Euratis_39:

(Start: 28 @30726 has 61 MA's), (Start: 30 @30732 has 1 MA's), (45, 30834),

Gene: Finalfrontier_51 Start: 34555, Stop: 34989, Start Num: 28

Candidate Starts for Finalfrontier_51:

(Start: 23 @34546 has 5 MA's), (Start: 28 @34555 has 61 MA's), (73, 34819), (88, 34891), (90, 34903),

Gene: FlameThrower_46 Start: 33765, Stop: 34199, Start Num: 28

Candidate Starts for FlameThrower_46:

(1, 33297), (2, 33333), (7, 33663), (18, 33732), (19, 33738), (Start: 28 @33765 has 61 MA's), (45, 33861), (49, 33879), (66, 33969), (73, 34029), (75, 34035), (76, 34038), (77, 34041), (91, 34116), (103,

34170),

Gene: FloraSnap32_7 Start: 4086, Stop: 4433, Start Num: 34

Candidate Starts for FloraSnap32_7:

(Start: 34 @4086 has 21 MA's), (Start: 36 @4098 has 1 MA's), (45, 4170), (55, 4221), (71, 4314), (77, 4335), (85, 4383), (91, 4410), (94, 4419), (95, 4425),

Gene: FloraSnap32_292 Start: 178224, Stop: 178571, Start Num: 34

Candidate Starts for FloraSnap32_292:

(Start: 34 @178224 has 21 MA's), (Start: 36 @178236 has 1 MA's), (45, 178308), (55, 178359), (71, 178452), (77, 178473), (85, 178521), (91, 178548), (94, 178557), (95, 178563),

Gene: Franklin22_47 Start: 32020, Stop: 32448, Start Num: 28

Candidate Starts for Franklin22_47:

(7, 31915), (18, 31984), (19, 31990), (Start: 28 @32020 has 61 MA's), (Start: 30 @32026 has 1 MA's), (45, 32116), (49, 32134), (71, 32275), (73, 32284), (77, 32296), (90, 32368), (106, 32440),

Gene: FrostedClock_292 Start: 177830, Stop: 178177, Start Num: 34

Candidate Starts for FrostedClock_292:

(Start: 34 @177830 has 21 MA's), (Start: 36 @177842 has 1 MA's), (45, 177914), (55, 177965), (71, 178058), (77, 178079), (85, 178127), (91, 178154), (94, 178163), (95, 178169),

Gene: FrostedClock_7 Start: 4030, Stop: 4377, Start Num: 34

Candidate Starts for FrostedClock_7:

(Start: 34 @4030 has 21 MA's), (Start: 36 @4042 has 1 MA's), (45, 4114), (55, 4165), (71, 4258), (77, 4279), (85, 4327), (91, 4354), (94, 4363), (95, 4369),

Gene: Gack_46 Start: 32064, Stop: 32492, Start Num: 28

Candidate Starts for Gack_46:

(2, 31629), (7, 31959), (18, 32028), (19, 32034), (Start: 28 @32064 has 61 MA's), (63, 32253), (73, 32328), (76, 32337), (82, 32364), (91, 32415), (102, 32463), (104, 32472), (107, 32487),

Gene: Genie2_260 Start: 122120, Stop: 121728, Start Num: 25

Candidate Starts for Genie2_260:

(19, 122141), (Start: 25 @122120 has 66 MA's), (33, 122084), (48, 121982), (70, 121862), (82, 121814), (99, 121739),

Gene: Genie2_5 Start: 3219, Stop: 2827, Start Num: 25

Candidate Starts for Genie2_5:

(19, 3240), (Start: 25 @3219 has 66 MA's), (33, 3183), (48, 3081), (70, 2961), (82, 2913), (99, 2838),

Gene: Gibbi_3 Start: 2850, Stop: 2458, Start Num: 25

Candidate Starts for Gibbi_3:

(Start: 25 @2850 has 66 MA's), (48, 2712), (54, 2679), (59, 2664), (66, 2625), (74, 2574), (85, 2520), (99, 2469),

Gene: Gibbi_274 Start: 122950, Stop: 122558, Start Num: 25

Candidate Starts for Gibbi_274:

(Start: 25 @122950 has 66 MA's), (48, 122812), (54, 122779), (59, 122764), (66, 122725), (74, 122674), (85, 122620), (99, 122569),

Gene: GoldenEssence_7 Start: 4085, Stop: 4432, Start Num: 34

Candidate Starts for GoldenEssence_7:

(Start: 34 @4085 has 21 MA's), (Start: 36 @4097 has 1 MA's), (45, 4169), (52, 4199), (55, 4220), (71, 4313), (77, 4334), (91, 4409), (94, 4418), (95, 4424),

Gene: GoldenEssence_288 Start: 174638, Stop: 174985, Start Num: 34

Candidate Starts for GoldenEssence_288:

(Start: 34 @174638 has 21 MA's), (Start: 36 @174650 has 1 MA's), (45, 174722), (52, 174752), (55, 174773), (71, 174866), (77, 174887), (91, 174962), (94, 174971), (95, 174977),

Gene: Heather_41 Start: 32025, Stop: 32429, Start Num: 28

Candidate Starts for Heather_41:

(Start: 28 @32025 has 61 MA's), (Start: 30 @32031 has 1 MA's), (31, 32040), (Start: 34 @32055 has 21 MA's), (43, 32124), (45, 32133), (85, 32349),

Gene: IchabodCrane_3 Start: 2847, Stop: 2455, Start Num: 25

Candidate Starts for IchabodCrane_3:

(Start: 25 @2847 has 66 MA's), (48, 2709), (54, 2676), (59, 2661), (66, 2622), (74, 2571), (85, 2517), (99, 2466),

Gene: IchabodCrane_256 Start: 121390, Stop: 120998, Start Num: 25

Candidate Starts for IchabodCrane_256:

(Start: 25 @121390 has 66 MA's), (48, 121252), (54, 121219), (59, 121204), (66, 121165), (74, 121114), (85, 121060), (99, 121009),

Gene: IndyLu_50 Start: 34038, Stop: 34472, Start Num: 28

Candidate Starts for IndyLu_50:

(6, 33915), (Start: 28 @34038 has 61 MA's), (73, 34302), (90, 34386),

Gene: Jabb_50 Start: 33567, Stop: 34001, Start Num: 28

Candidate Starts for Jabb_50:

(Start: 23 @33558 has 5 MA's), (Start: 28 @33567 has 61 MA's), (73, 33831), (88, 33903),

Gene: JimJam_272 Start: 124775, Stop: 124383, Start Num: 25

Candidate Starts for JimJam_272:

(Start: 25 @124775 has 66 MA's), (48, 124637), (54, 124604), (59, 124589), (66, 124550), (74, 124499), (85, 124445), (99, 124394),

Gene: JimJam_4 Start: 3239, Stop: 2847, Start Num: 25

Candidate Starts for JimJam_4:

(Start: 25 @3239 has 66 MA's), (48, 3101), (54, 3068), (59, 3053), (66, 3014), (74, 2963), (85, 2909), (99, 2858),

Gene: Johnathan_49 Start: 33043, Stop: 33477, Start Num: 28

Candidate Starts for Johnathan_49:

(Start: 23 @33034 has 5 MA's), (Start: 28 @33043 has 61 MA's), (71, 33298), (73, 33307), (80, 33328),

Gene: Jollison_261 Start: 121914, Stop: 121522, Start Num: 25

Candidate Starts for Jollison_261:

(Start: 25 @121914 has 66 MA's), (48, 121776), (54, 121743), (59, 121728), (66, 121689), (74, 121638), (85, 121584), (99, 121533),

Gene: Jollison_4 Start: 3239, Stop: 2847, Start Num: 25

Candidate Starts for Jollison_4:

(Start: 25 @3239 has 66 MA's), (48, 3101), (54, 3068), (59, 3053), (66, 3014), (74, 2963), (85, 2909), (99, 2858),

Gene: Jovita_49 Start: 33427, Stop: 33861, Start Num: 28

Candidate Starts for Jovita_49:

(Start: 28 @33427 has 61 MA's), (73, 33691), (88, 33763), (90, 33775),

Gene: KSunshine22_298 Start: 180460, Stop: 180807, Start Num: 34

Candidate Starts for KSunshine22_298:

(Start: 34 @180460 has 21 MA's), (45, 180544), (68, 180658), (75, 180706), (79, 180718), (80, 180721), (82, 180736), (91, 180787),

Gene: KSunshine22_6 Start: 3559, Stop: 3906, Start Num: 34

Candidate Starts for KSunshine22_6:

(Start: 34 @3559 has 21 MA's), (45, 3643), (68, 3757), (75, 3805), (79, 3817), (80, 3820), (82, 3835), (91, 3886),

Gene: Karimac_4 Start: 3241, Stop: 2849, Start Num: 25

Candidate Starts for Karimac_4:

(Start: 25 @3241 has 66 MA's), (48, 3103), (54, 3070), (59, 3055), (66, 3016), (74, 2965), (85, 2911), (99, 2860),

Gene: Karimac_262 Start: 122560, Stop: 122168, Start Num: 25

Candidate Starts for Karimac_262:

(Start: 25 @122560 has 66 MA's), (48, 122422), (54, 122389), (59, 122374), (66, 122335), (74, 122284), (85, 122230), (99, 122179),

Gene: Kate33_51 Start: 33755, Stop: 34189, Start Num: 28

Candidate Starts for Kate33_51:

(6, 33632), (Start: 28 @33755 has 61 MA's), (49, 33869), (73, 34019), (80, 34040), (88, 34091),

Gene: Katzastrophic_48 Start: 34275, Stop: 34709, Start Num: 28

Candidate Starts for Katzastrophic_48:

(4, 34101), (9, 34188), (15, 34218), (Start: 28 @34275 has 61 MA's), (45, 34371), (49, 34389), (66, 34479), (76, 34548), (77, 34551), (91, 34626), (103, 34680),

Gene: KentuckyRacer_271 Start: 124302, Stop: 123910, Start Num: 25

Candidate Starts for KentuckyRacer_271:

(Start: 25 @124302 has 66 MA's), (48, 124164), (54, 124131), (59, 124116), (66, 124077), (74, 124026), (85, 123972), (99, 123921),

Gene: KentuckyRacer_3 Start: 2851, Stop: 2459, Start Num: 25

Candidate Starts for KentuckyRacer_3:

(Start: 25 @2851 has 66 MA's), (48, 2713), (54, 2680), (59, 2665), (66, 2626), (74, 2575), (85, 2521), (99, 2470),

Gene: Kenzers_50 Start: 33579, Stop: 34013, Start Num: 28

Candidate Starts for Kenzers_50:

(Start: 23 @33570 has 5 MA's), (Start: 28 @33579 has 61 MA's), (73, 33843), (88, 33915), (90, 33927),

Gene: Lahqtemish_49 Start: 34037, Stop: 34471, Start Num: 28

Candidate Starts for Lahqtemish_49:

(6, 33914), (8, 33944), (Start: 28 @34037 has 61 MA's), (49, 34151), (73, 34301), (80, 34322), (88, 34373),

Gene: Laure_6 Start: 3860, Stop: 4201, Start Num: 34

Candidate Starts for Laure_6:

(Start: 34 @3860 has 21 MA's), (Start: 36 @3872 has 1 MA's), (45, 3938), (47, 3947), (53, 3977), (77, 4103), (80, 4112), (82, 4127), (91, 4178), (95, 4193),

Gene: Laure_324 Start: 172208, Stop: 172549, Start Num: 34

Candidate Starts for Laure_324:

(Start: 34 @172208 has 21 MA's), (Start: 36 @172220 has 1 MA's), (45, 172286), (47, 172295), (53, 172325), (77, 172451), (80, 172460), (82, 172475), (91, 172526), (95, 172541),

Gene: LeoJr_320 Start: 181219, Stop: 181482, Start Num: 45

Candidate Starts for LeoJr_320:

(Start: 34 @181135 has 21 MA's), (45, 181219), (74, 181378), (80, 181396), (81, 181402), (82, 181411), (94, 181471), (95, 181477),

Gene: LeoJr_7 Start: 3916, Stop: 4179, Start Num: 45

Candidate Starts for LeoJr_7:

(Start: 34 @3832 has 21 MA's), (45, 3916), (74, 4075), (80, 4093), (81, 4099), (82, 4108), (94, 4168), (95, 4174),

Gene: Lilbooboo_38 Start: 30841, Stop: 31239, Start Num: 28

Candidate Starts for Lilbooboo_38:

(10, 30763), (11, 30769), (Start: 28 @30841 has 61 MA's), (Start: 30 @30847 has 1 MA's), (37, 30916), (43, 30940), (45, 30949), (80, 31123), (82, 31138), (85, 31165),

Gene: Lilo27_51 Start: 33604, Stop: 34038, Start Num: 28

Candidate Starts for Lilo27_51:

(Start: 23 @33595 has 5 MA's), (Start: 28 @33604 has 61 MA's), (73, 33868), (88, 33940), (90, 33952),

Gene: LimaBean_50 Start: 33314, Stop: 33748, Start Num: 28

Candidate Starts for LimaBean_50:

(Start: 23 @33305 has 5 MA's), (Start: 28 @33314 has 61 MA's), (49, 33428), (73, 33578), (80, 33599),

Gene: LukeCage_266 Start: 123746, Stop: 123354, Start Num: 25

Candidate Starts for LukeCage_266:

(Start: 25 @123746 has 66 MA's), (40, 123644), (54, 123575), (59, 123560), (66, 123521), (74, 123470), (82, 123440), (85, 123416), (87, 123407), (99, 123365),

Gene: LukeCage_3 Start: 2842, Stop: 2450, Start Num: 25

Candidate Starts for LukeCage_3:

(Start: 25 @2842 has 66 MA's), (40, 2740), (54, 2671), (59, 2656), (66, 2617), (74, 2566), (82, 2536), (85, 2512), (87, 2503), (99, 2461),

Gene: Lynlen_51 Start: 33867, Stop: 34301, Start Num: 28

Candidate Starts for Lynlen_51:

(Start: 28 @33867 has 61 MA's), (71, 34122), (73, 34131), (80, 34152),

Gene: Milomuff_50 Start: 33544, Stop: 33978, Start Num: 28

Candidate Starts for Milomuff_50:

(Start: 23 @33535 has 5 MA's), (Start: 28 @33544 has 61 MA's), (71, 33799), (73, 33808), (80, 33829),

Gene: Mimi_7 Start: 4027, Stop: 4374, Start Num: 34

Candidate Starts for Mimi_7:

(Start: 34 @4027 has 21 MA's), (Start: 36 @4039 has 1 MA's), (45, 4111), (55, 4162), (71, 4255), (77, 4276), (85, 4324), (91, 4351), (94, 4360), (95, 4366),

Gene: Mimi_292 Start: 176699, Stop: 177034, Start Num: 36

Candidate Starts for Mimi_292:

(Start: 34 @176687 has 21 MA's), (Start: 36 @176699 has 1 MA's), (45, 176771), (55, 176822), (71, 176915), (77, 176936), (85, 176984), (91, 177011), (94, 177020), (95, 177026),

Gene: MindFlayer_3 Start: 2849, Stop: 2457, Start Num: 25

Candidate Starts for MindFlayer_3:

(Start: 25 @2849 has 66 MA's), (48, 2711), (54, 2678), (59, 2663), (66, 2624), (74, 2573), (85, 2519), (99, 2468),

Gene: MindFlayer_255 Start: 120909, Stop: 120517, Start Num: 25

Candidate Starts for MindFlayer_255:

(Start: 25 @120909 has 66 MA's), (48, 120771), (54, 120738), (59, 120723), (66, 120684), (74, 120633), (85, 120579), (99, 120528),

Gene: MsUbiquitous_50 Start: 33558, Stop: 34001, Start Num: 23

Candidate Starts for MsUbiquitous_50:

(Start: 23 @33558 has 5 MA's), (Start: 28 @33567 has 61 MA's), (73, 33831), (88, 33903),

Gene: Mugiwara_270 Start: 124214, Stop: 123822, Start Num: 25

Candidate Starts for Mugiwara_270:

(Start: 25 @124214 has 66 MA's), (48, 124076), (54, 124043), (61, 124010), (66, 123989), (82, 123908), (85, 123884), (87, 123875), (88, 123872), (92, 123851), (99, 123833),

Gene: Mugiwara_3 Start: 2829, Stop: 2437, Start Num: 25

Candidate Starts for Mugiwara_3:

(Start: 25 @2829 has 66 MA's), (48, 2691), (54, 2658), (61, 2625), (66, 2604), (82, 2523), (85, 2499), (87, 2490), (88, 2487), (92, 2466), (99, 2448),

Gene: Nicky22_51 Start: 34214, Stop: 34648, Start Num: 28

Candidate Starts for Nicky22_51:

(Start: 23 @34205 has 5 MA's), (Start: 28 @34214 has 61 MA's), (73, 34478), (88, 34550), (90, 34562),

Gene: Panchaali_293 Start: 182100, Stop: 182444, Start Num: 34

Candidate Starts for Panchaali_293:

(Start: 34 @182100 has 21 MA's), (Start: 35 @182106 has 1 MA's), (45, 182184), (70, 182322), (75, 182343), (79, 182355), (80, 182358), (81, 182364), (82, 182373), (86, 182403),

Gene: Panchaali_6 Start: 3042, Stop: 3386, Start Num: 34

Candidate Starts for Panchaali_6:

(Start: 34 @3042 has 21 MA's), (Start: 35 @3048 has 1 MA's), (45, 3126), (70, 3264), (75, 3285), (79, 3297), (80, 3300), (81, 3306), (82, 3315), (86, 3345),

Gene: PastaFagioli_50 Start: 34281, Stop: 34715, Start Num: 28

Candidate Starts for PastaFagioli_50:

(6, 34158), (Start: 28 @34281 has 61 MA's), (49, 34395), (73, 34545), (80, 34566), (88, 34617), (90, 34629),

Gene: Patbob_7 Start: 4133, Stop: 4480, Start Num: 34

Candidate Starts for Patbob_7:

(Start: 34 @4133 has 21 MA's), (Start: 36 @4145 has 1 MA's), (45, 4217), (55, 4268), (71, 4361), (77, 4382), (85, 4430), (91, 4457), (94, 4466), (95, 4472),

Gene: Patbob_293 Start: 179592, Stop: 179939, Start Num: 34

Candidate Starts for Patbob_293:

(Start: 34 @179592 has 21 MA's), (Start: 36 @179604 has 1 MA's), (45, 179676), (55, 179727), (71, 179820), (77, 179841), (85, 179889), (91, 179916), (94, 179925), (95, 179931),

Gene: Pecas_51 Start: 33936, Stop: 34379, Start Num: 23

Candidate Starts for Pecas_51:

(Start: 23 @33936 has 5 MA's), (Start: 28 @33945 has 61 MA's), (73, 34209), (88, 34281), (90, 34293),

Gene: PhigPhack_51 Start: 33561, Stop: 33995, Start Num: 28

Candidate Starts for PhigPhack_51:

(Start: 23 @33552 has 5 MA's), (Start: 28 @33561 has 61 MA's), (49, 33675), (73, 33825),

Gene: Phisb_50 Start: 33626, Stop: 34060, Start Num: 28

Candidate Starts for Phisb_50:

(Start: 23 @33617 has 5 MA's), (Start: 28 @33626 has 61 MA's), (49, 33740), (73, 33890), (88, 33962), (90, 33974),

Gene: Phrampa_291 Start: 180511, Stop: 180858, Start Num: 34

Candidate Starts for Phrampa_291:

(20, 180451), (21, 180460), (26, 180475), (Start: 34 @180511 has 21 MA's), (Start: 36 @180523 has 1 MA's), (45, 180595), (52, 180625), (55, 180646), (66, 180700), (71, 180739), (94, 180844), (95, 180850),

Gene: Phrampa_7 Start: 4140, Stop: 4487, Start Num: 34

Candidate Starts for Phrampa_7:

(20, 4080), (21, 4089), (26, 4104), (Start: 34 @4140 has 21 MA's), (Start: 36 @4152 has 1 MA's), (45, 4224), (52, 4254), (55, 4275), (66, 4329), (71, 4368), (94, 4473), (95, 4479),

Gene: PumpkinSpice_4 Start: 3239, Stop: 2847, Start Num: 25

Candidate Starts for PumpkinSpice_4:

(Start: 25 @3239 has 66 MA's), (48, 3101), (54, 3068), (59, 3053), (66, 3014), (74, 2963), (85, 2909), (99, 2858),

Gene: PumpkinSpice_268 Start: 123131, Stop: 122739, Start Num: 25

Candidate Starts for PumpkinSpice_268:

(Start: 25 @123131 has 66 MA's), (48, 122993), (54, 122960), (59, 122945), (66, 122906), (74, 122855), (85, 122801), (99, 122750),

Gene: QMacho_52 Start: 34198, Stop: 34641, Start Num: 23

Candidate Starts for QMacho_52:

(Start: 23 @34198 has 5 MA's), (Start: 28 @34207 has 61 MA's), (73, 34471), (88, 34543), (90, 34555),

Gene: Quaran19_265 Start: 122421, Stop: 122029, Start Num: 25

Candidate Starts for Quaran19_265:

(Start: 25 @122421 has 66 MA's), (48, 122283), (54, 122250), (59, 122235), (66, 122196), (74, 122145), (85, 122091), (99, 122040),

Gene: Quaran19_4 Start: 3239, Stop: 2847, Start Num: 25

Candidate Starts for Quaran19_4:

(Start: 25 @3239 has 66 MA's), (48, 3101), (54, 3068), (59, 3053), (66, 3014), (74, 2963), (85, 2909), (99, 2858),

Gene: Quenya_49 Start: 34399, Stop: 34833, Start Num: 28

Candidate Starts for Quenya_49:

(Start: 28 @34399 has 61 MA's), (45, 34495), (49, 34513), (73, 34663), (91, 34750), (103, 34804),

Gene: Racecar_296 Start: 177796, Stop: 178143, Start Num: 34

Candidate Starts for Racecar_296:

(Start: 34 @177796 has 21 MA's), (Start: 36 @177808 has 1 MA's), (45, 177880), (55, 177931), (71, 178024), (77, 178045), (91, 178120), (94, 178129), (95, 178135),

Gene: Racecar_7 Start: 4087, Stop: 4434, Start Num: 34

Candidate Starts for Racecar_7:

(Start: 34 @4087 has 21 MA's), (Start: 36 @4099 has 1 MA's), (45, 4171), (55, 4222), (71, 4315), (77, 4336), (91, 4411), (94, 4420), (95, 4426),

Gene: ReginaGlobina_317 Start: 181215, Stop: 181478, Start Num: 45

Candidate Starts for ReginaGlobina_317:

(Start: 34 @181131 has 21 MA's), (45, 181215), (74, 181374), (80, 181392), (81, 181398), (82, 181407), (94, 181467), (95, 181473),

Gene: ReginaGlobina_6 Start: 3768, Stop: 4031, Start Num: 45

Candidate Starts for ReginaGlobina_6:

(Start: 34 @3684 has 21 MA's), (45, 3768), (74, 3927), (80, 3945), (81, 3951), (82, 3960), (94, 4020), (95, 4026),

Gene: RemusLoopin_40 Start: 32252, Stop: 32656, Start Num: 28

Candidate Starts for RemusLoopin_40:

(Start: 28 @32252 has 61 MA's), (Start: 34 @32282 has 21 MA's), (43, 32351), (45, 32360), (70, 32498), (85, 32576),

Gene: Rikishi_265 Start: 122922, Stop: 122530, Start Num: 25

Candidate Starts for Rikishi_265:

(Start: 25 @122922 has 66 MA's), (48, 122784), (54, 122751), (59, 122736), (66, 122697), (74, 122646), (85, 122592), (99, 122541),

Gene: Rikishi_3 Start: 2849, Stop: 2457, Start Num: 25

Candidate Starts for Rikishi_3:

(Start: 25 @2849 has 66 MA's), (48, 2711), (54, 2678), (59, 2663), (66, 2624), (74, 2573), (85, 2519), (99, 2468),

Gene: Rockabye_305 Start: 176666, Stop: 177001, Start Num: 36

Candidate Starts for Rockabye_305:

(Start: 34 @176654 has 21 MA's), (Start: 36 @176666 has 1 MA's), (39, 176705), (42, 176726), (45, 176738), (46, 176741), (60, 176816), (71, 176882), (77, 176903), (80, 176912), (82, 176927), (85, 176951), (94, 176987), (95, 176993),

Gene: Rockabye_6 Start: 4053, Stop: 4388, Start Num: 36

Candidate Starts for Rockabye_6:

(Start: 34 @4041 has 21 MA's), (Start: 36 @4053 has 1 MA's), (39, 4092), (42, 4113), (45, 4125), (46, 4128), (60, 4203), (71, 4269), (77, 4290), (80, 4299), (82, 4314), (85, 4338), (94, 4374), (95, 4380),

Gene: Rollins_46 Start: 31506, Stop: 31931, Start Num: 28

Candidate Starts for Rollins_46:

(18, 31470), (19, 31476), (Start: 28 @31506 has 61 MA's), (31, 31524), (65, 31716), (69, 31731), (72, 31773), (75, 31785), (94, 31875),

Gene: SJReid_7 Start: 4281, Stop: 4634, Start Num: 32

Candidate Starts for SJReid_7:

(Start: 32 @4281 has 2 MA's), (Start: 36 @4299 has 1 MA's), (45, 4371), (55, 4422), (80, 4545), (85, 4584), (86, 4590), (91, 4611), (94, 4620),

Gene: SJReid_316 Start: 177120, Stop: 177473, Start Num: 32

Candidate Starts for SJReid_316:

(Start: 32 @177120 has 2 MA's), (Start: 36 @177138 has 1 MA's), (45, 177210), (55, 177261), (80, 177384), (85, 177423), (86, 177429), (91, 177450), (94, 177459),

Gene: SaltySpittoon_4 Start: 3239, Stop: 2847, Start Num: 25

Candidate Starts for SaltySpittoon_4:

(Start: 25 @3239 has 66 MA's), (48, 3101), (54, 3068), (59, 3053), (66, 3014), (74, 2963), (85, 2909), (99, 2858),

Gene: SaltySpittoon_264 Start: 121503, Stop: 121111, Start Num: 25

Candidate Starts for SaltySpittoon_264:

(Start: 25 @121503 has 66 MA's), (48, 121365), (54, 121332), (59, 121317), (66, 121278), (74, 121227), (85, 121173), (99, 121122),

Gene: Samora_39 Start: 31416, Stop: 31814, Start Num: 28

Candidate Starts for Samora_39:

(10, 31338), (11, 31344), (Start: 28 @31416 has 61 MA's), (41, 31509), (45, 31524),

Gene: SansAfet_51 Start: 33622, Stop: 34056, Start Num: 28

Candidate Starts for SansAfet_51:

(5, 33493), (Start: 23 @33613 has 5 MA's), (Start: 28 @33622 has 61 MA's), (49, 33736), (73, 33886), (80, 33907),

Gene: SarBear_50 Start: 33394, Stop: 33837, Start Num: 23

Candidate Starts for SarBear_50:

(Start: 23 @33394 has 5 MA's), (Start: 28 @33403 has 61 MA's), (73, 33667), (88, 33739), (90, 33751),

Gene: Sebastisaurus_39 Start: 31926, Stop: 32330, Start Num: 28

Candidate Starts for Sebastisaurus_39:

(10, 31851), (Start: 28 @31926 has 61 MA's), (31, 31941), (43, 32025), (45, 32034), (57, 32091), (70, 32172), (85, 32250),

Gene: Shawty_37 Start: 30679, Stop: 31077, Start Num: 28

Candidate Starts for Shawty_37:

(12, 30613), (Start: 28 @30679 has 61 MA's), (43, 30778), (45, 30787), (56, 30841), (75, 30946), (77, 30952),

Gene: SirBeanington_50 Start: 33911, Stop: 34354, Start Num: 23

Candidate Starts for SirBeanington_50:

(Start: 23 @33911 has 5 MA's), (Start: 28 @33920 has 61 MA's), (73, 34184), (88, 34256), (90, 34268),

Gene: Skylord_46 Start: 31437, Stop: 31862, Start Num: 28

Candidate Starts for Skylord_46:

(18, 31401), (19, 31407), (Start: 28 @31437 has 61 MA's), (31, 31455), (65, 31647), (69, 31662), (72, 31704), (75, 31716), (94, 31806), (99, 31821),

Gene: Slay_50 Start: 33935, Stop: 34378, Start Num: 23

Candidate Starts for Slay_50:

(Start: 23 @33935 has 5 MA's), (Start: 28 @33944 has 61 MA's), (73, 34208), (80, 34229), (88, 34280),

Gene: Softsoap_50 Start: 33602, Stop: 34036, Start Num: 28

Candidate Starts for Softsoap_50:

(6, 33479), (Start: 28 @33602 has 61 MA's), (49, 33716), (73, 33866), (80, 33887), (88, 33938),

Gene: Solea_51 Start: 33535, Stop: 33978, Start Num: 23

Candidate Starts for Solea_51:

(Start: 23 @33535 has 5 MA's), (Start: 28 @33544 has 61 MA's), (71, 33799), (73, 33808), (80, 33829),

Gene: Sollertia_261 Start: 122109, Stop: 121717, Start Num: 25

Candidate Starts for Sollertia_261:

(19, 122130), (Start: 25 @122109 has 66 MA's), (33, 122073), (48, 121971), (70, 121851), (82, 121803), (99, 121728),

Gene: Sollertia_5 Start: 3219, Stop: 2827, Start Num: 25

Candidate Starts for Sollertia_5:

(19, 3240), (Start: 25 @3219 has 66 MA's), (33, 3183), (48, 3081), (70, 2961), (82, 2913), (99, 2838),

Gene: Spelly_270 Start: 122043, Stop: 121651, Start Num: 25

Candidate Starts for Spelly_270:

(Start: 25 @122043 has 66 MA's), (48, 121905), (54, 121872), (59, 121857), (66, 121818), (74, 121767), (85, 121713), (99, 121662),

Gene: Spelly_4 Start: 3239, Stop: 2847, Start Num: 25

Candidate Starts for Spelly_4:

(Start: 25 @3239 has 66 MA's), (48, 3101), (54, 3068), (59, 3053), (66, 3014), (74, 2963), (85, 2909), (99, 2858),

Gene: Spilled_3 Start: 2849, Stop: 2457, Start Num: 25

Candidate Starts for Spilled_3:

(Start: 25 @2849 has 66 MA's), (48, 2711), (54, 2678), (59, 2663), (66, 2624), (74, 2573), (85, 2519), (99, 2468),

Gene: Spilled_271 Start: 123318, Stop: 122926, Start Num: 25

Candidate Starts for Spilled_271:

(Start: 25 @123318 has 66 MA's), (48, 123180), (54, 123147), (59, 123132), (66, 123093), (74, 123042), (85, 122988), (99, 122937),

Gene: Stanimal_5 Start: 3219, Stop: 2827, Start Num: 25

Candidate Starts for Stanimal_5:

(19, 3240), (Start: 25 @3219 has 66 MA's), (33, 3183), (48, 3081), (70, 2961), (82, 2913), (99, 2838),

Gene: Stanimal_260 Start: 122493, Stop: 122101, Start Num: 25

Candidate Starts for Stanimal_260:

(19, 122514), (Start: 25 @122493 has 66 MA's), (33, 122457), (48, 122355), (70, 122235), (82, 122187), (99, 122112),

Gene: StarPlatinum_3 Start: 2983, Stop: 2591, Start Num: 25

Candidate Starts for StarPlatinum_3:

(Start: 25 @2983 has 66 MA's), (40, 2881), (48, 2845), (54, 2812), (59, 2797), (61, 2779), (66, 2758), (74, 2707), (82, 2677), (85, 2653), (87, 2644), (99, 2602),

Gene: StarPlatinum_273 Start: 124670, Stop: 124278, Start Num: 25

Candidate Starts for StarPlatinum_273:

(Start: 25 @124670 has 66 MA's), (40, 124568), (48, 124532), (54, 124499), (59, 124484), (61, 124466), (66, 124445), (74, 124394), (82, 124364), (85, 124340), (87, 124331), (99, 124289),

Gene: Starbow_261 Start: 122087, Stop: 121695, Start Num: 25

Candidate Starts for Starbow_261:

(Start: 25 @122087 has 66 MA's), (48, 121949), (54, 121916), (59, 121901), (66, 121862), (74, 121811), (85, 121757), (99, 121706),

Gene: Starbow_4 Start: 3239, Stop: 2847, Start Num: 25

Candidate Starts for Starbow_4:

(Start: 25 @3239 has 66 MA's), (48, 3101), (54, 3068), (59, 3053), (66, 3014), (74, 2963), (85, 2909), (99, 2858),

Gene: Stewart25555_5 Start: 3566, Stop: 3910, Start Num: 34

Candidate Starts for Stewart25555_5:

(Start: 34 @3566 has 21 MA's), (45, 3650), (64, 3746), (80, 3824), (81, 3830), (82, 3839), (94, 3899),

Gene: Swervy_51 Start: 33675, Stop: 34109, Start Num: 28

Candidate Starts for Swervy_51:

(Start: 23 @33666 has 5 MA's), (Start: 28 @33675 has 61 MA's), (73, 33939), (88, 34011), (90, 34023),

Gene: TG1_34 Start: 29721, Stop: 30113, Start Num: 30

Candidate Starts for TG1_34:

(Start: 28 @29715 has 61 MA's), (Start: 30 @29721 has 1 MA's), (41, 29808), (45, 29826), (73, 29979),

Gene: Talia1610_7 Start: 4042, Stop: 4389, Start Num: 34

Candidate Starts for Talia1610_7:

(Start: 34 @4042 has 21 MA's), (Start: 36 @4054 has 1 MA's), (45, 4126), (55, 4177), (71, 4270), (91, 4366), (94, 4375), (95, 4381),

Gene: Talia1610_293 Start: 178514, Stop: 178861, Start Num: 34

Candidate Starts for Talia1610_293:

(Start: 34 @178514 has 21 MA's), (Start: 36 @178526 has 1 MA's), (45, 178598), (55, 178649), (71, 178742), (91, 178838), (94, 178847), (95, 178853),

Gene: ThursdayNight_64 Start: 41906, Stop: 42307, Start Num: 28

Candidate Starts for ThursdayNight_64:

(Start: 28 @41906 has 61 MA's), (45, 42011), (47, 42020), (75, 42188), (85, 42242), (97, 42287),

Gene: TomSawyer_269 Start: 124612, Stop: 124220, Start Num: 25

Candidate Starts for TomSawyer_269:

(Start: 25 @124612 has 66 MA's), (48, 124474), (54, 124441), (59, 124426), (66, 124387), (74, 124336), (85, 124282), (99, 124231),

Gene: TomSawyer_4 Start: 2833, Stop: 2441, Start Num: 25

Candidate Starts for TomSawyer_4:

(Start: 25 @2833 has 66 MA's), (48, 2695), (54, 2662), (59, 2647), (66, 2608), (74, 2557), (85, 2503), (99, 2452),

Gene: Tomas_4 Start: 3256, Stop: 2858, Start Num: 25

Candidate Starts for Tomas_4:

(13, 3319), (14, 3316), (Start: 25 @3256 has 66 MA's), (38, 3169), (46, 3130), (51, 3112), (66, 3028), (74, 2977), (76, 2971), (78, 2965), (82, 2944), (90, 2896), (96, 2875),

Gene: Tomas_260 Start: 124963, Stop: 124565, Start Num: 25

Candidate Starts for Tomas_260:

(13, 125026), (14, 125023), (Start: 25 @124963 has 66 MA's), (38, 124876), (46, 124837), (51, 124819), (66, 124735), (74, 124684), (76, 124678), (78, 124672), (82, 124651), (90, 124603), (96, 124582),

Gene: TukTuk_51 Start: 33683, Stop: 34117, Start Num: 28

Candidate Starts for TukTuk_51:

(Start: 23 @33674 has 5 MA's), (Start: 28 @33683 has 61 MA's), (73, 33947), (88, 34019),

Gene: Vash_37 Start: 30660, Stop: 31058, Start Num: 28

Candidate Starts for Vash_37:

(Start: 28 @30660 has 61 MA's), (Start: 30 @30666 has 1 MA's), (37, 30735), (43, 30759), (45, 30768), (82, 30957), (85, 30984),

Gene: Vitas_46 Start: 31419, Stop: 31844, Start Num: 28

Candidate Starts for Vitas_46:

(18, 31383), (19, 31389), (Start: 28 @31419 has 61 MA's), (65, 31629), (69, 31644), (72, 31686), (75, 31698), (94, 31788), (99, 31803),

Gene: WaddleDee_4 Start: 2969, Stop: 3316, Start Num: 34

Candidate Starts for WaddleDee_4:

(Start: 34 @2969 has 21 MA's), (45, 3053), (75, 3215), (79, 3227), (82, 3245), (91, 3296),

Gene: WaddleDee_295 Start: 181164, Stop: 181511, Start Num: 34

Candidate Starts for WaddleDee_295:

(Start: 34 @181164 has 21 MA's), (45, 181248), (75, 181410), (79, 181422), (82, 181440), (91, 181491),

Gene: Wipeout_3 Start: 2854, Stop: 2462, Start Num: 25

Candidate Starts for Wipeout_3:

(Start: 25 @2854 has 66 MA's), (48, 2716), (54, 2683), (59, 2668), (66, 2629), (74, 2578), (85, 2524), (99, 2473),

Gene: Wipeout_256 Start: 123585, Stop: 123193, Start Num: 25

Candidate Starts for Wipeout_256:

(Start: 25 @123585 has 66 MA's), (48, 123447), (54, 123414), (59, 123399), (66, 123360), (74, 123309), (85, 123255), (99, 123204),

Gene: Wofford_4 Start: 3125, Stop: 2730, Start Num: 25

Candidate Starts for Wofford_4:

(Start: 25 @3125 has 66 MA's), (48, 2987), (61, 2921), (66, 2900), (70, 2867), (75, 2846), (76, 2843), (82, 2816), (87, 2783), (91, 2765), (99, 2741),

Gene: Wofford_262 Start: 124918, Stop: 124523, Start Num: 25

Candidate Starts for Wofford_262:

(Start: 25 @124918 has 66 MA's), (48, 124780), (61, 124714), (66, 124693), (70, 124660), (75, 124639), (76, 124636), (82, 124609), (87, 124576), (91, 124558), (99, 124534),

Gene: Yaboi_5 Start: 3219, Stop: 2827, Start Num: 25

Candidate Starts for Yaboi_5:

(19, 3240), (Start: 25 @3219 has 66 MA's), (33, 3183), (48, 3081), (70, 2961), (82, 2913), (99, 2838),

Gene: Yaboi_266 Start: 122037, Stop: 121645, Start Num: 25

Candidate Starts for Yaboi_266:

(19, 122058), (Start: 25 @122037 has 66 MA's), (33, 122001), (48, 121899), (70, 121779), (82, 121731), (99, 121656),

Gene: Yappy_109 Start: 56080, Stop: 55733, Start Num: 35

Candidate Starts for Yappy_109:

(Start: 35 @56080 has 1 MA's), (39, 56035), (45, 56008), (50, 55990), (58, 55939), (77, 55837), (85, 55795), (98, 55750),

Gene: phiBT1_14 Start: 32102, Stop: 32500, Start Num: 28

Candidate Starts for phiBT1_14:

(Start: 28 @32102 has 61 MA's), (45, 32210), (70, 32348),

Gene: phiSASD1_5 Start: 21806, Stop: 22309, Start Num: 27

Candidate Starts for phiSASD1_5:

(Start: 27 @21806 has 1 MA's), (44, 21917), (64, 22025), (74, 22085), (80, 22103), (82, 22118), (83, 22124), (91, 22169), (101, 22217), (108, 22250), (109, 22253),