





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 195398 Report

This analysis was run 12/09/24 on database version 580.

Pham number 195398 has 244 members, 6 are drafts.

Phages represented in each track:

- Track 1 : Crispicous1_34
- Track 2 : Naira_36, Fenn_36
- Track 3 : Euphoria_35, Eyeball_35, Graduation_37, Watermelon_37, Forsytheast_35, Violet_34, Jasper_36, Kenmech_38, RidgeCB_35, Bones_35, Bruns_34, Cueylyss_35, BaconJack_38, Trip3t_36, SwissCheese_37, MetalQZJ_35, Hope4ever_35, Abbysshoes_37, Corvo_36, Moose_35, Dussy_36, ILeeKay_37, MaryBeth_35, Papez_37, Beatrix_35, GrecoEtereo_37
- Track 4 : PinkPlastic_34, Manatee_36, Big3_35, PascalRango_36, Switzer_36, Greg_37, Bircsak_35, Michley_35, McGuire_36, DrFeelGood_34, Gompeii16_35, U2_35, Ichabod_36, BeesKnees_36, Ciao_35, Dynamix_36, Pippin_37, GMonster_34, MrGordo_35, Fajezeel_37, Mkhusei_36
- Track 5 : Blue_35, Zeeculate_35, Alvin_36, Bxb1_33
- Track 6 : Museum_37, Gandalf20_36, Jerm2_36, BigMau_37, Rohr_36, Bob3_34, PattyP_37, Pari_36, Dulcie_34, Burton_36, HermioneGrange_35, Petp2012_37
- Track 7 : Killigrew_33
- Track 8 : Licorice_37
- Track 9 : Chanagan_34
- Track 10 : Marsha_35
- Track 11 : Bexan_33, StrongArm_34
- Track 12 : Tasp14_36
- Track 13 : Altman_37, Kanely_36
- Track 14 : Briton15_37
- Track 15 : Mryolo_33
- Track 16 : Ruotula_35
- Track 17 : Lopton_36, Seabiscuit_37, DreamCatcher_38, KSSJEB_35, Squee_36
- Track 18 : Nhonho_35
- Track 19 : Scowl_35
- Track 20 : Parliament_34, Lamina13_35, Norz_37
- Track 21 : TheloniousMonk_37
- Track 22 : PherrisBueller_36, Dreamboat_36
- Track 23 : JuliaChild_37
- Track 24 : Rufus_36
- Track 25 : Atkinbua_37
- Track 26 : Lockley_36
- Track 27 : Smeagol_37
- Track 28 : Peterson_38
- Track 29 : Payneful_35

- Track 30 : Hermia_38
- Track 31 : Jorgensen_35
- Track 32 : DarthPhader_8
- Track 33 : Drago_25, Enby_25, Lorde_25, Filuzino_24, Awesomesauce_25, Daenerys_24, Rockne_24, Piper2020_26, TootsiePop_25, DaddyRickover_24, Misha28_25, Llij_24, Scottish_25, PMC_24, UncleRicky_27, JoeyJr_24, Mova_25, Pacc40_24, BlueCrab_24, KingMidas_25, PHappiness_24, Maravista_24, Chuckly_24
- Track 34 : Sparkdehlily_24, Saal_24, TDanisky_24, DRBy19_24, Nebkiss_28, Philus_24, SwagPigglett_24
- Track 35 : ByChance_24, DosHalletts_25, Nivrat_24, ShowerHandel_24, Burwell21_24, Yorick_24, LilMoolah_24, NormanBulbieJr_24, Martik_24
- Track 36 : Karhdo_24, Polka14_25, DLane_24, Phatniss_25, Doug_25, Dorothy_24, DocMcStuffins_26, Ramsey_25, Nitzel_25, Leozinho_25, ChickenDinner_25
- Track 37 : Harley_24, Ibhubesi_24
- Track 38 : Gorge_24, BobaPhett_24, Mattes_24, James_24, Jarcob_24
- Track 39 : Alexphander_26
- Track 40 : Cornucopia_25
- Track 41 : Chevrolet_24
- Track 42 : Leperchaun_24, OwlsT2W_26, Eradicator_24, Donkeykong_24
- Track 43 : DillTech15_24
- Track 44 : Veteran_24, GUmbie_24, GigiOuiOui_24, SiSi_24, Phasih_25, Mantra_24, DirtMcgirt_25
- Track 45 : Emma_24
- Track 46 : Royals2015_24
- Track 47 : Cabrinians_24, OlympiaSaint_24, FreddyB_24, Priscilla_24, Spoonbill_24
- Track 48 : Eish_24
- Track 49 : Mahavrat_24
- Track 50 : Blexus_24
- Track 51 : Florinda_24, Quico_25, Girafales_25
- Track 52 : DaWorst_26
- Track 53 : LunaBlu_25
- Track 54 : DotProduct_24
- Track 55 : Empress_25, OldBen_24, Sassafras_24, Deb65_24, Inventum_24, Geralt_24, MisterCuddles_24, Girr_24, Ruby_24
- Track 56 : Galactic_24, Batiatus_24
- Track 57 : Plumbus_25
- Track 58 : WillSterrel_25, IrishSherpFalk_25
- Track 59 : RitaG_24
- Track 60 : Hades_24
- Track 61 : Boomer_25
- Track 62 : Fancypants_24
- Track 63 : Moonbeam_25
- Track 64 : Fastidio_24
- Track 65 : Juniper1_24
- Track 66 : Seabastian_24, Modragons_24, Jinglebell_23, OfUltron_24, Oksu_25, Llama_24
- Track 67 : Rita_24, Bubbles123_25
- Track 68 : Marker_25
- Track 69 : QuickMath_25, Kimberlium_26, MulchExplorer_27
- Track 70 : RockyHorror_25, Zerg_24
- Track 71 : Whouxphf_24
- Track 72 : Hamulus_24

- Track 73 : PhesterPhotato_24
- Track 74 : SimranZ1_25
- Track 75 : RedBird_24, LittleE_45
- Track 76 : Nimbo_24
- Track 77 : Doomphist_24, Poenanya_24
- Track 78 : Lizziana_24
- Track 79 : Gandalph_24
- Track 80 : ShiLan_24, Zizzle_24
- Track 81 : Aubs_24
- Track 82 : Krakatau_25
- Track 83 : Duke13_42, Wanda_45
- Track 84 : Optimus_43, BAKA_42
- Track 85 : Gaia_27

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

The start number called the most often in the published annotations is 2, it was called in 166 of the 238 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Alexphander_26, Altman_37, Alvin_36, Atkinbua_37, Awesomesauce_25, BeesKnees_36, Bexan_33, Big3_35, BigMau_37, Bircsak_35, Blexus_24, BlueCrab_24, Blue_35, Bob3_34, BobaPhett_24, Briton15_37, Burton_36, Burwell21_24, Bxb1_33, ByChance_24, Cabrinians_24, Chanagan_34, ChickenDinner_25, Chuckly_24, Ciao_35, Cornucopia_25, Crispicous1_34, DLane_24, DRBy19_24, DaWorst_26, DaddyRickover_24, Daenerys_24, DarthPhader_8, Deb65_24, DirtMcgirt_25, DocMcStuffins_26, Donkeykong_24, Dorothy_24, DosHalletts_25, Doug_25, DrFeelGood_34, Drago_25, DreamCatcher_38, Dulcie_34, Dynamix_36, Eish_24, Emma_24, Empress_25, Enby_25, Eradicator_24, Fajezeel_37, Fancypants_24, Fastidio_24, Fenn_36, Filuzino_24, Florinda_24, FreddyB_24, GMonster_34, GUmbie_24, Gaia_27, Gandalf20_36, Gandalph_24, Geralt_24, GigiOuiOui_24, Girafales_25, Girr_24, Gompeii16_35, Gorge_24, Greg_37, Hades_24, HermioneGrange_35, Ichabod_36, Invention_24, James_24, Jarcob_24, Jerm2_36, JoeyJr_24, Jorgensen_35, KSSJEB_35, Kanely_36, Karhdo_24, Killigrew_33, Kimberlium_26, KingMidas_25, Lamina13_35, Leozinho_25, Leperchaun_24, LilMoolah_24, Lizziana_24, Llij_24, Lopton_36, Lorde_25, LunaBlu_25, Manatee_36, Mantra_24, Maravista_24, Marker_25, Martik_24, Mattes_24, McGuire_36, Michley_35, Misha28_25, MisterCuddles_24, Mkhuseli_36, Moonbeam_25, Mova_25, MrGordo_35, MulchExplorer_27, Museum_37, Naira_36, Nebkiss_28, Nhonho_35, Nitzel_25, Nivrat_24, NormanBulbieJr_24, Norz_37, OldBen_24, OlympiaSaint_24, OwlsT2W_26, PHappiness_24, PMC_24, Pacc40_24, Pari_36, Parliament_34, PascalRango_36, PattyP_37, Petp2012_37, Phasih_25, Phatniss_25, Philus_24, PinkPlastic_34, Piper2020_26, Pippin_37, Plumbus_25, Polka14_25, Priscilla_24, QuickMath_25, Quico_25, Ramsey_25, RitaG_24, Rockne_24, RockyHorror_25, Rohr_36, Royals2015_24, Ruby_24, Rufus_36, Saal_24, Sassafras_24, Scottish_25, Scowl_35, Seabiscuit_37, ShiLan_24, ShowerHandel_24, SiSi_24, Sparkdehlily_24, Spoonbill_24, Squee_36, StrongArm_34, SwagPigglett_24, Switzer_36, TDanisky_24, Tasp14_36, TootsiePop_25, U2_35, UncleRicky_27, Veteran_24, Whouxphf_24, Yorick_24, Zeeculate_35, Zerg_24, Zizzle_24,

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

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

- Abbysshoes_37, Aubs_24, BAKA_42, BaconJack_38, Batiatus_24, Beatrix_35, Bones_35, Boomer_25, Bruns_34, Bubbles123_25, Chevrolet_24, Corvo_36, Cueyllyss_35, DillTech15_24, Doomphist_24, DotProduct_24, Dreamboat_36, Duke13_42, Dussy_36, Euphoria_35, Eyeball_35, Forsytheast_35, Galactic_24, Graduation_37, GrecoEtereo_37, Hamulus_24, Harley_24, Hermia_38, Hope4ever_35, ILeeKay_37, Ibhubesi_24, IrishSherpFalk_25, Jasper_36, Jinglebell_23, JuliaChild_37, Juniper1_24, Kenmech_38, Krakatau_25, Licorice_37, LittleE_45, Llama_24, Lockley_36, Mahavrat_24, Marsha_35, MaryBeth_35, MetalQZJ_35, Modragons_24, Moose_35, Mryolo_33, Nimbo_24, OfUltron_24, Oksu_25, Optimus_43, Papez_37, Payneful_35, Peterson_38, PherrisBueller_36, PhesterPhotato_24, Poenanya_24, RedBird_24, RidgeCB_35, Rita_24, Ruotula_35, Seabastian_24, SimranZ1_25, Smeagol_37, SwissCheese_37, TheloniousMonk_37, Tripl3t_36, Violet_34, Wanda_45, Watermelon_37, WillSterrel_25,

Summary by start number:

Start 2:

- Found in 171 of 244 (70.1%) of genes in pham
- Manual Annotations of this start: 166 of 238
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Alexphander_26 (F1), Altman_37 (A1), Alvin_36 (A1), Atkinbua_37 (A1), Awesomesauce_25 (F1), BeesKnees_36 (A1), Bexan_33 (A1), Big3_35 (A1), BigMau_37 (A1), Bircsak_35 (A1), Blexus_24 (F1), BlueCrab_24 (F1), Blue_35 (A1), Bob3_34 (A1), BobaPhett_24 (F1), Briton15_37 (A1), Burton_36 (A1), Burwell21_24 (F1), Bxb1_33 (A1), ByChance_24 (F1), Cabrinians_24 (F1), Chanagan_34 (A1), ChickenDinner_25 (F1), Chuckly_24 (F1), Ciao_35 (A1), Cornucopia_25 (F1), Crispicous1_34 (A1), DLane_24 (F1), DRBy19_24 (F1), DaWorst_26 (F1), DaddyRickover_24 (F1), Daenerys_24 (F1), DarthPhader_8 (A12), Deb65_24 (F1), DirtMcgirt_25 (F1), DocMcStuffins_26 (F1), Donkeykong_24 (F1), Dorothy_24 (F1), DosHalletts_25 (F1), Doug_25 (F1), DrFeelGood_34 (A1), Drago_25 (F1), DreamCatcher_38 (A1), Dulcie_34 (A1), Dynamix_36 (A1), Eish_24 (F1), Emma_24 (F1), Empress_25 (F1), Enby_25 (F1), Eradicator_24 (F1), Fajezeel_37 (A1), Fancypants_24 (F1), Fastidio_24 (F1), Fenn_36 (A1), Filuzino_24 (F1), Florinda_24 (F1), FreddyB_24 (F1), GMonster_34 (A1), GUmbie_24 (F1), Gaia_27 (X), Gandalf20_36 (A1), Gandolph_24 (F1), Geralt_24 (F1), GigiOuiOui_24 (F1), Girafales_25 (F1), Girr_24 (F1), Gompeii16_35 (A1), Gorge_24 (F1), Greg_37 (A1), Hades_24 (F1), HermioneGrange_35 (A1), Ichabod_36 (A1), Inventum_24 (F1), James_24 (F1), Jarcob_24 (F1), Jerm2_36 (A1), JoeyJr_24 (F1), Jorgensen_35 (A1), KSSJEB_35 (A1), Kanely_36 (A1), Karhdo_24 (F1), Killigrew_33 (A1), Kimberlium_26 (F1), KingMidas_25 (F1), Lamina13_35 (A1), Leozinho_25 (F1), Leperchaun_24 (F1), LilMoolah_24 (F1), Lizziana_24 (F1), Llij_24 (F1), Lopton_36 (A1), Lorde_25 (F1), LunaBlu_25 (F1), Manatee_36 (A1), Mantra_24 (F1), Maravista_24 (F1), Marker_25 (F1), Martik_24 (F1), Mattes_24 (F1), McGuire_36 (A1), Michley_35 (A1), Misha28_25 (F1), MisterCuddles_24 (F1), Mkhusei_36 (A1), Moonbeam_25 (F1), Mova_25 (F1), MrGordo_35 (A1), MulchExplorer_27 (F1), Museum_37 (A1), Naira_36 (A1), Nebkiss_28 (X), Nhonho_35 (A1), Nitzel_25 (F1), Nivrat_24 (F1), NormanBulbieJr_24 (F1), Norz_37 (A1), OldBen_24 (F1), OlympiaSaint_24 (F1), OwlsT2W_26 (F1), PHappiness_24

(F1), PMC_24 (F1), Pacc40_24 (F1), Pari_36 (A1), Parliament_34 (A1), PascalRango_36 (A1), PattyP_37 (A1), Petp2012_37 (A1), Phasih_25 (F1), Phatniss_25 (F1), Philus_24 (F1), PinkPlastic_34 (A1), Piper2020_26 (F1), Pippin_37 (A1), Plumbus_25 (F1), Polka14_25 (F1), Priscilla_24 (F1), QuickMath_25 (F1), Quico_25 (F1), Ramsey_25 (F1), RitaG_24 (F1), Rockne_24 (F1), RockyHorror_25 (F1), Rohr_36 (A1), Royals2015_24 (F1), Ruby_24 (F1), Rufus_36 (A1), Saal_24 (F1), Sassafras_24 (F1), Scottish_25 (F1), Scowl_35 (A1), Seabiscuit_37 (A1), ShiLan_24 (F1), ShowerHandel_24 (F1), SiSi_24 (F1), Sparkdehlily_24 (F1), Spoonbill_24 (F1), Squee_36 (A1), StrongArm_34 (A1), SwagPiggett_24 (F1), Switzer_36 (A1), TDanisky_24 (F1), Tasp14_36 (A1), TootsiePop_25 (F1), U2_35 (A1), UncleRicky_27 (F1), Veteran_24 (F1), Whouxphf_24 (F1), Yorick_24 (F1), Zeeculate_35 (A1), Zerg_24 (F1), Zizzle_24 (F1),

Start 3:

- Found in 33 of 244 (13.5%) of genes in pham
- Manual Annotations of this start: 32 of 238
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aubs_24 (F1), BAKA_42 (J), Batiatus_24 (F1), Boomer_25 (F1), Bubbles123_25 (F1), Chevrolet_24 (F1), DillTech15_24 (F1), Doomphist_24 (F1), DotProduct_24 (F1), Duke13_42 (J), Galactic_24 (F1), Hamulus_24 (F1), Harley_24 (F1), Ibhubesi_24 (F1), IrishSherpFalk_25 (F1), Jinglebell_23 (F1), Juniper1_24 (F1), Krakatau_25 (F1), LittleE_45 (J), Llama_24 (F1), Mahavrat_24 (F1), Modragons_24 (F1), Nimbo_24 (F1), OfUltron_24 (F1), Oksu_25 (F1), Optimus_43 (J), PhesterPotato_24 (F1), Poenanya_24 (F1), RedBird_24 (F1), Rita_24 (F1), Sebastian_24 (F1), Wanda_45 (J), WillSterrel_25 (F1),

Start 4:

- Found in 5 of 244 (2.0%) of genes in pham
- Manual Annotations of this start: 5 of 238
- Called 100.0% of time when present
- Phage (with cluster) where this start called: JuliaChild_37 (A1), Lockley_36 (A1), Marsha_35 (A1), Payneful_35 (A1), Ruotula_35 (A1),

Start 5:

- Found in 2 of 244 (0.8%) of genes in pham
- Manual Annotations of this start: 1 of 238
- Called 50.0% of time when present
- Phage (with cluster) where this start called: SimranZ1_25 (F1),

Start 7:

- Found in 1 of 244 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 238
- Called 100.0% of time when present
- Phage (with cluster) where this start called: TheloniousMonk_37 (A1),

Start 10:

- Found in 33 of 244 (13.5%) of genes in pham
- Manual Annotations of this start: 32 of 238
- Called 97.0% of time when present
- Phage (with cluster) where this start called: Abbyshoes_37 (A1), BaconJack_38 (A1), Beatrix_35 (A1), Bones_35 (A1), Bruns_34 (A1), Corvo_36 (A1), Cueyllyss_35 (A1), Dreamboat_36 (A1), Dussy_36 (A1), Euphoria_35 (A1), Eyeball_35 (A1),

Forsytheast_35 (A1), Graduation_37 (A1), GrecoEtereo_37 (A1), Hermia_38 (A1), Hope4ever_35 (A1), ILeeKay_37 (A1), Jasper_36 (A1), Kenmech_38 (A1), Licorice_37 (A1), MaryBeth_35 (A1), MetalQZJ_35 (A1), Moose_35 (A1), Papez_37 (A1), Peterson_38 (A1), PherrisBueller_36 (A1), RidgeCB_35 (A1), Smeagol_37 (A1), SwissCheese_37 (A1), Tripl3t_36 (A1), Violet_34 (A1), Watermelon_37 (A1),

Start 12:

- Found in 89 of 244 (36.5%) of genes in pham
- Manual Annotations of this start: 1 of 238
- Called 1.1% of time when present
- Phage (with cluster) where this start called: Mryolo_33 (A1),

Summary by clusters:

There are 5 clusters represented in this pham: A1, F1, J, X, A12,

Info for manual annotations of cluster A1:

- Start number 2 was manually annotated 59 times for cluster A1.
- Start number 4 was manually annotated 5 times for cluster A1.
- Start number 7 was manually annotated 1 time for cluster A1.
- Start number 10 was manually annotated 32 times for cluster A1.
- Start number 12 was manually annotated 1 time for cluster A1.

Info for manual annotations of cluster A12:

- Start number 2 was manually annotated 1 time for cluster A12.

Info for manual annotations of cluster F1:

- Start number 2 was manually annotated 104 times for cluster F1.
- Start number 3 was manually annotated 27 times for cluster F1.
- Start number 5 was manually annotated 1 time for cluster F1.

Info for manual annotations of cluster J:

- Start number 3 was manually annotated 5 times for cluster J.

Info for manual annotations of cluster X:

- Start number 2 was manually annotated 2 times for cluster X.

Gene Information:

Gene: Abbyshoes_37 Start: 28238, Stop: 29026, Start Num: 10

Candidate Starts for Abbyshoes_37:

(Start: 10 @28238 has 32 MA's), (Start: 12 @28244 has 1 MA's), (16, 28280), (36, 28538), (45, 28643), (50, 28670), (51, 28694), (66, 28871),

Gene: Alexphander_26 Start: 24790, Stop: 25614, Start Num: 2

Candidate Starts for Alexphander_26:

(Start: 2 @24790 has 166 MA's), (13, 24838), (17, 24871), (45, 25231),

Gene: Altman_37 Start: 28857, Stop: 29801, Start Num: 2

Candidate Starts for Altman_37:

(Start: 2 @28857 has 166 MA's), (13, 28893), (18, 28935), (37, 29178), (48, 29304),

Gene: Alvin_36 Start: 28638, Stop: 29438, Start Num: 2

Candidate Starts for Alvin_36:

(Start: 2 @28638 has 166 MA's), (Start: 12 @28674 has 1 MA's), (19, 28716), (25, 28803), (45, 29055), (51, 29106), (66, 29283),

Gene: Atkinbua_37 Start: 28484, Stop: 29272, Start Num: 2

Candidate Starts for Atkinbua_37:

(Start: 2 @28484 has 166 MA's), (Start: 12 @28520 has 1 MA's), (19, 28562), (25, 28649), (45, 28904), (51, 28955), (75, 29255),

Gene: Aubs_24 Start: 24425, Stop: 25231, Start Num: 3

Candidate Starts for Aubs_24:

(Start: 3 @24425 has 32 MA's), (13, 24473), (22, 24566), (47, 24869), (49, 24875), (66, 25079), (77, 25226),

Gene: Awesomesauce_25 Start: 24131, Stop: 24955, Start Num: 2

Candidate Starts for Awesomesauce_25:

(1, 24071), (Start: 2 @24131 has 166 MA's), (13, 24179), (20, 24245), (45, 24572),

Gene: BAKA_42 Start: 36778, Stop: 37584, Start Num: 3

Candidate Starts for BAKA_42:

(1, 36718), (Start: 3 @36778 has 32 MA's), (13, 36826), (17, 36859), (20, 36892), (21, 36916), (22, 36919), (47, 37222), (49, 37228), (66, 37432), (77, 37579),

Gene: BaconJack_38 Start: 28558, Stop: 29346, Start Num: 10

Candidate Starts for BaconJack_38:

(Start: 10 @28558 has 32 MA's), (Start: 12 @28564 has 1 MA's), (16, 28600), (36, 28858), (45, 28963), (50, 28990), (51, 29014), (66, 29191),

Gene: Batiatus_24 Start: 24316, Stop: 25122, Start Num: 3

Candidate Starts for Batiatus_24:

(1, 24256), (Start: 3 @24316 has 32 MA's), (13, 24364), (22, 24457), (47, 24760), (49, 24766), (66, 24970), (77, 25117),

Gene: Beatrix_35 Start: 29473, Stop: 30261, Start Num: 10

Candidate Starts for Beatrix_35:

(Start: 10 @29473 has 32 MA's), (Start: 12 @29479 has 1 MA's), (16, 29515), (36, 29773), (45, 29878), (50, 29905), (51, 29929), (66, 30106),

Gene: BeesKnees_36 Start: 28085, Stop: 28894, Start Num: 2

Candidate Starts for BeesKnees_36:

(Start: 2 @28085 has 166 MA's), (Start: 12 @28121 has 1 MA's), (19, 28163), (25, 28250), (45, 28505), (51, 28556),

Gene: Bexan_33 Start: 28908, Stop: 29804, Start Num: 2

Candidate Starts for Bexan_33:

(Start: 2 @28908 has 166 MA's), (Start: 12 @28944 has 1 MA's), (19, 28986), (25, 29073), (28, 29100), (32, 29202), (45, 29331), (61, 29460),

Gene: Big3_35 Start: 28678, Stop: 29481, Start Num: 2

Candidate Starts for Big3_35:

(Start: 2 @28678 has 166 MA's), (Start: 12 @28714 has 1 MA's), (19, 28756), (25, 28843), (45, 29098), (51, 29149),

Gene: BigMau_37 Start: 28214, Stop: 29017, Start Num: 2

Candidate Starts for BigMau_37:

(Start: 2 @28214 has 166 MA's), (Start: 12 @28250 has 1 MA's), (19, 28292), (25, 28379), (45, 28634),

Gene: Bircsak_35 Start: 28523, Stop: 29326, Start Num: 2

Candidate Starts for Bircsak_35:

(Start: 2 @28523 has 166 MA's), (Start: 12 @28559 has 1 MA's), (19, 28601), (25, 28688), (45, 28943), (51, 28994),

Gene: Blexus_24 Start: 24450, Stop: 25397, Start Num: 2

Candidate Starts for Blexus_24:

(1, 24390), (Start: 2 @24450 has 166 MA's), (13, 24498), (17, 24531), (20, 24564), (21, 24588), (30, 24657), (37, 24774), (38, 24792),

Gene: Blue_35 Start: 28519, Stop: 29322, Start Num: 2

Candidate Starts for Blue_35:

(Start: 2 @28519 has 166 MA's), (Start: 12 @28555 has 1 MA's), (19, 28597), (25, 28684), (45, 28939), (51, 28990), (66, 29167),

Gene: BlueCrab_24 Start: 24432, Stop: 25256, Start Num: 2

Candidate Starts for BlueCrab_24:

(1, 24372), (Start: 2 @24432 has 166 MA's), (13, 24480), (20, 24546), (45, 24873),

Gene: Bob3_34 Start: 27560, Stop: 28363, Start Num: 2

Candidate Starts for Bob3_34:

(Start: 2 @27560 has 166 MA's), (Start: 12 @27596 has 1 MA's), (19, 27638), (25, 27725), (45, 27980),

Gene: BobaPhett_24 Start: 24420, Stop: 25244, Start Num: 2

Candidate Starts for BobaPhett_24:

(1, 24360), (Start: 2 @24420 has 166 MA's), (13, 24468), (17, 24501), (20, 24534), (25, 24606), (45, 24861),

Gene: Bones_35 Start: 27931, Stop: 28719, Start Num: 10

Candidate Starts for Bones_35:

(Start: 10 @27931 has 32 MA's), (Start: 12 @27937 has 1 MA's), (16, 27973), (36, 28231), (45, 28336), (50, 28363), (51, 28387), (66, 28564),

Gene: Boomer_25 Start: 24077, Stop: 24886, Start Num: 3

Candidate Starts for Boomer_25:

(1, 24017), (Start: 3 @24077 has 32 MA's), (13, 24125), (17, 24158), (20, 24191), (22, 24218), (52, 24557), (60, 24620), (66, 24731),

Gene: Briton15_37 Start: 28318, Stop: 29121, Start Num: 2

Candidate Starts for Briton15_37:

(Start: 2 @28318 has 166 MA's), (Start: 12 @28354 has 1 MA's), (19, 28396), (45, 28738),

Gene: Bruns_34 Start: 27953, Stop: 28801, Start Num: 10

Candidate Starts for Bruns_34:

(Start: 10 @27953 has 32 MA's), (Start: 12 @27959 has 1 MA's), (16, 27995), (36, 28313), (45, 28418), (50, 28445), (51, 28469), (66, 28646),

Gene: Bubbles123_25 Start: 24980, Stop: 25789, Start Num: 3

Candidate Starts for Bubbles123_25:

(1, 24920), (Start: 3 @24980 has 32 MA's), (13, 25028), (20, 25094), (22, 25121), (28, 25178), (29, 25184), (33, 25283), (60, 25523), (66, 25634),

Gene: Burton_36 Start: 28168, Stop: 28971, Start Num: 2

Candidate Starts for Burton_36:

(Start: 2 @28168 has 166 MA's), (Start: 12 @28204 has 1 MA's), (19, 28246), (25, 28333), (45, 28588),

Gene: Burwell21_24 Start: 24454, Stop: 25278, Start Num: 2

Candidate Starts for Burwell21_24:

(1, 24394), (Start: 2 @24454 has 166 MA's), (8, 24481), (13, 24502), (17, 24535), (20, 24568), (45, 24895),

Gene: Bxb1_33 Start: 28131, Stop: 28934, Start Num: 2

Candidate Starts for Bxb1_33:

(Start: 2 @28131 has 166 MA's), (Start: 12 @28167 has 1 MA's), (19, 28209), (25, 28296), (45, 28551), (51, 28602), (66, 28779),

Gene: ByChance_24 Start: 24431, Stop: 25255, Start Num: 2

Candidate Starts for ByChance_24:

(1, 24371), (Start: 2 @24431 has 166 MA's), (8, 24458), (13, 24479), (17, 24512), (20, 24545), (45, 24872),

Gene: Cabrinians_24 Start: 24448, Stop: 25272, Start Num: 2

Candidate Starts for Cabrinians_24:

(Start: 2 @24448 has 166 MA's), (13, 24496), (17, 24529), (20, 24562), (25, 24634), (45, 24889), (51, 24940),

Gene: Chanagan_34 Start: 27633, Stop: 28415, Start Num: 2

Candidate Starts for Chanagan_34:

(Start: 2 @27633 has 166 MA's), (Start: 12 @27669 has 1 MA's), (19, 27711), (21, 27759), (22, 27762), (38, 27963), (45, 28047), (50, 28074), (51, 28098), (66, 28260),

Gene: Chevrolet_24 Start: 24302, Stop: 25084, Start Num: 3

Candidate Starts for Chevrolet_24:

(1, 24242), (Start: 3 @24302 has 32 MA's), (13, 24350), (20, 24416), (47, 24734), (55, 24788),

Gene: ChickenDinner_25 Start: 24858, Stop: 25682, Start Num: 2

Candidate Starts for ChickenDinner_25:

(1, 24798), (Start: 2 @24858 has 166 MA's), (13, 24906), (17, 24939), (20, 24972), (45, 25299),

Gene: Chuckly_24 Start: 24431, Stop: 25255, Start Num: 2

Candidate Starts for Chuckly_24:

(1, 24371), (Start: 2 @24431 has 166 MA's), (13, 24479), (20, 24545), (45, 24872),

Gene: Ciao_35 Start: 27976, Stop: 28779, Start Num: 2

Candidate Starts for Ciao_35:

(Start: 2 @27976 has 166 MA's), (Start: 12 @28012 has 1 MA's), (19, 28054), (25, 28141), (45, 28396), (51, 28447),

Gene: Cornucopia_25 Start: 24304, Stop: 25140, Start Num: 2

Candidate Starts for Cornucopia_25:

(1, 24244), (Start: 2 @24304 has 166 MA's), (13, 24352), (17, 24385), (45, 24757), (51, 24808),

Gene: Corvo_36 Start: 28990, Stop: 29778, Start Num: 10

Candidate Starts for Corvo_36:

(Start: 10 @28990 has 32 MA's), (Start: 12 @28996 has 1 MA's), (16, 29032), (36, 29290), (45, 29395), (50, 29422), (51, 29446), (66, 29623),

Gene: Crispicous1_34 Start: 27574, Stop: 28377, Start Num: 2

Candidate Starts for Crispicous1_34:

(Start: 2 @27574 has 166 MA's), (Start: 12 @27610 has 1 MA's), (19, 27652), (25, 27739), (45, 27994), (51, 28045), (52, 28048),

Gene: Cueyllyss_35 Start: 28164, Stop: 28952, Start Num: 10

Candidate Starts for Cueyllyss_35:

(Start: 10 @28164 has 32 MA's), (Start: 12 @28170 has 1 MA's), (16, 28206), (36, 28464), (45, 28569), (50, 28596), (51, 28620), (66, 28797),

Gene: DLane_24 Start: 24254, Stop: 25078, Start Num: 2

Candidate Starts for DLane_24:

(1, 24194), (Start: 2 @24254 has 166 MA's), (13, 24302), (17, 24335), (20, 24368), (45, 24695),

Gene: DRBy19_24 Start: 24290, Stop: 25114, Start Num: 2

Candidate Starts for DRBy19_24:

(1, 24230), (Start: 2 @24290 has 166 MA's), (13, 24338), (17, 24371), (20, 24404), (25, 24476), (45, 24731),

Gene: DaWorst_26 Start: 24797, Stop: 25621, Start Num: 2

Candidate Starts for DaWorst_26:

(Start: 2 @24797 has 166 MA's), (13, 24845), (15, 24866), (45, 25238),

Gene: DaddyRickover_24 Start: 24437, Stop: 25261, Start Num: 2

Candidate Starts for DaddyRickover_24:

(1, 24377), (Start: 2 @24437 has 166 MA's), (13, 24485), (20, 24551), (45, 24878),

Gene: Daenerys_24 Start: 24264, Stop: 25088, Start Num: 2

Candidate Starts for Daenerys_24:

(1, 24204), (Start: 2 @24264 has 166 MA's), (13, 24312), (20, 24378), (45, 24705),

Gene: DarthPhader_8 Start: 5319, Stop: 6242, Start Num: 2

Candidate Starts for DarthPhader_8:

(Start: 2 @5319 has 166 MA's), (37, 5628), (40, 5649),

Gene: Deb65_24 Start: 24261, Stop: 25085, Start Num: 2

Candidate Starts for Deb65_24:

(1, 24201), (Start: 2 @24261 has 166 MA's), (13, 24309), (45, 24702),

Gene: DillTech15_24 Start: 24302, Stop: 25108, Start Num: 3

Candidate Starts for DillTech15_24:

(1, 24242), (Start: 3 @24302 has 32 MA's), (13, 24350), (15, 24371), (20, 24416), (22, 24443), (26, 24479), (28, 24500), (29, 24506), (66, 24956),

Gene: DirtMcgirt_25 Start: 24087, Stop: 24911, Start Num: 2

Candidate Starts for DirtMcgirt_25:

(Start: 2 @24087 has 166 MA's), (13, 24135), (17, 24168), (20, 24201), (45, 24528), (66, 24756),

Gene: DocMcStuffins_26 Start: 24858, Stop: 25682, Start Num: 2

Candidate Starts for DocMcStuffins_26:

(1, 24798), (Start: 2 @24858 has 166 MA's), (13, 24906), (17, 24939), (20, 24972), (45, 25299),

Gene: Donkeykong_24 Start: 24440, Stop: 25264, Start Num: 2

Candidate Starts for Donkeykong_24:

(1, 24380), (Start: 2 @24440 has 166 MA's), (13, 24488), (20, 24554), (45, 24881),

Gene: Doomphist_24 Start: 24402, Stop: 25211, Start Num: 3

Candidate Starts for Doomphist_24:

(1, 24342), (Start: 3 @24402 has 32 MA's), (13, 24450), (17, 24483), (20, 24516), (22, 24543), (60, 24945), (66, 25056),

Gene: Dorothy_24 Start: 24222, Stop: 25046, Start Num: 2

Candidate Starts for Dorothy_24:

(1, 24162), (Start: 2 @24222 has 166 MA's), (13, 24270), (17, 24303), (20, 24336), (45, 24663),

Gene: DosHalletts_25 Start: 24377, Stop: 25201, Start Num: 2

Candidate Starts for DosHalletts_25:

(1, 24317), (Start: 2 @24377 has 166 MA's), (8, 24404), (13, 24425), (17, 24458), (20, 24491), (45, 24818),

Gene: DotProduct_24 Start: 24269, Stop: 25078, Start Num: 3

Candidate Starts for DotProduct_24:

(Start: 3 @24269 has 32 MA's), (13, 24317), (17, 24350), (20, 24383), (22, 24410), (60, 24812), (66, 24923),

Gene: Doug_25 Start: 24814, Stop: 25638, Start Num: 2

Candidate Starts for Doug_25:

(1, 24754), (Start: 2 @24814 has 166 MA's), (13, 24862), (17, 24895), (20, 24928), (45, 25255),

Gene: DrFeelGood_34 Start: 28437, Stop: 29240, Start Num: 2

Candidate Starts for DrFeelGood_34:

(Start: 2 @28437 has 166 MA's), (Start: 12 @28473 has 1 MA's), (19, 28515), (25, 28602), (45, 28857), (51, 28908),

Gene: Drago_25 Start: 24086, Stop: 24910, Start Num: 2

Candidate Starts for Drago_25:

(1, 24026), (Start: 2 @24086 has 166 MA's), (13, 24134), (20, 24200), (45, 24527),

Gene: DreamCatcher_38 Start: 29392, Stop: 30195, Start Num: 2

Candidate Starts for DreamCatcher_38:

(Start: 2 @29392 has 166 MA's), (Start: 12 @29428 has 1 MA's), (19, 29470), (45, 29812), (51, 29863),

Gene: Dreamboat_36 Start: 27996, Stop: 28784, Start Num: 10

Candidate Starts for Dreamboat_36:

(Start: 10 @27996 has 32 MA's), (Start: 12 @28002 has 1 MA's), (16, 28038), (36, 28296), (45, 28401), (51, 28452), (66, 28629),

Gene: Duke13_42 Start: 36667, Stop: 37473, Start Num: 3

Candidate Starts for Duke13_42:

(1, 36607), (Start: 3 @36667 has 32 MA's), (13, 36715), (17, 36748), (20, 36781), (27, 36850), (47, 37111), (49, 37117), (66, 37321), (77, 37468),

Gene: Dulcie_34 Start: 27688, Stop: 28491, Start Num: 2

Candidate Starts for Dulcie_34:

(Start: 2 @27688 has 166 MA's), (Start: 12 @27724 has 1 MA's), (19, 27766), (25, 27853), (45, 28108),

Gene: Dussy_36 Start: 28258, Stop: 29046, Start Num: 10

Candidate Starts for Dussy_36:

(Start: 10 @28258 has 32 MA's), (Start: 12 @28264 has 1 MA's), (16, 28300), (36, 28558), (45, 28663), (50, 28690), (51, 28714), (66, 28891),

Gene: Dynamix_36 Start: 28070, Stop: 28879, Start Num: 2

Candidate Starts for Dynamix_36:

(Start: 2 @28070 has 166 MA's), (Start: 12 @28106 has 1 MA's), (19, 28148), (25, 28235), (45, 28490), (51, 28541),

Gene: Eish_24 Start: 24401, Stop: 25225, Start Num: 2

Candidate Starts for Eish_24:

(1, 24341), (Start: 2 @24401 has 166 MA's), (13, 24449), (17, 24482), (20, 24515), (45, 24842), (66, 25070),

Gene: Emma_24 Start: 24316, Stop: 25299, Start Num: 2

Candidate Starts for Emma_24:

(1, 24256), (Start: 2 @24316 has 166 MA's), (13, 24364), (28, 24529), (37, 24658), (49, 24784), (78, 25228),

Gene: Empress_25 Start: 25613, Stop: 26437, Start Num: 2

Candidate Starts for Empress_25:

(1, 25553), (Start: 2 @25613 has 166 MA's), (13, 25661), (45, 26054),

Gene: Enby_25 Start: 24086, Stop: 24910, Start Num: 2

Candidate Starts for Enby_25:

(1, 24026), (Start: 2 @24086 has 166 MA's), (13, 24134), (20, 24200), (45, 24527),

Gene: Eradicator_24 Start: 24309, Stop: 25133, Start Num: 2

Candidate Starts for Eradicator_24:

(1, 24249), (Start: 2 @24309 has 166 MA's), (13, 24357), (20, 24423), (45, 24750),

Gene: Euphoria_35 Start: 28029, Stop: 28874, Start Num: 10

Candidate Starts for Euphoria_35:

(Start: 10 @28029 has 32 MA's), (Start: 12 @28035 has 1 MA's), (16, 28071), (36, 28389), (45, 28494), (50, 28521), (51, 28545), (66, 28719),

Gene: Eyeball_35 Start: 27834, Stop: 28622, Start Num: 10

Candidate Starts for Eyeball_35:

(Start: 10 @27834 has 32 MA's), (Start: 12 @27840 has 1 MA's), (16, 27876), (36, 28134), (45, 28239), (50, 28266), (51, 28290), (66, 28467),

Gene: Fajezeel_37 Start: 28339, Stop: 29142, Start Num: 2

Candidate Starts for Fajezeel_37:

(Start: 2 @28339 has 166 MA's), (Start: 12 @28375 has 1 MA's), (19, 28417), (25, 28504), (45, 28759), (51, 28810),

Gene: Fancypants_24 Start: 24269, Stop: 25093, Start Num: 2

Candidate Starts for Fancypants_24:

(1, 24209), (Start: 2 @24269 has 166 MA's), (13, 24317), (20, 24383), (45, 24710), (60, 24827),

Gene: Fastidio_24 Start: 24233, Stop: 25216, Start Num: 2

Candidate Starts for Fastidio_24:

(1, 24173), (Start: 2 @24233 has 166 MA's), (13, 24281), (15, 24302), (24, 24404), (25, 24419), (28, 24446), (37, 24575), (49, 24701), (78, 25145),

Gene: Fenn_36 Start: 29657, Stop: 30460, Start Num: 2

Candidate Starts for Fenn_36:

(Start: 2 @29657 has 166 MA's), (Start: 12 @29693 has 1 MA's), (19, 29735), (45, 30077), (50, 30104), (51, 30128), (53, 30143),

Gene: Filuzino_24 Start: 24259, Stop: 25083, Start Num: 2

Candidate Starts for Filuzino_24:

(1, 24199), (Start: 2 @24259 has 166 MA's), (13, 24307), (20, 24373), (45, 24700),

Gene: Florinda_24 Start: 24279, Stop: 25103, Start Num: 2

Candidate Starts for Florinda_24:

(Start: 2 @24279 has 166 MA's), (13, 24327), (20, 24393), (45, 24720),

Gene: Forsytheast_35 Start: 28268, Stop: 29056, Start Num: 10

Candidate Starts for Forsytheast_35:

(Start: 10 @28268 has 32 MA's), (Start: 12 @28274 has 1 MA's), (16, 28310), (36, 28568), (45, 28673), (50, 28700), (51, 28724), (66, 28901),

Gene: FreddyB_24 Start: 24457, Stop: 25281, Start Num: 2

Candidate Starts for FreddyB_24:

(Start: 2 @24457 has 166 MA's), (13, 24505), (17, 24538), (20, 24571), (25, 24643), (45, 24898), (51, 24949),

Gene: GMonster_34 Start: 27408, Stop: 28217, Start Num: 2

Candidate Starts for GMonster_34:

(Start: 2 @27408 has 166 MA's), (Start: 12 @27444 has 1 MA's), (19, 27486), (25, 27573), (45, 27828), (51, 27879),

Gene: GUmbie_24 Start: 24269, Stop: 25093, Start Num: 2

Candidate Starts for GUmbie_24:

(Start: 2 @24269 has 166 MA's), (13, 24317), (17, 24350), (20, 24383), (45, 24710), (66, 24938),

Gene: Gaia_27 Start: 26804, Stop: 27628, Start Num: 2

Candidate Starts for Gaia_27:

(1, 26744), (Start: 2 @26804 has 166 MA's), (13, 26852), (17, 26885), (20, 26918), (25, 26990), (45, 27245), (66, 27473),

Gene: Galactic_24 Start: 24262, Stop: 25068, Start Num: 3

Candidate Starts for Galactic_24:

(1, 24202), (Start: 3 @24262 has 32 MA's), (13, 24310), (22, 24403), (47, 24706), (49, 24712), (66, 24916), (77, 25063),

Gene: Gandalf20_36 Start: 28867, Stop: 29670, Start Num: 2

Candidate Starts for Gandalf20_36:

(Start: 2 @28867 has 166 MA's), (Start: 12 @28903 has 1 MA's), (19, 28945), (25, 29032), (45, 29287),

Gene: Gandalph_24 Start: 24362, Stop: 25186, Start Num: 2

Candidate Starts for Gandalph_24:

(1, 24302), (Start: 2 @24362 has 166 MA's), (13, 24410), (17, 24443), (20, 24476), (45, 24803), (66, 25031),

Gene: Geralt_24 Start: 24260, Stop: 25084, Start Num: 2

Candidate Starts for Geralt_24:

(1, 24200), (Start: 2 @24260 has 166 MA's), (13, 24308), (45, 24701),

Gene: GigiOuiOui_24 Start: 24393, Stop: 25217, Start Num: 2

Candidate Starts for GigiOuiOui_24:

(Start: 2 @24393 has 166 MA's), (13, 24441), (17, 24474), (20, 24507), (45, 24834), (66, 25062),

Gene: Girafales_25 Start: 24087, Stop: 24911, Start Num: 2

Candidate Starts for Girafales_25:

(Start: 2 @24087 has 166 MA's), (13, 24135), (20, 24201), (45, 24528),

Gene: Girr_24 Start: 24239, Stop: 25063, Start Num: 2

Candidate Starts for Girr_24:

(1, 24179), (Start: 2 @24239 has 166 MA's), (13, 24287), (45, 24680),

Gene: Gompeii16_35 Start: 28524, Stop: 29327, Start Num: 2

Candidate Starts for Gompeii16_35:

(Start: 2 @28524 has 166 MA's), (Start: 12 @28560 has 1 MA's), (19, 28602), (25, 28689), (45, 28944), (51, 28995),

Gene: Gorge_24 Start: 24424, Stop: 25248, Start Num: 2

Candidate Starts for Gorge_24:

(1, 24364), (Start: 2 @24424 has 166 MA's), (13, 24472), (17, 24505), (20, 24538), (25, 24610), (45, 24865),

Gene: Graduation_37 Start: 28751, Stop: 29539, Start Num: 10

Candidate Starts for Graduation_37:

(Start: 10 @28751 has 32 MA's), (Start: 12 @28757 has 1 MA's), (16, 28793), (36, 29051), (45, 29156), (50, 29183), (51, 29207), (66, 29384),

Gene: GrecoEtereo_37 Start: 28838, Stop: 29623, Start Num: 10

Candidate Starts for GrecoEtereo_37:

(Start: 10 @28838 has 32 MA's), (Start: 12 @28844 has 1 MA's), (16, 28880), (36, 29138), (45, 29243), (50, 29270), (51, 29294), (66, 29468),

Gene: Greg_37 Start: 28339, Stop: 29142, Start Num: 2

Candidate Starts for Greg_37:

(Start: 2 @28339 has 166 MA's), (Start: 12 @28375 has 1 MA's), (19, 28417), (25, 28504), (45, 28759), (51, 28810),

Gene: Hades_24 Start: 24354, Stop: 25178, Start Num: 2

Candidate Starts for Hades_24:

(1, 24294), (Start: 2 @24354 has 166 MA's), (45, 24795),

Gene: Hamulus_24 Start: 24276, Stop: 25241, Start Num: 3

Candidate Starts for Hamulus_24:

(1, 24213), (Start: 3 @24276 has 32 MA's), (13, 24324), (17, 24357), (20, 24390), (28, 24489), (37, 24618), (48, 24744),

Gene: Harley_24 Start: 24258, Stop: 25040, Start Num: 3

Candidate Starts for Harley_24:

(Start: 3 @24258 has 32 MA's), (13, 24306), (20, 24372), (47, 24690), (55, 24744),

Gene: Hermia_38 Start: 29555, Stop: 30343, Start Num: 10

Candidate Starts for Hermia_38:

(Start: 10 @29555 has 32 MA's), (Start: 12 @29561 has 1 MA's), (16, 29597), (36, 29855), (45, 29960), (66, 30188),

Gene: HermioneGrange_35 Start: 27948, Stop: 28751, Start Num: 2

Candidate Starts for HermioneGrange_35:

(Start: 2 @27948 has 166 MA's), (Start: 12 @27984 has 1 MA's), (19, 28026), (25, 28113), (45, 28368),

Gene: Hope4ever_35 Start: 28441, Stop: 29229, Start Num: 10

Candidate Starts for Hope4ever_35:

(Start: 10 @28441 has 32 MA's), (Start: 12 @28447 has 1 MA's), (16, 28483), (36, 28741), (45, 28846), (50, 28873), (51, 28897), (66, 29074),

Gene: ILeeKay_37 Start: 28205, Stop: 28993, Start Num: 10

Candidate Starts for ILeeKay_37:

(Start: 10 @28205 has 32 MA's), (Start: 12 @28211 has 1 MA's), (16, 28247), (36, 28505), (45, 28610), (50, 28637), (51, 28661), (66, 28838),

Gene: Ibhubesi_24 Start: 24265, Stop: 25047, Start Num: 3

Candidate Starts for Ibhubesi_24:

(Start: 3 @24265 has 32 MA's), (13, 24313), (20, 24379), (47, 24697), (55, 24751),

Gene: Ichabod_36 Start: 28224, Stop: 29027, Start Num: 2

Candidate Starts for Ichabod_36:

(Start: 2 @28224 has 166 MA's), (Start: 12 @28260 has 1 MA's), (19, 28302), (25, 28389), (45, 28644), (51, 28695),

Gene: Inventum_24 Start: 24395, Stop: 25219, Start Num: 2

Candidate Starts for Inventum_24:

(1, 24335), (Start: 2 @24395 has 166 MA's), (13, 24443), (45, 24836),

Gene: IrishSherpFalk_25 Start: 25625, Stop: 26431, Start Num: 3

Candidate Starts for IrishSherpFalk_25:

(1, 25565), (Start: 3 @25625 has 32 MA's), (13, 25673), (17, 25706), (20, 25739), (47, 26069), (49, 26075), (66, 26279), (77, 26426),

Gene: James_24 Start: 24420, Stop: 25244, Start Num: 2

Candidate Starts for James_24:

(1, 24360), (Start: 2 @24420 has 166 MA's), (13, 24468), (17, 24501), (20, 24534), (25, 24606), (45, 24861),

Gene: Jacob_24 Start: 24455, Stop: 25279, Start Num: 2

Candidate Starts for Jacob_24:

(1, 24395), (Start: 2 @24455 has 166 MA's), (13, 24503), (17, 24536), (20, 24569), (25, 24641), (45, 24896),

Gene: Jasper_36 Start: 27882, Stop: 28670, Start Num: 10

Candidate Starts for Jasper_36:

(Start: 10 @27882 has 32 MA's), (Start: 12 @27888 has 1 MA's), (16, 27924), (36, 28182), (45, 28287), (50, 28314), (51, 28338), (66, 28515),

Gene: Jerm2_36 Start: 28214, Stop: 29017, Start Num: 2

Candidate Starts for Jerm2_36:

(Start: 2 @28214 has 166 MA's), (Start: 12 @28250 has 1 MA's), (19, 28292), (25, 28379), (45, 28634),

Gene: Jinglebell_23 Start: 24502, Stop: 25308, Start Num: 3

Candidate Starts for Jinglebell_23:

(Start: 3 @24502 has 32 MA's), (13, 24550), (17, 24583), (20, 24616), (28, 24700), (29, 24706), (33, 24805), (49, 24952), (60, 25045), (66, 25156),

Gene: JoeyJr_24 Start: 24432, Stop: 25256, Start Num: 2

Candidate Starts for JoeyJr_24:

(1, 24372), (Start: 2 @24432 has 166 MA's), (13, 24480), (20, 24546), (45, 24873),

Gene: Jorgensen_35 Start: 27931, Stop: 28722, Start Num: 2

Candidate Starts for Jorgensen_35:

(Start: 2 @27931 has 166 MA's), (Start: 12 @27967 has 1 MA's), (19, 28009), (22, 28060), (26, 28096), (60, 28459),

Gene: JuliaChild_37 Start: 28576, Stop: 29454, Start Num: 4

Candidate Starts for JuliaChild_37:

(Start: 4 @28576 has 5 MA's), (13, 28612), (18, 28654), (25, 28741), (28, 28768), (37, 28897), (49, 29008), (59, 29107), (78, 29383),

Gene: Juniper1_24 Start: 24259, Stop: 25068, Start Num: 3

Candidate Starts for Juniper1_24:

(1, 24196), (Start: 3 @24259 has 32 MA's), (Start: 5 @24265 has 1 MA's), (13, 24307), (20, 24373), (22, 24400), (28, 24457), (29, 24463), (33, 24562), (60, 24802), (66, 24913),

Gene: KSSJEB_35 Start: 27824, Stop: 28633, Start Num: 2

Candidate Starts for KSSJEB_35:

(Start: 2 @27824 has 166 MA's), (Start: 12 @27860 has 1 MA's), (19, 27902), (45, 28244), (51, 28295),

Gene: Kanely_36 Start: 28634, Stop: 29578, Start Num: 2

Candidate Starts for Kanely_36:

(Start: 2 @28634 has 166 MA's), (13, 28670), (18, 28712), (37, 28955), (48, 29081),

Gene: Karhdo_24 Start: 24395, Stop: 25219, Start Num: 2

Candidate Starts for Karhdo_24:

(1, 24335), (Start: 2 @24395 has 166 MA's), (13, 24443), (17, 24476), (20, 24509), (45, 24836),

Gene: Kenmech_38 Start: 29345, Stop: 30133, Start Num: 10

Candidate Starts for Kenmech_38:

(Start: 10 @29345 has 32 MA's), (Start: 12 @29351 has 1 MA's), (16, 29387), (36, 29645), (45, 29750), (50, 29777), (51, 29801), (66, 29978),

Gene: Killigrew_33 Start: 27558, Stop: 28355, Start Num: 2

Candidate Starts for Killigrew_33:

(Start: 2 @27558 has 166 MA's), (Start: 12 @27594 has 1 MA's), (19, 27636), (21, 27684), (22, 27687), (38, 27888), (45, 27972), (50, 27999), (51, 28023),

Gene: Kimberlium_26 Start: 25387, Stop: 26211, Start Num: 2

Candidate Starts for Kimberlium_26:

(1, 25327), (Start: 2 @25387 has 166 MA's), (13, 25435), (20, 25501), (45, 25828), (66, 26056),

Gene: KingMidas_25 Start: 25564, Stop: 26388, Start Num: 2

Candidate Starts for KingMidas_25:

(1, 25504), (Start: 2 @25564 has 166 MA's), (13, 25612), (20, 25678), (45, 26005),

Gene: Krakatau_25 Start: 24963, Stop: 25769, Start Num: 3

Candidate Starts for Krakatau_25:

(1, 24903), (Start: 3 @24963 has 32 MA's), (13, 25011), (49, 25413), (60, 25506), (66, 25617),

Gene: Lamina13_35 Start: 27644, Stop: 28477, Start Num: 2

Candidate Starts for Lamina13_35:

(Start: 2 @27644 has 166 MA's), (Start: 12 @27680 has 1 MA's), (19, 27722), (28, 27836), (34, 27950), (37, 27965), (38, 27983), (47, 28094), (58, 28187), (69, 28337), (70, 28346), (72, 28367), (73, 28370),

Gene: Leozinho_25 Start: 24109, Stop: 24933, Start Num: 2

Candidate Starts for Leozinho_25:

(1, 24049), (Start: 2 @24109 has 166 MA's), (13, 24157), (17, 24190), (20, 24223), (45, 24550),

Gene: Leperchaun_24 Start: 24336, Stop: 25160, Start Num: 2

Candidate Starts for Leperchaun_24:

(1, 24276), (Start: 2 @24336 has 166 MA's), (13, 24384), (20, 24450), (45, 24777),

Gene: Licorice_37 Start: 29036, Stop: 29821, Start Num: 10

Candidate Starts for Licorice_37:

(Start: 10 @29036 has 32 MA's), (Start: 12 @29042 has 1 MA's), (16, 29078), (36, 29336), (45, 29441), (50, 29468), (51, 29492),

Gene: LilMoolah_24 Start: 24554, Stop: 25378, Start Num: 2

Candidate Starts for LilMoolah_24:

(1, 24494), (Start: 2 @24554 has 166 MA's), (8, 24581), (13, 24602), (17, 24635), (20, 24668), (45, 24995),

Gene: LittleE_45 Start: 37858, Stop: 38664, Start Num: 3

Candidate Starts for LittleE_45:

(1, 37798), (Start: 3 @37858 has 32 MA's), (13, 37906), (20, 37972), (21, 37996), (22, 37999), (47, 38302), (49, 38308), (66, 38512), (77, 38659),

Gene: Lizziana_24 Start: 24429, Stop: 25253, Start Num: 2

Candidate Starts for Lizziana_24:

(Start: 2 @24429 has 166 MA's), (13, 24477), (17, 24510), (20, 24543), (25, 24615), (45, 24870),

Gene: Llama_24 Start: 24502, Stop: 25308, Start Num: 3

Candidate Starts for Llama_24:

(Start: 3 @24502 has 32 MA's), (13, 24550), (17, 24583), (20, 24616), (28, 24700), (29, 24706), (33, 24805), (49, 24952), (60, 25045), (66, 25156),

Gene: Llij_24 Start: 24250, Stop: 25074, Start Num: 2

Candidate Starts for Llij_24:

(1, 24190), (Start: 2 @24250 has 166 MA's), (13, 24298), (20, 24364), (45, 24691),

Gene: Lockley_36 Start: 27986, Stop: 28873, Start Num: 4

Candidate Starts for Lockley_36:

(Start: 4 @27986 has 5 MA's), (13, 28022), (18, 28064), (25, 28151), (28, 28178), (33, 28286), (34, 28292), (37, 28307), (46, 28406), (47, 28418), (54, 28481),

Gene: Lopton_36 Start: 29446, Stop: 30216, Start Num: 2

Candidate Starts for Lopton_36:

(Start: 2 @29446 has 166 MA's), (Start: 12 @29482 has 1 MA's), (19, 29524), (45, 29866), (51, 29917),

Gene: Lorde_25 Start: 24086, Stop: 24910, Start Num: 2

Candidate Starts for Lorde_25:

(1, 24026), (Start: 2 @24086 has 166 MA's), (13, 24134), (20, 24200), (45, 24527),

Gene: LunaBlu_25 Start: 24345, Stop: 25313, Start Num: 2

Candidate Starts for LunaBlu_25:

(1, 24285), (Start: 2 @24345 has 166 MA's), (13, 24393), (17, 24426), (37, 24687),

Gene: Mahavrat_24 Start: 24254, Stop: 25063, Start Num: 3

Candidate Starts for Mahavrat_24:

(Start: 3 @24254 has 32 MA's), (13, 24302), (17, 24335), (20, 24368), (22, 24395), (28, 24452), (29, 24458), (33, 24557), (60, 24797), (66, 24908),

Gene: Manatee_36 Start: 27769, Stop: 28572, Start Num: 2

Candidate Starts for Manatee_36:

(Start: 2 @27769 has 166 MA's), (Start: 12 @27805 has 1 MA's), (19, 27847), (25, 27934), (45, 28189), (51, 28240),

Gene: Mantra_24 Start: 24362, Stop: 25186, Start Num: 2

Candidate Starts for Mantra_24:

(Start: 2 @24362 has 166 MA's), (13, 24410), (17, 24443), (20, 24476), (45, 24803), (66, 25031),

Gene: Maravista_24 Start: 24211, Stop: 25035, Start Num: 2

Candidate Starts for Maravista_24:

(1, 24151), (Start: 2 @24211 has 166 MA's), (13, 24259), (20, 24325), (45, 24652),

Gene: Marker_25 Start: 24115, Stop: 24939, Start Num: 2

Candidate Starts for Marker_25:

(1, 24055), (Start: 2 @24115 has 166 MA's), (13, 24163), (17, 24196), (45, 24556),

Gene: Marsha_35 Start: 28838, Stop: 29779, Start Num: 4

Candidate Starts for Marsha_35:

(Start: 4 @28838 has 5 MA's), (13, 28874), (18, 28916), (25, 29003), (28, 29030), (35, 29153), (37, 29159), (49, 29270), (59, 29369), (64, 29435), (78, 29708),

Gene: Martik_24 Start: 24456, Stop: 25280, Start Num: 2

Candidate Starts for Martik_24:

(1, 24396), (Start: 2 @24456 has 166 MA's), (8, 24483), (13, 24504), (17, 24537), (20, 24570), (45, 24897),

Gene: MaryBeth_35 Start: 28196, Stop: 28984, Start Num: 10

Candidate Starts for MaryBeth_35:

(Start: 10 @28196 has 32 MA's), (Start: 12 @28202 has 1 MA's), (16, 28238), (36, 28496), (45, 28601), (50, 28628), (51, 28652), (66, 28829),

Gene: Mattes_24 Start: 24420, Stop: 25244, Start Num: 2

Candidate Starts for Mattes_24:

(1, 24360), (Start: 2 @24420 has 166 MA's), (13, 24468), (17, 24501), (20, 24534), (25, 24606), (45, 24861),

Gene: McGuire_36 Start: 28061, Stop: 28864, Start Num: 2

Candidate Starts for McGuire_36:

(Start: 2 @28061 has 166 MA's), (Start: 12 @28097 has 1 MA's), (19, 28139), (25, 28226), (45, 28481), (51, 28532),

Gene: MetalQZJ_35 Start: 28196, Stop: 28984, Start Num: 10

Candidate Starts for MetalQZJ_35:

(Start: 10 @28196 has 32 MA's), (Start: 12 @28202 has 1 MA's), (16, 28238), (36, 28496), (45, 28601), (50, 28628), (51, 28652), (66, 28829),

Gene: Michley_35 Start: 27900, Stop: 28703, Start Num: 2

Candidate Starts for Michley_35:

(Start: 2 @27900 has 166 MA's), (Start: 12 @27936 has 1 MA's), (19, 27978), (25, 28065), (45, 28320), (51, 28371),

Gene: Misha28_25 Start: 24136, Stop: 24960, Start Num: 2

Candidate Starts for Misha28_25:

(1, 24076), (Start: 2 @24136 has 166 MA's), (13, 24184), (20, 24250), (45, 24577),

Gene: MisterCuddles_24 Start: 24239, Stop: 25063, Start Num: 2

Candidate Starts for MisterCuddles_24:

(1, 24179), (Start: 2 @24239 has 166 MA's), (13, 24287), (45, 24680),

Gene: Mkhuseli_36 Start: 28098, Stop: 28901, Start Num: 2

Candidate Starts for Mkhuseli_36:

(Start: 2 @28098 has 166 MA's), (Start: 12 @28134 has 1 MA's), (19, 28176), (25, 28263), (45, 28518), (51, 28569),

Gene: Modragons_24 Start: 24346, Stop: 25152, Start Num: 3

Candidate Starts for Modragons_24:

(Start: 3 @24346 has 32 MA's), (13, 24394), (17, 24427), (20, 24460), (28, 24544), (29, 24550), (33, 24649), (49, 24796), (60, 24889), (66, 25000),

Gene: Moonbeam_25 Start: 24757, Stop: 25740, Start Num: 2

Candidate Starts for Moonbeam_25:

(1, 24697), (Start: 2 @24757 has 166 MA's), (13, 24805), (25, 24943), (28, 24970), (37, 25099), (49, 25225), (78, 25669),

Gene: Moose_35 Start: 28268, Stop: 29056, Start Num: 10

Candidate Starts for Moose_35:

(Start: 10 @28268 has 32 MA's), (Start: 12 @28274 has 1 MA's), (16, 28310), (36, 28568), (45, 28673), (50, 28700), (51, 28724), (66, 28901),

Gene: Mova_25 Start: 24116, Stop: 24940, Start Num: 2

Candidate Starts for Mova_25:

(1, 24056), (Start: 2 @24116 has 166 MA's), (13, 24164), (20, 24230), (45, 24557),

Gene: MrGordo_35 Start: 27763, Stop: 28566, Start Num: 2

Candidate Starts for MrGordo_35:

(Start: 2 @27763 has 166 MA's), (Start: 12 @27799 has 1 MA's), (19, 27841), (25, 27928), (45, 28183), (51, 28234),

Gene: Mryolo_33 Start: 27800, Stop: 28582, Start Num: 12

Candidate Starts for Mryolo_33:

(Start: 10 @27794 has 32 MA's), (Start: 12 @27800 has 1 MA's), (16, 27836), (36, 28094), (45, 28199), (50, 28226), (51, 28250), (66, 28427),

Gene: MulchExplorer_27 Start: 25387, Stop: 26211, Start Num: 2

Candidate Starts for MulchExplorer_27:

(1, 25327), (Start: 2 @25387 has 166 MA's), (13, 25435), (20, 25501), (45, 25828), (66, 26056),

Gene: Museum_37 Start: 28107, Stop: 28910, Start Num: 2

Candidate Starts for Museum_37:

(Start: 2 @28107 has 166 MA's), (Start: 12 @28143 has 1 MA's), (19, 28185), (25, 28272), (45, 28527),

Gene: Naira_36 Start: 29704, Stop: 30507, Start Num: 2

Candidate Starts for Naira_36:

(Start: 2 @29704 has 166 MA's), (Start: 12 @29740 has 1 MA's), (19, 29782), (45, 30124), (50, 30151), (51, 30175), (53, 30190),

Gene: Nebkiss_28 Start: 26805, Stop: 27629, Start Num: 2

Candidate Starts for Nebkiss_28:

(1, 26745), (Start: 2 @26805 has 166 MA's), (13, 26853), (17, 26886), (20, 26919), (25, 26991), (45, 27246),

Gene: Nhonho_35 Start: 28264, Stop: 29211, Start Num: 2

Candidate Starts for Nhonho_35:

(Start: 2 @28264 has 166 MA's), (13, 28300), (18, 28342), (37, 28585), (48, 28711), (76, 29086),

Gene: Nimbo_24 Start: 24268, Stop: 25092, Start Num: 3

Candidate Starts for Nimbo_24:

(1, 24205), (Start: 3 @24268 has 32 MA's), (13, 24316), (45, 24709),

Gene: Nitzel_25 Start: 24998, Stop: 25822, Start Num: 2

Candidate Starts for Nitzel_25:

(1, 24938), (Start: 2 @24998 has 166 MA's), (13, 25046), (17, 25079), (20, 25112), (45, 25439),

Gene: Nivrat_24 Start: 24428, Stop: 25252, Start Num: 2

Candidate Starts for Nivrat_24:

(1, 24368), (Start: 2 @24428 has 166 MA's), (8, 24455), (13, 24476), (17, 24509), (20, 24542), (45, 24869),

Gene: NormanBulbieJr_24 Start: 24443, Stop: 25267, Start Num: 2

Candidate Starts for NormanBulbieJr_24:

(1, 24383), (Start: 2 @24443 has 166 MA's), (8, 24470), (13, 24491), (17, 24524), (20, 24557), (45, 24884),

Gene: Norz_37 Start: 28914, Stop: 29747, Start Num: 2

Candidate Starts for Norz_37:

(Start: 2 @28914 has 166 MA's), (Start: 12 @28950 has 1 MA's), (19, 28992), (28, 29106), (34, 29220), (37, 29235), (38, 29253), (47, 29364), (58, 29457), (69, 29607), (70, 29616), (72, 29637), (73, 29640),

Gene: OfUltron_24 Start: 24502, Stop: 25308, Start Num: 3

Candidate Starts for OfUltron_24:

(Start: 3 @24502 has 32 MA's), (13, 24550), (17, 24583), (20, 24616), (28, 24700), (29, 24706), (33, 24805), (49, 24952), (60, 25045), (66, 25156),

Gene: Oksu_25 Start: 24347, Stop: 25153, Start Num: 3

Candidate Starts for Oksu_25:

(Start: 3 @24347 has 32 MA's), (13, 24395), (17, 24428), (20, 24461), (28, 24545), (29, 24551), (33, 24650), (49, 24797), (60, 24890), (66, 25001),

Gene: OldBen_24 Start: 24234, Stop: 25058, Start Num: 2

Candidate Starts for OldBen_24:

(1, 24174), (Start: 2 @24234 has 166 MA's), (13, 24282), (45, 24675),

Gene: OlympiaSaint_24 Start: 24643, Stop: 25467, Start Num: 2

Candidate Starts for OlympiaSaint_24:

(Start: 2 @24643 has 166 MA's), (13, 24691), (17, 24724), (20, 24757), (25, 24829), (45, 25084), (51, 25135),

Gene: Optimus_43 Start: 37661, Stop: 38467, Start Num: 3

Candidate Starts for Optimus_43:

(1, 37601), (Start: 3 @37661 has 32 MA's), (13, 37709), (17, 37742), (20, 37775), (21, 37799), (22, 37802), (47, 38105), (49, 38111), (66, 38315), (77, 38462),

Gene: OwlsT2W_26 Start: 24714, Stop: 25538, Start Num: 2

Candidate Starts for OwlsT2W_26:

(1, 24654), (Start: 2 @24714 has 166 MA's), (13, 24762), (20, 24828), (45, 25155),

Gene: PHappiness_24 Start: 24242, Stop: 25066, Start Num: 2

Candidate Starts for PHappiness_24:

(1, 24182), (Start: 2 @24242 has 166 MA's), (13, 24290), (20, 24356), (45, 24683),

Gene: PMC_24 Start: 24250, Stop: 25074, Start Num: 2

Candidate Starts for PMC_24:

(1, 24190), (Start: 2 @24250 has 166 MA's), (13, 24298), (20, 24364), (45, 24691),

Gene: Pacc40_24 Start: 24432, Stop: 25256, Start Num: 2

Candidate Starts for Pacc40_24:

(1, 24372), (Start: 2 @24432 has 166 MA's), (13, 24480), (20, 24546), (45, 24873),

Gene: Papez_37 Start: 29749, Stop: 30537, Start Num: 10

Candidate Starts for Papez_37:

(Start: 10 @29749 has 32 MA's), (Start: 12 @29755 has 1 MA's), (16, 29791), (36, 30049), (45, 30154), (50, 30181), (51, 30205), (66, 30382),

Gene: Pari_36 Start: 27780, Stop: 28583, Start Num: 2

Candidate Starts for Pari_36:

(Start: 2 @27780 has 166 MA's), (Start: 12 @27816 has 1 MA's), (19, 27858), (25, 27945), (45, 28200),

Gene: Parliament_34 Start: 28115, Stop: 28948, Start Num: 2

Candidate Starts for Parliament_34:

(Start: 2 @28115 has 166 MA's), (Start: 12 @28151 has 1 MA's), (19, 28193), (28, 28307), (34, 28421), (37, 28436), (38, 28454), (47, 28565), (58, 28658), (69, 28808), (70, 28817), (72, 28838), (73, 28841),

Gene: PascalRango_36 Start: 28083, Stop: 28892, Start Num: 2

Candidate Starts for PascalRango_36:

(Start: 2 @28083 has 166 MA's), (Start: 12 @28119 has 1 MA's), (19, 28161), (25, 28248), (45, 28503), (51, 28554),

Gene: PattyP_37 Start: 28316, Stop: 29119, Start Num: 2

Candidate Starts for PattyP_37:

(Start: 2 @28316 has 166 MA's), (Start: 12 @28352 has 1 MA's), (19, 28394), (25, 28481), (45, 28736),

Gene: Payneful_35 Start: 27564, Stop: 28526, Start Num: 4

Candidate Starts for Payneful_35:

(Start: 4 @27564 has 5 MA's), (13, 27600), (18, 27642), (28, 27756), (37, 27885), (49, 28011), (78, 28455),

Gene: Peterson_38 Start: 29965, Stop: 30759, Start Num: 10

Candidate Starts for Peterson_38:

(Start: 10 @29965 has 32 MA's),

Gene: Petp2012_37 Start: 28987, Stop: 29790, Start Num: 2

Candidate Starts for Petp2012_37:

(Start: 2 @28987 has 166 MA's), (Start: 12 @29023 has 1 MA's), (19, 29065), (25, 29152), (45, 29407),

Gene: Phasih_25 Start: 24806, Stop: 25630, Start Num: 2

Candidate Starts for Phasih_25:

(Start: 2 @24806 has 166 MA's), (13, 24854), (17, 24887), (20, 24920), (45, 25247), (66, 25475),

Gene: Phatniss_25 Start: 24767, Stop: 25591, Start Num: 2
Candidate Starts for Phatniss_25:
(1, 24707), (Start: 2 @24767 has 166 MA's), (13, 24815), (17, 24848), (20, 24881), (45, 25208),

Gene: PherrisBueller_36 Start: 27905, Stop: 28693, Start Num: 10
Candidate Starts for PherrisBueller_36:
(Start: 10 @27905 has 32 MA's), (Start: 12 @27911 has 1 MA's), (16, 27947), (36, 28205), (45, 28310), (51, 28361), (66, 28538),

Gene: PhesterPhotato_24 Start: 24286, Stop: 25092, Start Num: 3
Candidate Starts for PhesterPhotato_24:
(1, 24226), (Start: 3 @24286 has 32 MA's), (13, 24334), (22, 24427), (49, 24736), (60, 24829), (66, 24940), (77, 25087),

Gene: Philus_24 Start: 24266, Stop: 25090, Start Num: 2
Candidate Starts for Philus_24:
(1, 24206), (Start: 2 @24266 has 166 MA's), (13, 24314), (17, 24347), (20, 24380), (25, 24452), (45, 24707),

Gene: PinkPlastic_34 Start: 27834, Stop: 28637, Start Num: 2
Candidate Starts for PinkPlastic_34:
(Start: 2 @27834 has 166 MA's), (Start: 12 @27870 has 1 MA's), (19, 27912), (25, 27999), (45, 28254), (51, 28305),

Gene: Piper2020_26 Start: 24860, Stop: 25684, Start Num: 2
Candidate Starts for Piper2020_26:
(1, 24800), (Start: 2 @24860 has 166 MA's), (13, 24908), (20, 24974), (45, 25301),

Gene: Pippin_37 Start: 28398, Stop: 29201, Start Num: 2
Candidate Starts for Pippin_37:
(Start: 2 @28398 has 166 MA's), (Start: 12 @28434 has 1 MA's), (19, 28476), (25, 28563), (45, 28818), (51, 28869),

Gene: Plumbus_25 Start: 24094, Stop: 24918, Start Num: 2
Candidate Starts for Plumbus_25:
(1, 24034), (Start: 2 @24094 has 166 MA's), (8, 24121), (13, 24142), (17, 24175), (20, 24208), (45, 24535),

Gene: Poenanya_24 Start: 24402, Stop: 25211, Start Num: 3
Candidate Starts for Poenanya_24:
(1, 24342), (Start: 3 @24402 has 32 MA's), (13, 24450), (17, 24483), (20, 24516), (22, 24543), (60, 24945), (66, 25056),

Gene: Polka14_25 Start: 24804, Stop: 25628, Start Num: 2
Candidate Starts for Polka14_25:
(1, 24744), (Start: 2 @24804 has 166 MA's), (13, 24852), (17, 24885), (20, 24918), (45, 25245),

Gene: Priscilla_24 Start: 24457, Stop: 25281, Start Num: 2
Candidate Starts for Priscilla_24:
(Start: 2 @24457 has 166 MA's), (13, 24505), (17, 24538), (20, 24571), (25, 24643), (45, 24898), (51, 24949),

Gene: QuickMath_25 Start: 25611, Stop: 26435, Start Num: 2
Candidate Starts for QuickMath_25:
(1, 25551), (Start: 2 @25611 has 166 MA's), (13, 25659), (20, 25725), (45, 26052), (66, 26280),

Gene: Quico_25 Start: 24087, Stop: 24911, Start Num: 2
Candidate Starts for Quico_25:
(Start: 2 @24087 has 166 MA's), (13, 24135), (20, 24201), (45, 24528),

Gene: Ramsey_25 Start: 24297, Stop: 25121, Start Num: 2
Candidate Starts for Ramsey_25:
(1, 24237), (Start: 2 @24297 has 166 MA's), (13, 24345), (17, 24378), (20, 24411), (45, 24738),

Gene: RedBird_24 Start: 24225, Stop: 25031, Start Num: 3
Candidate Starts for RedBird_24:
(1, 24165), (Start: 3 @24225 has 32 MA's), (13, 24273), (20, 24339), (21, 24363), (22, 24366), (47, 24669), (49, 24675), (66, 24879), (77, 25026),

Gene: RidgeCB_35 Start: 27836, Stop: 28624, Start Num: 10
Candidate Starts for RidgeCB_35:
(Start: 10 @27836 has 32 MA's), (Start: 12 @27842 has 1 MA's), (16, 27878), (36, 28136), (45, 28241), (50, 28268), (51, 28292), (66, 28469),

Gene: Rita_24 Start: 24276, Stop: 25085, Start Num: 3
Candidate Starts for Rita_24:
(1, 24216), (Start: 3 @24276 has 32 MA's), (13, 24324), (20, 24390), (22, 24417), (28, 24474), (29, 24480), (33, 24579), (60, 24819), (66, 24930),

Gene: RitaG_24 Start: 24488, Stop: 25312, Start Num: 2
Candidate Starts for RitaG_24:
(1, 24428), (Start: 2 @24488 has 166 MA's), (13, 24536), (45, 24929),

Gene: Rockne_24 Start: 24250, Stop: 25074, Start Num: 2
Candidate Starts for Rockne_24:
(1, 24190), (Start: 2 @24250 has 166 MA's), (13, 24298), (20, 24364), (45, 24691),

Gene: RockyHorror_25 Start: 24122, Stop: 24946, Start Num: 2
Candidate Starts for RockyHorror_25:
(1, 24062), (Start: 2 @24122 has 166 MA's), (13, 24170), (20, 24236), (45, 24563), (76, 24929),

Gene: Rohr_36 Start: 28253, Stop: 29056, Start Num: 2
Candidate Starts for Rohr_36:
(Start: 2 @28253 has 166 MA's), (Start: 12 @28289 has 1 MA's), (19, 28331), (25, 28418), (45, 28673),

Gene: Royals2015_24 Start: 24344, Stop: 25168, Start Num: 2
Candidate Starts for Royals2015_24:
(1, 24284), (Start: 2 @24344 has 166 MA's), (13, 24392), (17, 24425), (20, 24458), (43, 24740), (45, 24785), (51, 24836), (66, 25013),

Gene: Ruby_24 Start: 24239, Stop: 25063, Start Num: 2
Candidate Starts for Ruby_24:
(1, 24179), (Start: 2 @24239 has 166 MA's), (13, 24287), (45, 24680),

Gene: Rufus_36 Start: 28440, Stop: 29189, Start Num: 2

Candidate Starts for Rufus_36:

(Start: 2 @28440 has 166 MA's), (Start: 12 @28476 has 1 MA's), (19, 28518), (28, 28632), (31, 28731), (34, 28746), (42, 28806), (56, 28977), (63, 29046),

Gene: Ruotula_35 Start: 28645, Stop: 29577, Start Num: 4

Candidate Starts for Ruotula_35:

(Start: 4 @28645 has 5 MA's), (13, 28681), (18, 28723), (25, 28810), (28, 28837), (37, 28966), (39, 28984), (41, 28996), (44, 29062), (62, 29227), (65, 29251), (79, 29557),

Gene: Saal_24 Start: 24244, Stop: 25068, Start Num: 2

Candidate Starts for Saal_24:

(1, 24184), (Start: 2 @24244 has 166 MA's), (13, 24292), (17, 24325), (20, 24358), (25, 24430), (45, 24685),

Gene: Sassafras_24 Start: 24395, Stop: 25219, Start Num: 2

Candidate Starts for Sassafras_24:

(1, 24335), (Start: 2 @24395 has 166 MA's), (13, 24443), (45, 24836),

Gene: Scottish_25 Start: 25565, Stop: 26389, Start Num: 2

Candidate Starts for Scottish_25:

(1, 25505), (Start: 2 @25565 has 166 MA's), (13, 25613), (20, 25679), (45, 26006),

Gene: Scowl_35 Start: 28529, Stop: 29362, Start Num: 2

Candidate Starts for Scowl_35:

(Start: 2 @28529 has 166 MA's), (Start: 12 @28565 has 1 MA's), (19, 28607), (28, 28721), (34, 28835), (37, 28850), (38, 28868), (47, 28979), (58, 29072), (67, 29207), (69, 29222), (70, 29231), (72, 29252), (73, 29255),

Gene: Seabastian_24 Start: 24502, Stop: 25308, Start Num: 3

Candidate Starts for Seabastian_24:

(Start: 3 @24502 has 32 MA's), (13, 24550), (17, 24583), (20, 24616), (28, 24700), (29, 24706), (33, 24805), (49, 24952), (60, 25045), (66, 25156),

Gene: Seabiscuit_37 Start: 28061, Stop: 28864, Start Num: 2

Candidate Starts for Seabiscuit_37:

(Start: 2 @28061 has 166 MA's), (Start: 12 @28097 has 1 MA's), (19, 28139), (45, 28481), (51, 28532),

Gene: ShiLan_24 Start: 24455, Stop: 25279, Start Num: 2

Candidate Starts for ShiLan_24:

(Start: 2 @24455 has 166 MA's), (13, 24503), (17, 24536), (20, 24569), (45, 24896),

Gene: ShowerHandel_24 Start: 24456, Stop: 25280, Start Num: 2

Candidate Starts for ShowerHandel_24:

(1, 24396), (Start: 2 @24456 has 166 MA's), (8, 24483), (13, 24504), (17, 24537), (20, 24570), (45, 24897),

Gene: SiSi_24 Start: 24255, Stop: 25079, Start Num: 2

Candidate Starts for SiSi_24:

(Start: 2 @24255 has 166 MA's), (13, 24303), (17, 24336), (20, 24369), (45, 24696), (66, 24924),

Gene: SimranZ1_25 Start: 24067, Stop: 24906, Start Num: 5

Candidate Starts for SimranZ1_25:

(1, 24004), (Start: 5 @24067 has 1 MA's), (6, 24073), (14, 24115), (23, 24208), (34, 24379), (37, 24394), (38, 24412), (59, 24622), (67, 24751), (71, 24781), (72, 24796), (74, 24856),

Gene: Smeagol_37 Start: 29393, Stop: 30175, Start Num: 10

Candidate Starts for Smeagol_37:

(Start: 10 @29393 has 32 MA's), (24, 29528), (47, 29816), (57, 29903), (68, 30044),

Gene: Sparkdehlily_24 Start: 24290, Stop: 25114, Start Num: 2

Candidate Starts for Sparkdehlily_24:

(1, 24230), (Start: 2 @24290 has 166 MA's), (13, 24338), (17, 24371), (20, 24404), (25, 24476), (45, 24731),

Gene: Spoonbill_24 Start: 24454, Stop: 25278, Start Num: 2

Candidate Starts for Spoonbill_24:

(Start: 2 @24454 has 166 MA's), (13, 24502), (17, 24535), (20, 24568), (25, 24640), (45, 24895), (51, 24946),

Gene: Squee_36 Start: 28900, Stop: 29703, Start Num: 2

Candidate Starts for Squee_36:

(Start: 2 @28900 has 166 MA's), (Start: 12 @28936 has 1 MA's), (19, 28978), (45, 29320), (51, 29371),

Gene: StrongArm_34 Start: 29035, Stop: 29871, Start Num: 2

Candidate Starts for StrongArm_34:

(Start: 2 @29035 has 166 MA's), (Start: 12 @29071 has 1 MA's), (19, 29113), (25, 29200), (28, 29227), (32, 29329), (45, 29458), (61, 29587),

Gene: SwagPiggett_24 Start: 24267, Stop: 25091, Start Num: 2

Candidate Starts for SwagPiggett_24:

(1, 24207), (Start: 2 @24267 has 166 MA's), (13, 24315), (17, 24348), (20, 24381), (25, 24453), (45, 24708),

Gene: SwissCheese_37 Start: 28768, Stop: 29556, Start Num: 10

Candidate Starts for SwissCheese_37:

(Start: 10 @28768 has 32 MA's), (Start: 12 @28774 has 1 MA's), (16, 28810), (36, 29068), (45, 29173), (50, 29200), (51, 29224), (66, 29401),

Gene: Switzer_36 Start: 28167, Stop: 28970, Start Num: 2

Candidate Starts for Switzer_36:

(Start: 2 @28167 has 166 MA's), (Start: 12 @28203 has 1 MA's), (19, 28245), (25, 28332), (45, 28587), (51, 28638),

Gene: TDanisky_24 Start: 24290, Stop: 25114, Start Num: 2

Candidate Starts for TDanisky_24:

(1, 24230), (Start: 2 @24290 has 166 MA's), (13, 24338), (17, 24371), (20, 24404), (25, 24476), (45, 24731),

Gene: Tasp14_36 Start: 28268, Stop: 29101, Start Num: 2

Candidate Starts for Tasp14_36:

(Start: 2 @28268 has 166 MA's), (Start: 12 @28304 has 1 MA's), (19, 28346), (28, 28460), (34, 28574), (37, 28589), (38, 28607), (47, 28718), (69, 28961), (70, 28970), (72, 28991), (73, 28994),

Gene: TheloniousMonk_37 Start: 29707, Stop: 30498, Start Num: 7
Candidate Starts for TheloniousMonk_37:
(Start: 7 @29707 has 1 MA's), (9, 29722), (11, 29728), (19, 29773), (25, 29860), (45, 30115), (51, 30166),

Gene: TootsiePop_25 Start: 24136, Stop: 24960, Start Num: 2
Candidate Starts for TootsiePop_25:
(1, 24076), (Start: 2 @24136 has 166 MA's), (13, 24184), (20, 24250), (45, 24577),

Gene: Tripl3t_36 Start: 28912, Stop: 29700, Start Num: 10
Candidate Starts for Tripl3t_36:
(Start: 10 @28912 has 32 MA's), (Start: 12 @28918 has 1 MA's), (16, 28954), (36, 29212), (45, 29317), (50, 29344), (51, 29368), (66, 29545),

Gene: U2_35 Start: 28173, Stop: 28955, Start Num: 2
Candidate Starts for U2_35:
(Start: 2 @28173 has 166 MA's), (Start: 12 @28209 has 1 MA's), (19, 28251), (25, 28338), (45, 28572), (51, 28623),

Gene: UncleRicky_27 Start: 25583, Stop: 26407, Start Num: 2
Candidate Starts for UncleRicky_27:
(1, 25523), (Start: 2 @25583 has 166 MA's), (13, 25631), (20, 25697), (45, 26024),

Gene: Veteran_24 Start: 24269, Stop: 25093, Start Num: 2
Candidate Starts for Veteran_24:
(Start: 2 @24269 has 166 MA's), (13, 24317), (17, 24350), (20, 24383), (45, 24710), (66, 24938),

Gene: Violet_34 Start: 28585, Stop: 29373, Start Num: 10
Candidate Starts for Violet_34:
(Start: 10 @28585 has 32 MA's), (Start: 12 @28591 has 1 MA's), (16, 28627), (36, 28885), (45, 28990), (50, 29017), (51, 29041), (66, 29218),

Gene: Wanda_45 Start: 36693, Stop: 37499, Start Num: 3
Candidate Starts for Wanda_45:
(1, 36633), (Start: 3 @36693 has 32 MA's), (13, 36741), (17, 36774), (20, 36807), (27, 36876), (47, 37137), (49, 37143), (66, 37347), (77, 37494),

Gene: Watermelon_37 Start: 28921, Stop: 29709, Start Num: 10
Candidate Starts for Watermelon_37:
(Start: 10 @28921 has 32 MA's), (Start: 12 @28927 has 1 MA's), (16, 28963), (36, 29221), (45, 29326), (50, 29353), (51, 29377), (66, 29554),

Gene: Whouxphf_24 Start: 24369, Stop: 25334, Start Num: 2
Candidate Starts for Whouxphf_24:
(1, 24309), (Start: 2 @24369 has 166 MA's), (13, 24417), (17, 24450), (20, 24483), (28, 24582), (37, 24711), (48, 24837),

Gene: WillSterrel_25 Start: 25658, Stop: 26464, Start Num: 3
Candidate Starts for WillSterrel_25:
(1, 25598), (Start: 3 @25658 has 32 MA's), (13, 25706), (17, 25739), (20, 25772), (47, 26102), (49, 26108), (66, 26312), (77, 26459),

Gene: Yorick_24 Start: 24454, Stop: 25278, Start Num: 2

Candidate Starts for Yorick_24:

(1, 24394), (Start: 2 @24454 has 166 MA's), (8, 24481), (13, 24502), (17, 24535), (20, 24568), (45, 24895),

Gene: Zeeculate_35 Start: 28799, Stop: 29602, Start Num: 2

Candidate Starts for Zeeculate_35:

(Start: 2 @28799 has 166 MA's), (Start: 12 @28835 has 1 MA's), (19, 28877), (25, 28964), (45, 29219), (51, 29270), (66, 29447),

Gene: Zerg_24 Start: 24231, Stop: 25055, Start Num: 2

Candidate Starts for Zerg_24:

(1, 24171), (Start: 2 @24231 has 166 MA's), (13, 24279), (20, 24345), (45, 24672), (76, 25038),

Gene: Zizzle_24 Start: 24398, Stop: 25222, Start Num: 2

Candidate Starts for Zizzle_24:

(Start: 2 @24398 has 166 MA's), (13, 24446), (17, 24479), (20, 24512), (45, 24839),