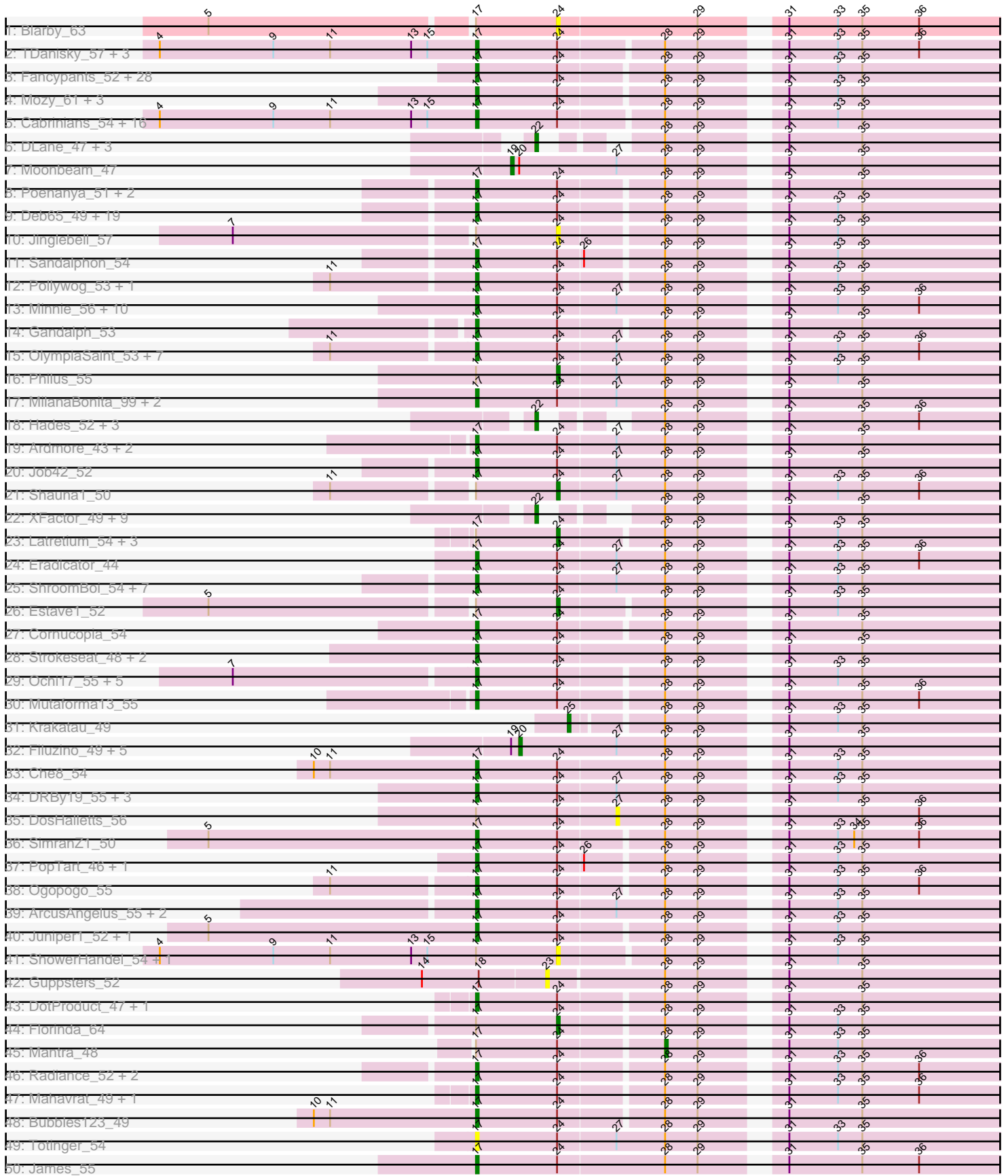
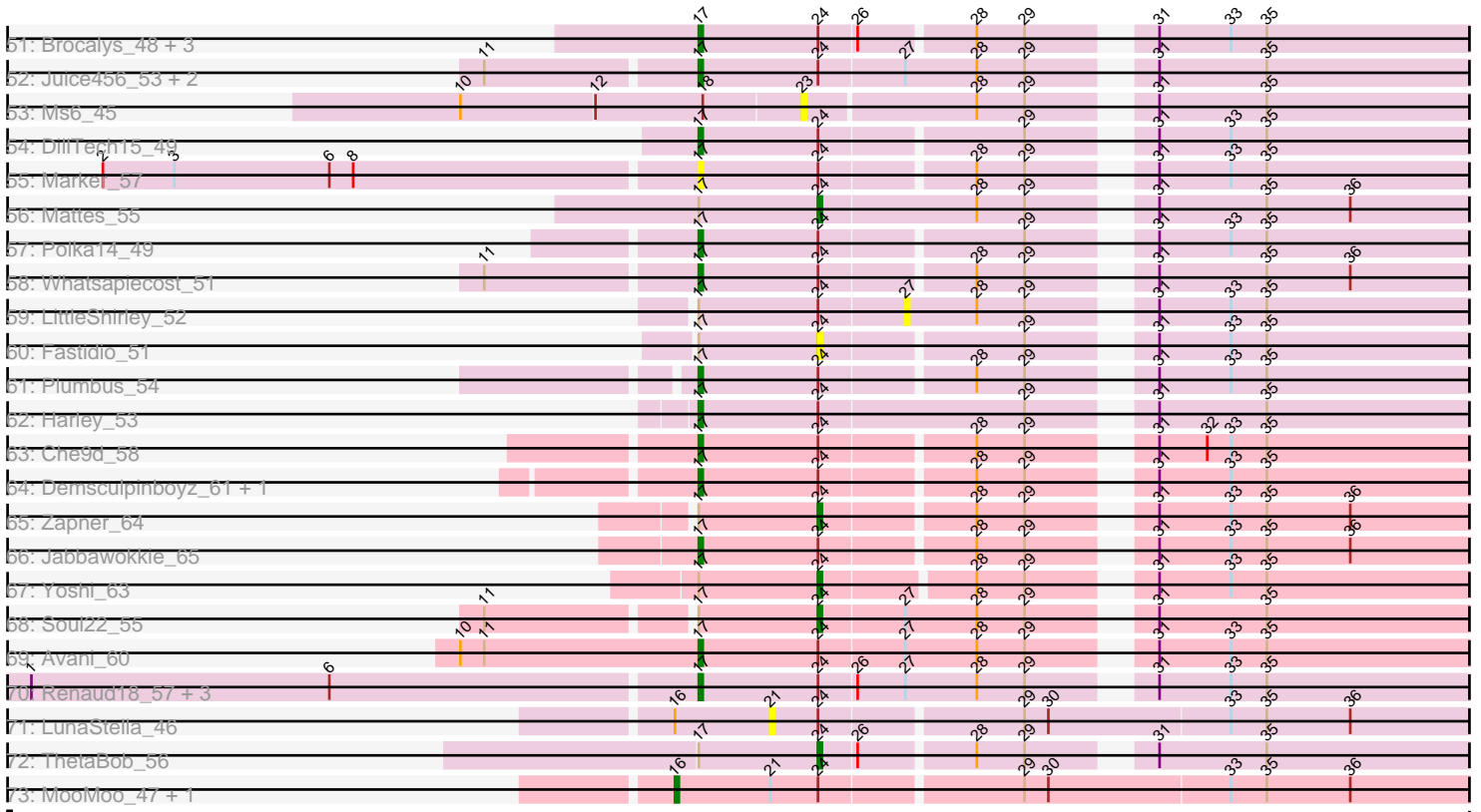


Pham 163336



Pham 163336



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 163336 Report

This analysis was run 04/28/24 on database version 559.

Pham number 163336 has 225 members, 19 are drafts.

Phages represented in each track:

- Track 1 : Blarby_63
- Track 2 : TDanisky_57, MadMen_47, Chuckly_52, Sparkdehlily_57
- Track 3 : Fancypants_52, Dorothy_48, Phatniss_50, Starceвич_51, LilMoolah_50, Drago_50, Karhdo_50, Firehouse51_52, Llij_48, SiSi_50, Hamulus_52, Girr_51, RedBird_48, Kersh_54, Leozinho_52, Ruby_49, Kimberlium_54, Girafales_61, QuickMath_53, Sassafras_49, Veteran_48, Maravista_53, Sabbb_57, MisterCuddles_51, Whouxphf_50, Nivrat_48, UncleRicky_51, Tootsieroll_54, Seagreen_52
- Track 4 : Mozy_61, Zizzle_57, LunaBlu_55, Galactic_52
- Track 5 : Cabrinians_54, Burwell21_51, Jarcob_53, Koella_47, BuzzLyseyear_58, Lizziana_59, Martik_53, Dante_52, GUmbe_50, Nitzel_48, NormanBulbieJr_53, Priscilla_53, ShiLan_52, Madiba_49, FreddyB_54, Ibhuesi_51, Yorick_52
- Track 6 : DLane_47, Fruitloop_49, Phalconet_50, Ovechkin_48
- Track 7 : Moonbeam_47
- Track 8 : Poenanya_51, Doomphist_51, Eish_53
- Track 9 : Deb65_49, Quico_61, Blexus_50, Scottish_51, BlueCrab_49, OldBen_50, Nimbo_47, Leperchaun_45, PHappiness_48, Stap_51, Daenerys_47, RitaG_48, Geralt_48, JoeyJr_48, Empress_51, IbOuu_54, Ramsey_53, Pacc40_47, Spoonbill_50, KingMidas_52
- Track 10 : Jinglebell_57
- Track 11 : Sandalphon_54
- Track 12 : Pollywog_53, OwlsT2W_52
- Track 13 : Minnie_56, Alexphander_56, IrishSherpFalk_52, Sarma624_49, Kingsley_48, Spartacus_53, BigPhil_47, WillSterrel_52, Cerasum_47, Coco12_50, Velveteen_46
- Track 14 : Gandalph_53
- Track 15 : OlympiaSaint_53, Cornie_46, Donkeykong_56, Phanphagia_49, SuperGrey_55, JalFarm20_63, Flathead_51, Bipolar_51
- Track 16 : Philus_55
- Track 17 : MilanaBonita_99, Akhila_43, Rialto_56
- Track 18 : Hades_52, Gorge_56, ByChance_43, Saal_54
- Track 19 : Ardmore_43, Mova_52, Bobi_54
- Track 20 : Job42_52
- Track 21 : Shauna1_50
- Track 22 : XFactor_49, Melissauren88_49, Batiatus_49, StAnnes_50, CaptainTrips_48, MinionDave_50, SG4_48, VRedHorse_51, Enby_52, Lorde_52
- Track 23 : Latretium_54, Inventum_46, DaddyRickover_51, DirtMcgirt_51

- Track 24 : Eradicator_44
- Track 25 : ShroomBoi_54, DaWorst_53, RockyHorror_52, PMC_46, Rockne_50, Boomer_54, Zerg_51, Doug_54
- Track 26 : Estave1_52
- Track 27 : Cornucopia_54
- Track 28 : Strokeseat_48, Hlubikazi_48, Mandlovu_48
- Track 29 : Ochi17_55, AlpineSix_57, Llama_57, Modragons_56, OfUltron_57, Seabastian_57
- Track 30 : Mutaforma13_55
- Track 31 : Krakatau_49
- Track 32 : Filuzino_49, Beakin_53, Emma_51, Hegedechwinu_51, PhesterPhotato_54, MilleniumForce_51
- Track 33 : Che8_54
- Track 34 : DRBy19_55, Wachhund_53, SwagPiggett_57, BobaPhett_55
- Track 35 : DosHalletts_56
- Track 36 : SimranZ1_50
- Track 37 : PopTart_46, SassyB_46
- Track 38 : Ogopogo_55
- Track 39 : ArcusAngelus_55, Chevrolet_61, Royals2015_54
- Track 40 : Juniper1_52, Byougenkin_49
- Track 41 : ShowerHandel_54, Crumble_48
- Track 42 : Guppsters_52
- Track 43 : DotProduct_47, GigiOuiOui_48
- Track 44 : Florinda_64
- Track 45 : Mantra_48
- Track 46 : Radiance_52, BodEinwohner17_53, Spikelee_58
- Track 47 : Mahavrat_49, Aubs_50
- Track 48 : Bubbles123_49
- Track 49 : Totinger_54
- Track 50 : James_55
- Track 51 : Brocalys_48, Clifton_48, Pippy_51, LastJedi_47
- Track 52 : Juice456_53, KristaRAM_54, EleanorGeorge_50
- Track 53 : Ms6_45
- Track 54 : DillTech15_49
- Track 55 : Marker_57
- Track 56 : Mattes_55
- Track 57 : Polka14_49
- Track 58 : Whatsapiecost_51
- Track 59 : LittleShirley_52
- Track 60 : Fastidio_51
- Track 61 : Plumbus_54
- Track 62 : Harley_53
- Track 63 : Che9d_58
- Track 64 : Demsculpinboyz_61, Tweety_51
- Track 65 : Zapner_64
- Track 66 : Jabbawokkie_65
- Track 67 : Yoshi_63
- Track 68 : Soul22_55
- Track 69 : Avani_60
- Track 70 : Renaud18_57, DeadP_57, Taj_55, Wee_54
- Track 71 : LunaStella_46
- Track 72 : ThetaBob_56
- Track 73 : MooMoo_47, TChen_51

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

The start number called the most often in the published annotations is 17, it was called in 166 of the 206 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Akhila_43, Alexphander_56, AlpineSix_57, ArcusAngelus_55, Ardmore_43, Aubs_50, Avani_60, BigPhil_47, Bipolar_51, Blexus_50, BlueCrab_49, BobaPhett_55, Bobi_54, BodEinwohner17_53, Boomer_54, Brocalys_48, Bubbles123_49, Burwell21_51, BuzzLyseyear_58, Byougenkin_49, Cabrinians_54, Cerasum_47, Che8_54, Che9d_58, Chevrolet_61, Chuckly_52, Clifton_48, Coco12_50, Cornie_46, Cornucopia_54, DRBy19_55, DaWorst_53, Daenerys_47, Dante_52, DeadP_57, Deb65_49, Demsculpinboyz_61, DillTech15_49, Donkeykong_56, Doomphist_51, Dorothy_48, DotProduct_47, Doug_54, Drago_50, Eish_53, EleanorGeorge_50, Empress_51, Eradicator_44, Fancypants_52, Firehouse51_52, Flathead_51, FreddyB_54, GUmbie_50, Galactic_52, Gandolph_53, Geralt_48, GigiOuiOui_48, Girafales_61, Girr_51, Hamulus_52, Harley_53, Hlubikazi_48, IbOuu_54, Ibhubesi_51, IrishSherpFalk_52, Jabbawokkie_65, JalFarm20_63, James_55, Jarcob_53, Job42_52, JoeyJr_48, Juice456_53, Juniper1_52, Karhdo_50, Kersh_54, Kimberlium_54, KingMidas_52, Kingsley_48, Koella_47, KristaRAM_54, LastJedi_47, Leozinho_52, Leperchaun_45, LilMoolah_50, Lizziana_59, Llama_57, Llij_48, LunaBlu_55, MadMen_47, Madiba_49, Mahavrat_49, Mandlovu_48, Maravista_53, Marker_57, Martik_53, MilanaBonita_99, Minnie_56, MisterCuddles_51, Modragons_56, Mova_52, Mozy_61, Mutaforma13_55, Nimbo_47, Nitzel_48, Nivrat_48, NormanBulbieJr_53, Ochi17_55, OfUltron_57, Ogopogo_55, OldBen_50, OlympiaSaint_53, OwlsT2W_52, PHappiness_48, PMC_46, Pacc40_47, Phanphagia_49, Phatniss_50, Pippy_51, Plumbus_54, Poenanya_51, Polka14_49, Pollywog_53, PopTart_46, Priscilla_53, QuickMath_53, Quico_61, Radiance_52, Ramsey_53, RedBird_48, Renaud18_57, Rialto_56, RitaG_48, Rockne_50, RockyHorror_52, Royals2015_54, Ruby_49, Sabbb_57, Sandalphon_54, Sarma624_49, Sassafras_49, SassyB_46, Scottish_51, Sebastian_57, Seagreen_52, ShiLan_52, ShroomBoi_54, SiSi_50, SimranZ1_50, Sparkdehlily_57, Spartacus_53, Spikelee_58, Spoonbill_50, Stap_51, Starcevich_51, Strokeseat_48, SuperGrey_55, SwagPigglett_57, TDanisky_57, Taj_55, Tootsieroll_54, Totinger_54, Tweety_51, UncleRicky_51, Velveteen_46, Veteran_48, Wachhund_53, Wee_54, Whatsapiecost_51, Whouxphf_50, WillSterrel_52, Yorick_52, Zerg_51, Zizzle_57,

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

- Blarby_63, Crumble_48, DaddyRickover_51, DirtMcgirt_51, DosHalletts_56, Estave1_52, Fastidio_51, Florinda_64, Inventum_46, Jinglebell_57, Latretium_54, LittleShirley_52, Mantra_48, Mattes_55, Philus_55, Shauna1_50, ShowerHandel_54, Soul22_55, ThetaBob_56, Yoshi_63, Zapner_64,

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

- Batiatus_49, Beakin_53, ByChance_43, CaptainTrips_48, DLane_47, Emma_51, Enby_52, Filuzino_49, Fruitloop_49, Gorge_56, Guppsters_52, Hades_52, Hegedechwinu_51, Krakatau_49, Lorde_52, LunaStella_46, Melissauren88_49, MilleniumForce_51, MinionDave_50, MooMoo_47, Moonbeam_47, Ms6_45,

Ovechkin_48, Phalconet_50, PhesterPhotato_54, SG4_48, Saal_54, StAnnes_50, TChen_51, VRedHorse_51, XFactor_49,

Summary by start number:

Start 16:

- Found in 3 of 225 (1.3%) of genes in pham
- Manual Annotations of this start: 2 of 206
- Called 66.7% of time when present
- Phage (with cluster) where this start called: MooMoo_47 (singleton), TChen_51 (F4),

Start 17:

- Found in 194 of 225 (86.2%) of genes in pham
- Manual Annotations of this start: 166 of 206
- Called 89.2% of time when present
- Phage (with cluster) where this start called: Akhila_43 (F1), Alexphander_56 (F1), AlpineSix_57 (F1), ArcusAngelus_55 (F1), Ardmore_43 (F1), Aubs_50 (F1), Avani_60 (F2), BigPhil_47 (F1), Bipolar_51 (F1), Blexus_50 (F1), BlueCrab_49 (F1), BobaPhett_55 (F1), Bobi_54 (F1), BodEinwohner17_53 (F1), Boomer_54 (F1), Brocalys_48 (F1), Bubbles123_49 (F1), Burwell21_51 (F1), BuzzLyseyear_58 (F1), Byougenkin_49 (F1), Cabrinians_54 (F1), Cerasum_47 (F1), Che8_54 (F1), Che9d_58 (F2), Chevrolet_61 (F1), Chuckly_52 (F1), Clifton_48 (F1), Coco12_50 (F1), Cornie_46 (F5), Cornucopia_54 (F1), DRBy19_55 (F1), DaWorst_53 (F1), Daenerys_47 (F1), Dante_52 (F1), DeadP_57 (F1), Deb65_49 (F1), Demsculpinboyz_61 (F2), DillTech15_49 (F1), Donkeykong_56 (F1), Doomphist_51 (F1), Dorothy_48 (F1), DotProduct_47 (F1), Doug_54 (F1), Drago_50 (F1), Eish_53 (F1), EleanorGeorge_50 (F1), Empress_51 (F1), Eradicator_44 (F1), Fancypants_52 (F1), Firehouse51_52 (F1), Flathead_51 (F1), FreddyB_54 (F1), GUmble_50 (F1), Galactic_52 (F1), Gandolph_53 (F1), Geralt_48 (F1), GigiOuiOui_48 (F1), Girafales_61 (F1), Girr_51 (F1), Hamulus_52 (F1), Harley_53 (F1), Hlubikazi_48 (F1), IbOuu_54 (F1), Ibhubesi_51 (F1), IrishSherpFalk_52 (F1), Jabbawokkie_65 (F2), JalFarm20_63 (F1), James_55 (F1), Jarcob_53 (F1), Job42_52 (F1), JoeyJr_48 (F1), Juice456_53 (F1), Juniper1_52 (F1), Karhdo_50 (F1), Kersh_54 (F1), Kimberlium_54 (F1), KingMidas_52 (F1), Kingsley_48 (F1), Koella_47 (F1), KristaRAM_54 (F1), LastJedi_47 (F1), Leozinho_52 (F1), Leperchaun_45 (F1), LilMoolah_50 (F1), Lizziana_59 (F1), Llama_57 (F1), Llij_48 (F1), LunaBlu_55 (F1), MadMen_47 (F1), Madiba_49 (F1), Mahavrat_49 (F1), Mandlovu_48 (F1), Maravista_53 (F1), Marker_57 (F1), Martik_53 (F1), MilanaBonita_99 (F1), Minnie_56 (F1), MisterCuddles_51 (F1), Modragons_56 (F1), Mova_52 (F1), Mozy_61 (F1), Mutaforma13_55 (F1), Nimbo_47 (F1), Nitzel_48 (F1), Nivrat_48 (F1), NormanBulbieJr_53 (F1), Ochi17_55 (F1), OfUltron_57 (F1), Ogopogo_55 (F1), OldBen_50 (F1), OlympiaSaint_53 (F1), OwlsT2W_52 (F1), PHappiness_48 (F1), PMC_46 (F1), Pacc40_47 (F1), Phanphagia_49 (F1), Phatniss_50 (F1), Pippy_51 (F1), Plumbus_54 (F1), Poenanya_51 (F1), Polka14_49 (F1), Pollywog_53 (F1), PopTart_46 (F1), Priscilla_53 (F1), QuickMath_53 (F1), Quico_61 (F1), Radiance_52 (F1), Ramsey_53 (F1), RedBird_48 (F1), Renaud18_57 (F4), Rialto_56 (F1), RitaG_48 (F1), Rockne_50 (F1), RockyHorror_52 (F1), Royals2015_54 (F1), Ruby_49 (F1), Sabbb_57 (F1), Sandalphon_54 (F1), Sarma624_49 (F1), Sassafras_49 (F1), SassyB_46 (F1), Scottish_51 (F1), Seabastian_57 (F1), Seagreen_52 (F1), ShiLan_52 (F1), ShroomBoi_54 (F1), SiSi_50 (F1), SimranZ1_50 (F1), Sparkdehliily_57 (F1), Spartacus_53 (F1), Spikelee_58 (F1), Spoonbill_50 (F1), Stap_51 (F1), Starcevich_51 (F1), Strokeseat_48 (F1), SuperGrey_55 (F1),

SwagPiggett_57 (F1), TDanisky_57 (F1), Taj_55 (F1), Tootsieroll_54 (F1), Totinger_54 (F1), Tweety_51 (F1), UncleRicky_51 (F1), Velveteen_46 (F1), Veteran_48 (F1), Wachhund_53 (F1), Wee_54 (F1), Whatsapiecost_51 (F1), Whouxphf_50 (F1), WillSterrel_52 (F1), Yorick_52 (F1), Zerg_51 (F1), Zizzle_57 (F1),

Start 19:

- Found in 7 of 225 (3.1%) of genes in pham
- Manual Annotations of this start: 1 of 206
- Called 14.3% of time when present
- Phage (with cluster) where this start called: Moonbeam_47 (F1),

Start 20:

- Found in 7 of 225 (3.1%) of genes in pham
- Manual Annotations of this start: 5 of 206
- Called 85.7% of time when present
- Phage (with cluster) where this start called: Beakin_53 (F1), Emma_51 (F1), Filuzino_49 (F1), Hegedechwinu_51 (F1), MilleniumForce_51 (F1), PhesterPhotato_54 (F1),

Start 21:

- Found in 3 of 225 (1.3%) of genes in pham
- No Manual Annotations of this start.
- Called 33.3% of time when present
- Phage (with cluster) where this start called: LunaStella_46 (F4),

Start 22:

- Found in 18 of 225 (8.0%) of genes in pham
- Manual Annotations of this start: 18 of 206
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Batiatus_49 (F1), ByChance_43 (F1), CaptainTrips_48 (F1), DLane_47 (F1), Enby_52 (F1), Fruitloop_49 (F1), Gorge_56 (F1), Hades_52 (F1), Lorde_52 (F1), Melissauren88_49 (F1), MinionDave_50 (F1), Ovechkin_48 (F1), Phalconet_50 (F1), SG4_48 (F1), Saal_54 (F1), StAnnes_50 (F1), VRedHorse_51 (F1), XFactor_49 (F1),

Start 23:

- Found in 2 of 225 (0.9%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Guppsters_52 (F1), Ms6_45 (F1),

Start 24:

- Found in 197 of 225 (87.6%) of genes in pham
- Manual Annotations of this start: 12 of 206
- Called 9.1% of time when present
- Phage (with cluster) where this start called: Blarby_63 (F), Crumble_48 (F1), DaddyRickover_51 (F1), DirtMcgirt_51 (F1), Estave1_52 (F1), Fastidio_51 (F1), Florinda_64 (F1), Inventum_46 (F1), Jinglebell_57 (F1), Latretium_54 (F1), Mattes_55 (F1), Philus_55 (F1), Shauna1_50 (F1), ShowerHandel_54 (F1), Soul22_55 (F2), ThetaBob_56 (F4), Yoshi_63 (F2), Zapner_64 (F2),

Start 25:

- Found in 1 of 225 (0.4%) of genes in pham

- Manual Annotations of this start: 1 of 206
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Krakatau_49 (F1),

Start 27:

- Found in 63 of 225 (28.0%) of genes in pham
- No Manual Annotations of this start.
- Called 3.2% of time when present
- Phage (with cluster) where this start called: DosHalletts_56 (F1), LittleShirley_52 (F1),

Start 28:

- Found in 217 of 225 (96.4%) of genes in pham
- Manual Annotations of this start: 1 of 206
- Called 0.5% of time when present
- Phage (with cluster) where this start called: Mantra_48 (F1),

Summary by clusters:

There are 6 clusters represented in this pham: F1, F2, F4, F5, F, singleton,

Info for manual annotations of cluster F1:

- Start number 17 was manually annotated 160 times for cluster F1.
- Start number 19 was manually annotated 1 time for cluster F1.
- Start number 20 was manually annotated 5 times for cluster F1.
- Start number 22 was manually annotated 18 times for cluster F1.
- Start number 24 was manually annotated 8 times for cluster F1.
- Start number 25 was manually annotated 1 time for cluster F1.
- Start number 28 was manually annotated 1 time for cluster F1.

Info for manual annotations of cluster F2:

- Start number 17 was manually annotated 4 times for cluster F2.
- Start number 24 was manually annotated 3 times for cluster F2.

Info for manual annotations of cluster F4:

- Start number 16 was manually annotated 1 time for cluster F4.
- Start number 17 was manually annotated 1 time for cluster F4.
- Start number 24 was manually annotated 1 time for cluster F4.

Info for manual annotations of cluster F5:

- Start number 17 was manually annotated 1 time for cluster F5.

Gene Information:

Gene: Akhila_43 Start: 32688, Stop: 32879, Start Num: 17

Candidate Starts for Akhila_43:

(Start: 17 @32688 has 166 MA's), (Start: 24 @32718 has 12 MA's), (27, 32739), (Start: 28 @32757 has 1 MA's), (29, 32769), (31, 32793), (35, 32820),

Gene: Alexphander_56 Start: 37735, Stop: 37926, Start Num: 17

Candidate Starts for Alexphander_56:

(Start: 17 @37735 has 166 MA's), (Start: 24 @37765 has 12 MA's), (27, 37786), (Start: 28 @37804 has 1 MA's), (29, 37816), (31, 37840), (33, 37858), (35, 37867), (36, 37888),

Gene: AlpineSix_57 Start: 39232, Stop: 39420, Start Num: 17

Candidate Starts for AlpineSix_57:

(7, 39148), (Start: 17 @39232 has 166 MA's), (Start: 24 @39262 has 12 MA's), (Start: 28 @39298 has 1 MA's), (29, 39310), (31, 39334), (33, 39352), (35, 39361),

Gene: ArcusAngelus_55 Start: 38253, Stop: 38444, Start Num: 17

Candidate Starts for ArcusAngelus_55:

(Start: 17 @38253 has 166 MA's), (Start: 24 @38283 has 12 MA's), (27, 38304), (Start: 28 @38322 has 1 MA's), (29, 38334), (31, 38358), (33, 38376), (35, 38385),

Gene: Ardmore_43 Start: 35029, Stop: 35220, Start Num: 17

Candidate Starts for Ardmore_43:

(Start: 17 @35029 has 166 MA's), (Start: 24 @35059 has 12 MA's), (27, 35080), (Start: 28 @35098 has 1 MA's), (29, 35110), (31, 35134), (35, 35161),

Gene: Aubs_50 Start: 36540, Stop: 36731, Start Num: 17

Candidate Starts for Aubs_50:

(Start: 17 @36540 has 166 MA's), (Start: 24 @36570 has 12 MA's), (Start: 28 @36609 has 1 MA's), (29, 36621), (31, 36645), (33, 36663), (35, 36672), (36, 36693),

Gene: Avani_60 Start: 37393, Stop: 37584, Start Num: 17

Candidate Starts for Avani_60:

(10, 37333), (11, 37339), (Start: 17 @37393 has 166 MA's), (Start: 24 @37423 has 12 MA's), (27, 37444), (Start: 28 @37462 has 1 MA's), (29, 37474), (31, 37498), (33, 37516), (35, 37525),

Gene: Batiatus_49 Start: 36900, Stop: 37049, Start Num: 22

Candidate Starts for Batiatus_49:

(Start: 22 @36900 has 18 MA's), (Start: 28 @36927 has 1 MA's), (29, 36939), (31, 36963), (35, 36990),

Gene: Beakin_53 Start: 36720, Stop: 36896, Start Num: 20

Candidate Starts for Beakin_53:

(Start: 19 @36717 has 1 MA's), (Start: 20 @36720 has 5 MA's), (27, 36756), (Start: 28 @36774 has 1 MA's), (29, 36786), (31, 36810), (35, 36837),

Gene: BigPhil_47 Start: 33177, Stop: 33368, Start Num: 17

Candidate Starts for BigPhil_47:

(Start: 17 @33177 has 166 MA's), (Start: 24 @33207 has 12 MA's), (27, 33228), (Start: 28 @33246 has 1 MA's), (29, 33258), (31, 33282), (33, 33300), (35, 33309), (36, 33330),

Gene: Bipolar_51 Start: 37677, Stop: 37868, Start Num: 17

Candidate Starts for Bipolar_51:

(11, 37629), (Start: 17 @37677 has 166 MA's), (Start: 24 @37707 has 12 MA's), (27, 37728), (Start: 28 @37746 has 1 MA's), (29, 37758), (31, 37782), (33, 37800), (35, 37809), (36, 37830),

Gene: Blarby_63 Start: 38118, Stop: 38279, Start Num: 24

Candidate Starts for Blarby_63:

(5, 37995), (Start: 17 @38088 has 166 MA's), (Start: 24 @38118 has 12 MA's), (29, 38169), (31, 38193), (33, 38211), (35, 38220), (36, 38241),

Gene: Blexus_50 Start: 37054, Stop: 37242, Start Num: 17

Candidate Starts for Blexus_50:

(Start: 17 @37054 has 166 MA's), (Start: 24 @37084 has 12 MA's), (Start: 28 @37120 has 1 MA's), (29, 37132), (31, 37156), (33, 37174), (35, 37183),

Gene: BlueCrab_49 Start: 36780, Stop: 36968, Start Num: 17

Candidate Starts for BlueCrab_49:

(Start: 17 @36780 has 166 MA's), (Start: 24 @36810 has 12 MA's), (Start: 28 @36846 has 1 MA's), (29, 36858), (31, 36882), (33, 36900), (35, 36909),

Gene: BobaPhett_55 Start: 39668, Stop: 39859, Start Num: 17

Candidate Starts for BobaPhett_55:

(Start: 17 @39668 has 166 MA's), (Start: 24 @39698 has 12 MA's), (27, 39719), (Start: 28 @39737 has 1 MA's), (29, 39749), (31, 39773), (33, 39791), (35, 39800),

Gene: Bobi_54 Start: 38032, Stop: 38223, Start Num: 17

Candidate Starts for Bobi_54:

(Start: 17 @38032 has 166 MA's), (Start: 24 @38062 has 12 MA's), (27, 38083), (Start: 28 @38101 has 1 MA's), (29, 38113), (31, 38137), (35, 38164),

Gene: BodEinwohner17_53 Start: 36996, Stop: 37184, Start Num: 17

Candidate Starts for BodEinwohner17_53:

(Start: 17 @36996 has 166 MA's), (Start: 24 @37026 has 12 MA's), (Start: 28 @37062 has 1 MA's), (29, 37074), (31, 37098), (33, 37116), (35, 37125), (36, 37146),

Gene: Boomer_54 Start: 38229, Stop: 38420, Start Num: 17

Candidate Starts for Boomer_54:

(Start: 17 @38229 has 166 MA's), (Start: 24 @38259 has 12 MA's), (27, 38280), (Start: 28 @38298 has 1 MA's), (29, 38310), (31, 38334), (33, 38352), (35, 38361),

Gene: Brocalys_48 Start: 34329, Stop: 34517, Start Num: 17

Candidate Starts for Brocalys_48:

(Start: 17 @34329 has 166 MA's), (Start: 24 @34359 has 12 MA's), (26, 34368), (Start: 28 @34395 has 1 MA's), (29, 34407), (31, 34431), (33, 34449), (35, 34458),

Gene: Bubbles123_49 Start: 37521, Stop: 37709, Start Num: 17

Candidate Starts for Bubbles123_49:

(10, 37461), (11, 37467), (Start: 17 @37521 has 166 MA's), (Start: 24 @37551 has 12 MA's), (Start: 28 @37587 has 1 MA's), (29, 37599), (31, 37623), (35, 37650),

Gene: Burwell21_51 Start: 37427, Stop: 37615, Start Num: 17

Candidate Starts for Burwell21_51:

(4, 37310), (9, 37352), (11, 37373), (13, 37403), (15, 37409), (Start: 17 @37427 has 166 MA's), (Start: 24 @37457 has 12 MA's), (Start: 28 @37493 has 1 MA's), (29, 37505), (31, 37529), (33, 37547), (35, 37556),

Gene: BuzzLyseyear_58 Start: 38698, Stop: 38886, Start Num: 17

Candidate Starts for BuzzLyseyear_58:

(4, 38581), (9, 38623), (11, 38644), (13, 38674), (15, 38680), (Start: 17 @38698 has 166 MA's), (Start: 24 @38728 has 12 MA's), (Start: 28 @38764 has 1 MA's), (29, 38776), (31, 38800), (33, 38818), (35, 38827),

Gene: ByChance_43 Start: 32694, Stop: 32843, Start Num: 22

Candidate Starts for ByChance_43:

(Start: 22 @32694 has 18 MA's), (Start: 28 @32721 has 1 MA's), (29, 32733), (31, 32757), (35, 32784), (36, 32805),

Gene: Byougenkin_49 Start: 36715, Stop: 36903, Start Num: 17

Candidate Starts for Byougenkin_49:

(5, 36616), (Start: 17 @36715 has 166 MA's), (Start: 24 @36745 has 12 MA's), (Start: 28 @36781 has 1 MA's), (29, 36793), (31, 36817), (33, 36835), (35, 36844),

Gene: Cabrinians_54 Start: 37505, Stop: 37693, Start Num: 17

Candidate Starts for Cabrinians_54:

(4, 37388), (9, 37430), (11, 37451), (13, 37481), (15, 37487), (Start: 17 @37505 has 166 MA's), (Start: 24 @37535 has 12 MA's), (Start: 28 @37571 has 1 MA's), (29, 37583), (31, 37607), (33, 37625), (35, 37634),

Gene: CaptainTrips_48 Start: 35920, Stop: 36069, Start Num: 22

Candidate Starts for CaptainTrips_48:

(Start: 22 @35920 has 18 MA's), (Start: 28 @35947 has 1 MA's), (29, 35959), (31, 35983), (35, 36010),

Gene: Cerasum_47 Start: 33195, Stop: 33386, Start Num: 17

Candidate Starts for Cerasum_47:

(Start: 17 @33195 has 166 MA's), (Start: 24 @33225 has 12 MA's), (27, 33246), (Start: 28 @33264 has 1 MA's), (29, 33276), (31, 33300), (33, 33318), (35, 33327), (36, 33348),

Gene: Che8_54 Start: 38120, Stop: 38311, Start Num: 17

Candidate Starts for Che8_54:

(10, 38060), (11, 38066), (Start: 17 @38120 has 166 MA's), (Start: 24 @38150 has 12 MA's), (Start: 28 @38189 has 1 MA's), (29, 38201), (31, 38225), (33, 38243), (35, 38252),

Gene: Che9d_58 Start: 36580, Stop: 36768, Start Num: 17

Candidate Starts for Che9d_58:

(Start: 17 @36580 has 166 MA's), (Start: 24 @36610 has 12 MA's), (Start: 28 @36646 has 1 MA's), (29, 36658), (31, 36682), (32, 36694), (33, 36700), (35, 36709),

Gene: Chevrolet_61 Start: 38254, Stop: 38445, Start Num: 17

Candidate Starts for Chevrolet_61:

(Start: 17 @38254 has 166 MA's), (Start: 24 @38284 has 12 MA's), (27, 38305), (Start: 28 @38323 has 1 MA's), (29, 38335), (31, 38359), (33, 38377), (35, 38386),

Gene: Chuckly_52 Start: 37120, Stop: 37308, Start Num: 17

Candidate Starts for Chuckly_52:

(4, 37003), (9, 37045), (11, 37066), (13, 37096), (15, 37102), (Start: 17 @37120 has 166 MA's), (Start: 24 @37150 has 12 MA's), (Start: 28 @37186 has 1 MA's), (29, 37198), (31, 37222), (33, 37240), (35, 37249), (36, 37270),

Gene: Clifton_48 Start: 34680, Stop: 34868, Start Num: 17

Candidate Starts for Clifton_48:

(Start: 17 @34680 has 166 MA's), (Start: 24 @34710 has 12 MA's), (26, 34719), (Start: 28 @34746 has 1 MA's), (29, 34758), (31, 34782), (33, 34800), (35, 34809),

Gene: Coco12_50 Start: 37252, Stop: 37443, Start Num: 17

Candidate Starts for Coco12_50:

(Start: 17 @37252 has 166 MA's), (Start: 24 @37282 has 12 MA's), (27, 37303), (Start: 28 @37321 has 1 MA's), (29, 37333), (31, 37357), (33, 37375), (35, 37384), (36, 37405),

Gene: Cornie_46 Start: 35312, Stop: 35503, Start Num: 17

Candidate Starts for Cornie_46:

(11, 35264), (Start: 17 @35312 has 166 MA's), (Start: 24 @35342 has 12 MA's), (27, 35363), (Start: 28 @35381 has 1 MA's), (29, 35393), (31, 35417), (33, 35435), (35, 35444), (36, 35465),

Gene: Cornucopia_54 Start: 37959, Stop: 38147, Start Num: 17

Candidate Starts for Cornucopia_54:

(Start: 17 @37959 has 166 MA's), (Start: 24 @37989 has 12 MA's), (Start: 28 @38025 has 1 MA's), (29, 38037), (31, 38061), (35, 38088),

Gene: Crumble_48 Start: 33471, Stop: 33629, Start Num: 24

Candidate Starts for Crumble_48:

(4, 33324), (9, 33366), (11, 33387), (13, 33417), (15, 33423), (Start: 17 @33441 has 166 MA's), (Start: 24 @33471 has 12 MA's), (Start: 28 @33507 has 1 MA's), (29, 33519), (31, 33543), (33, 33561), (35, 33570),

Gene: DLane_47 Start: 36002, Stop: 36151, Start Num: 22

Candidate Starts for DLane_47:

(Start: 22 @36002 has 18 MA's), (Start: 28 @36029 has 1 MA's), (29, 36041), (31, 36065), (35, 36092),

Gene: DRBy19_55 Start: 38456, Stop: 38647, Start Num: 17

Candidate Starts for DRBy19_55:

(Start: 17 @38456 has 166 MA's), (Start: 24 @38486 has 12 MA's), (27, 38507), (Start: 28 @38525 has 1 MA's), (29, 38537), (31, 38561), (33, 38579), (35, 38588),

Gene: DaWorst_53 Start: 37855, Stop: 38046, Start Num: 17

Candidate Starts for DaWorst_53:

(Start: 17 @37855 has 166 MA's), (Start: 24 @37885 has 12 MA's), (27, 37906), (Start: 28 @37924 has 1 MA's), (29, 37936), (31, 37960), (33, 37978), (35, 37987),

Gene: DaddyRickover_51 Start: 37515, Stop: 37673, Start Num: 24

Candidate Starts for DaddyRickover_51:

(Start: 17 @37485 has 166 MA's), (Start: 24 @37515 has 12 MA's), (Start: 28 @37551 has 1 MA's), (29, 37563), (31, 37587), (33, 37605), (35, 37614),

Gene: Daenerys_47 Start: 35723, Stop: 35911, Start Num: 17

Candidate Starts for Daenerys_47:

(Start: 17 @35723 has 166 MA's), (Start: 24 @35753 has 12 MA's), (Start: 28 @35789 has 1 MA's), (29, 35801), (31, 35825), (33, 35843), (35, 35852),

Gene: Dante_52 Start: 36848, Stop: 37039, Start Num: 17

Candidate Starts for Dante_52:

(4, 36731), (9, 36773), (11, 36794), (13, 36824), (15, 36830), (Start: 17 @36848 has 166 MA's), (Start: 24 @36878 has 12 MA's), (Start: 28 @36917 has 1 MA's), (29, 36929), (31, 36953), (33, 36971), (35, 36980),

Gene: DeadP_57 Start: 38744, Stop: 38935, Start Num: 17

Candidate Starts for DeadP_57:

(1, 38582), (6, 38657), (Start: 17 @38744 has 166 MA's), (Start: 24 @38774 has 12 MA's), (26, 38783), (27, 38795), (Start: 28 @38813 has 1 MA's), (29, 38825), (31, 38849), (33, 38867), (35, 38876),

Gene: Deb65_49 Start: 35692, Stop: 35880, Start Num: 17

Candidate Starts for Deb65_49:

(Start: 17 @35692 has 166 MA's), (Start: 24 @35722 has 12 MA's), (Start: 28 @35758 has 1 MA's), (29, 35770), (31, 35794), (33, 35812), (35, 35821),

Gene: Demsculpinboyz_61 Start: 36689, Stop: 36877, Start Num: 17

Candidate Starts for Demsculpinboyz_61:

(Start: 17 @36689 has 166 MA's), (Start: 24 @36719 has 12 MA's), (Start: 28 @36755 has 1 MA's), (29, 36767), (31, 36791), (33, 36809), (35, 36818),

Gene: DillTech15_49 Start: 35843, Stop: 36031, Start Num: 17

Candidate Starts for DillTech15_49:

(Start: 17 @35843 has 166 MA's), (Start: 24 @35873 has 12 MA's), (29, 35921), (31, 35945), (33, 35963), (35, 35972),

Gene: DirtMcgirt_51 Start: 36060, Stop: 36221, Start Num: 24

Candidate Starts for DirtMcgirt_51:

(Start: 17 @36030 has 166 MA's), (Start: 24 @36060 has 12 MA's), (Start: 28 @36099 has 1 MA's), (29, 36111), (31, 36135), (33, 36153), (35, 36162),

Gene: Donkeykong_56 Start: 39923, Stop: 40114, Start Num: 17

Candidate Starts for Donkeykong_56:

(11, 39875), (Start: 17 @39923 has 166 MA's), (Start: 24 @39953 has 12 MA's), (27, 39974), (Start: 28 @39992 has 1 MA's), (29, 40004), (31, 40028), (33, 40046), (35, 40055), (36, 40076),

Gene: Doomphist_51 Start: 37994, Stop: 38182, Start Num: 17

Candidate Starts for Doomphist_51:

(Start: 17 @37994 has 166 MA's), (Start: 24 @38024 has 12 MA's), (Start: 28 @38060 has 1 MA's), (29, 38072), (31, 38096), (35, 38123),

Gene: Dorothy_48 Start: 36366, Stop: 36557, Start Num: 17

Candidate Starts for Dorothy_48:

(Start: 17 @36366 has 166 MA's), (Start: 24 @36396 has 12 MA's), (Start: 28 @36435 has 1 MA's), (29, 36447), (31, 36471), (33, 36489), (35, 36498),

Gene: DosHalletts_56 Start: 38204, Stop: 38344, Start Num: 27

Candidate Starts for DosHalletts_56:

(Start: 17 @38153 has 166 MA's), (Start: 24 @38183 has 12 MA's), (27, 38204), (Start: 28 @38222 has 1 MA's), (29, 38234), (31, 38258), (35, 38285), (36, 38306),

Gene: DotProduct_47 Start: 36024, Stop: 36212, Start Num: 17

Candidate Starts for DotProduct_47:

(Start: 17 @36024 has 166 MA's), (Start: 24 @36054 has 12 MA's), (Start: 28 @36090 has 1 MA's), (29, 36102), (31, 36126), (35, 36153),

Gene: Doug_54 Start: 38112, Stop: 38303, Start Num: 17

Candidate Starts for Doug_54:

(Start: 17 @38112 has 166 MA's), (Start: 24 @38142 has 12 MA's), (27, 38163), (Start: 28 @38181 has 1 MA's), (29, 38193), (31, 38217), (33, 38235), (35, 38244),

Gene: Drago_50 Start: 36033, Stop: 36224, Start Num: 17

Candidate Starts for Drago_50:

(Start: 17 @36033 has 166 MA's), (Start: 24 @36063 has 12 MA's), (Start: 28 @36102 has 1 MA's), (29, 36114), (31, 36138), (33, 36156), (35, 36165),

Gene: Eish_53 Start: 37562, Stop: 37753, Start Num: 17

Candidate Starts for Eish_53:

(Start: 17 @37562 has 166 MA's), (Start: 24 @37592 has 12 MA's), (Start: 28 @37631 has 1 MA's), (29, 37643), (31, 37667), (35, 37694),

Gene: EleanorGeorge_50 Start: 36491, Stop: 36682, Start Num: 17

Candidate Starts for EleanorGeorge_50:

(11, 36443), (Start: 17 @36491 has 166 MA's), (Start: 24 @36521 has 12 MA's), (27, 36542), (Start: 28 @36560 has 1 MA's), (29, 36572), (31, 36596), (35, 36623),

Gene: Emma_51 Start: 36232, Stop: 36408, Start Num: 20

Candidate Starts for Emma_51:

(Start: 19 @36229 has 1 MA's), (Start: 20 @36232 has 5 MA's), (27, 36268), (Start: 28 @36286 has 1 MA's), (29, 36298), (31, 36322), (35, 36349),

Gene: Empress_51 Start: 37137, Stop: 37325, Start Num: 17

Candidate Starts for Empress_51:

(Start: 17 @37137 has 166 MA's), (Start: 24 @37167 has 12 MA's), (Start: 28 @37203 has 1 MA's), (29, 37215), (31, 37239), (33, 37257), (35, 37266),

Gene: Enby_52 Start: 35406, Stop: 35555, Start Num: 22

Candidate Starts for Enby_52:

(Start: 22 @35406 has 18 MA's), (Start: 28 @35433 has 1 MA's), (29, 35445), (31, 35469), (35, 35496),

Gene: Eradicator_44 Start: 35249, Stop: 35440, Start Num: 17

Candidate Starts for Eradicator_44:

(Start: 17 @35249 has 166 MA's), (Start: 24 @35279 has 12 MA's), (27, 35300), (Start: 28 @35318 has 1 MA's), (29, 35330), (31, 35354), (33, 35372), (35, 35381), (36, 35402),

Gene: Estave1_52 Start: 36959, Stop: 37117, Start Num: 24

Candidate Starts for Estave1_52:

(5, 36836), (Start: 17 @36929 has 166 MA's), (Start: 24 @36959 has 12 MA's), (Start: 28 @36995 has 1 MA's), (29, 37007), (31, 37031), (33, 37049), (35, 37058),

Gene: Fancypants_52 Start: 37522, Stop: 37710, Start Num: 17

Candidate Starts for Fancypants_52:

(Start: 17 @37522 has 166 MA's), (Start: 24 @37552 has 12 MA's), (Start: 28 @37588 has 1 MA's), (29, 37600), (31, 37624), (33, 37642), (35, 37651),

Gene: Fastidio_51 Start: 36020, Stop: 36178, Start Num: 24

Candidate Starts for Fastidio_51:

(Start: 17 @35990 has 166 MA's), (Start: 24 @36020 has 12 MA's), (29, 36068), (31, 36092), (33, 36110), (35, 36119),

Gene: Filuzino_49 Start: 35812, Stop: 35988, Start Num: 20

Candidate Starts for Filuzino_49:

(Start: 19 @35809 has 1 MA's), (Start: 20 @35812 has 5 MA's), (27, 35848), (Start: 28 @35866 has 1 MA's), (29, 35878), (31, 35902), (35, 35929),

Gene: Firehouse51_52 Start: 39773, Stop: 39961, Start Num: 17

Candidate Starts for Firehouse51_52:

(Start: 17 @39773 has 166 MA's), (Start: 24 @39803 has 12 MA's), (Start: 28 @39839 has 1 MA's), (29, 39851), (31, 39875), (33, 39893), (35, 39902),

Gene: Flathead_51 Start: 37388, Stop: 37579, Start Num: 17

Candidate Starts for Flathead_51:

(11, 37340), (Start: 17 @37388 has 166 MA's), (Start: 24 @37418 has 12 MA's), (27, 37439), (Start: 28 @37457 has 1 MA's), (29, 37469), (31, 37493), (33, 37511), (35, 37520), (36, 37541),

Gene: Florinda_64 Start: 39732, Stop: 39890, Start Num: 24

Candidate Starts for Florinda_64:

(Start: 17 @39702 has 166 MA's), (Start: 24 @39732 has 12 MA's), (Start: 28 @39768 has 1 MA's), (29, 39780), (31, 39804), (33, 39822), (35, 39831),

Gene: FreddyB_54 Start: 36353, Stop: 36541, Start Num: 17

Candidate Starts for FreddyB_54:

(4, 36236), (9, 36278), (11, 36299), (13, 36329), (15, 36335), (Start: 17 @36353 has 166 MA's), (Start: 24 @36383 has 12 MA's), (Start: 28 @36419 has 1 MA's), (29, 36431), (31, 36455), (33, 36473), (35, 36482),

Gene: Fruitloop_49 Start: 37675, Stop: 37824, Start Num: 22

Candidate Starts for Fruitloop_49:

(Start: 22 @37675 has 18 MA's), (Start: 28 @37702 has 1 MA's), (29, 37714), (31, 37738), (35, 37765),

Gene: GUmbie_50 Start: 36775, Stop: 36963, Start Num: 17

Candidate Starts for GUmbie_50:

(4, 36658), (9, 36700), (11, 36721), (13, 36751), (15, 36757), (Start: 17 @36775 has 166 MA's), (Start: 24 @36805 has 12 MA's), (Start: 28 @36841 has 1 MA's), (29, 36853), (31, 36877), (33, 36895), (35, 36904),

Gene: Galactic_52 Start: 37428, Stop: 37616, Start Num: 17

Candidate Starts for Galactic_52:

(Start: 17 @37428 has 166 MA's), (Start: 24 @37458 has 12 MA's), (Start: 28 @37494 has 1 MA's), (29, 37506), (31, 37530), (33, 37548), (35, 37557),

Gene: Gandalph_53 Start: 36977, Stop: 37165, Start Num: 17

Candidate Starts for Gandalph_53:

(Start: 17 @36977 has 166 MA's), (Start: 24 @37007 has 12 MA's), (Start: 28 @37043 has 1 MA's), (29, 37055), (31, 37079), (35, 37106),

Gene: Geralt_48 Start: 35691, Stop: 35879, Start Num: 17

Candidate Starts for Geralt_48:

(Start: 17 @35691 has 166 MA's), (Start: 24 @35721 has 12 MA's), (Start: 28 @35757 has 1 MA's), (29, 35769), (31, 35793), (33, 35811), (35, 35820),

Gene: GigiOuiOui_48 Start: 36169, Stop: 36357, Start Num: 17

Candidate Starts for GigiOuiOui_48:

(Start: 17 @36169 has 166 MA's), (Start: 24 @36199 has 12 MA's), (Start: 28 @36235 has 1 MA's), (29, 36247), (31, 36271), (35, 36298),

Gene: Girafales_61 Start: 39245, Stop: 39433, Start Num: 17

Candidate Starts for Girafales_61:

(Start: 17 @39245 has 166 MA's), (Start: 24 @39275 has 12 MA's), (Start: 28 @39311 has 1 MA's), (29, 39323), (31, 39347), (33, 39365), (35, 39374),

Gene: Girr_51 Start: 37228, Stop: 37419, Start Num: 17

Candidate Starts for Girr_51:

(Start: 17 @37228 has 166 MA's), (Start: 24 @37258 has 12 MA's), (Start: 28 @37297 has 1 MA's), (29, 37309), (31, 37333), (33, 37351), (35, 37360),

Gene: Gorge_56 Start: 38586, Stop: 38735, Start Num: 22

Candidate Starts for Gorge_56:

(Start: 22 @38586 has 18 MA's), (Start: 28 @38613 has 1 MA's), (29, 38625), (31, 38649), (35, 38676), (36, 38697),

Gene: Guppsters_52 Start: 36514, Stop: 36678, Start Num: 23

Candidate Starts for Guppsters_52:

(14, 36469), (18, 36490), (23, 36514), (Start: 28 @36556 has 1 MA's), (29, 36568), (31, 36592), (35, 36619),

Gene: Hades_52 Start: 37185, Stop: 37334, Start Num: 22

Candidate Starts for Hades_52:

(Start: 22 @37185 has 18 MA's), (Start: 28 @37212 has 1 MA's), (29, 37224), (31, 37248), (35, 37275), (36, 37296),

Gene: Hamulus_52 Start: 37611, Stop: 37799, Start Num: 17

Candidate Starts for Hamulus_52:

(Start: 17 @37611 has 166 MA's), (Start: 24 @37641 has 12 MA's), (Start: 28 @37677 has 1 MA's), (29, 37689), (31, 37713), (33, 37731), (35, 37740),

Gene: Harley_53 Start: 36964, Stop: 37155, Start Num: 17

Candidate Starts for Harley_53:

(Start: 17 @36964 has 166 MA's), (Start: 24 @36994 has 12 MA's), (29, 37045), (31, 37069), (35, 37096),

Gene: Hegedechwinu_51 Start: 35612, Stop: 35788, Start Num: 20

Candidate Starts for Hegedechwinu_51:

(Start: 19 @35609 has 1 MA's), (Start: 20 @35612 has 5 MA's), (27, 35648), (Start: 28 @35666 has 1 MA's), (29, 35678), (31, 35702), (35, 35729),

Gene: Hlubikazi_48 Start: 35369, Stop: 35560, Start Num: 17

Candidate Starts for Hlubikazi_48:

(Start: 17 @35369 has 166 MA's), (Start: 24 @35399 has 12 MA's), (Start: 28 @35438 has 1 MA's), (29, 35450), (31, 35474), (35, 35501),

Gene: lbOuu_54 Start: 37973, Stop: 38161, Start Num: 17

Candidate Starts for lbOuu_54:

(Start: 17 @37973 has 166 MA's), (Start: 24 @38003 has 12 MA's), (Start: 28 @38039 has 1 MA's), (29, 38051), (31, 38075), (33, 38093), (35, 38102),

Gene: lbhubesi_51 Start: 36568, Stop: 36756, Start Num: 17

Candidate Starts for lbhubesi_51:

(4, 36451), (9, 36493), (11, 36514), (13, 36544), (15, 36550), (Start: 17 @36568 has 166 MA's), (Start: 24 @36598 has 12 MA's), (Start: 28 @36634 has 1 MA's), (29, 36646), (31, 36670), (33, 36688), (35, 36697),

Gene: Inventum_46 Start: 36007, Stop: 36165, Start Num: 24

Candidate Starts for Inventum_46:

(Start: 17 @35977 has 166 MA's), (Start: 24 @36007 has 12 MA's), (Start: 28 @36043 has 1 MA's), (29, 36055), (31, 36079), (33, 36097), (35, 36106),

Gene: IrishSherpFalk_52 Start: 38345, Stop: 38536, Start Num: 17

Candidate Starts for IrishSherpFalk_52:

(Start: 17 @38345 has 166 MA's), (Start: 24 @38375 has 12 MA's), (27, 38396), (Start: 28 @38414 has 1 MA's), (29, 38426), (31, 38450), (33, 38468), (35, 38477), (36, 38498),

Gene: Jabbawokkie_65 Start: 38101, Stop: 38289, Start Num: 17

Candidate Starts for Jabbawokkie_65:

(Start: 17 @38101 has 166 MA's), (Start: 24 @38131 has 12 MA's), (Start: 28 @38167 has 1 MA's), (29, 38179), (31, 38203), (33, 38221), (35, 38230), (36, 38251),

Gene: JalFarm20_63 Start: 40418, Stop: 40609, Start Num: 17

Candidate Starts for JalFarm20_63:

(11, 40370), (Start: 17 @40418 has 166 MA's), (Start: 24 @40448 has 12 MA's), (27, 40469), (Start: 28 @40487 has 1 MA's), (29, 40499), (31, 40523), (33, 40541), (35, 40550), (36, 40571),

Gene: James_55 Start: 38546, Stop: 38737, Start Num: 17

Candidate Starts for James_55:

(Start: 17 @38546 has 166 MA's), (Start: 24 @38576 has 12 MA's), (Start: 28 @38615 has 1 MA's), (29, 38627), (31, 38651), (35, 38678), (36, 38699),

Gene: Jacob_53 Start: 37473, Stop: 37661, Start Num: 17

Candidate Starts for Jacob_53:

(4, 37356), (9, 37398), (11, 37419), (13, 37449), (15, 37455), (Start: 17 @37473 has 166 MA's), (Start: 24 @37503 has 12 MA's), (Start: 28 @37539 has 1 MA's), (29, 37551), (31, 37575), (33, 37593), (35, 37602),

Gene: Jinglebell_57 Start: 39261, Stop: 39419, Start Num: 24

Candidate Starts for Jinglebell_57:

(7, 39147), (Start: 17 @39231 has 166 MA's), (Start: 24 @39261 has 12 MA's), (Start: 28 @39297 has 1 MA's), (29, 39309), (31, 39333), (33, 39351), (35, 39360),

Gene: Job42_52 Start: 38645, Stop: 38836, Start Num: 17

Candidate Starts for Job42_52:

(Start: 17 @38645 has 166 MA's), (Start: 24 @38675 has 12 MA's), (27, 38696), (Start: 28 @38714 has 1 MA's), (29, 38726), (31, 38750), (35, 38777),

Gene: JoeyJr_48 Start: 35891, Stop: 36079, Start Num: 17

Candidate Starts for JoeyJr_48:

(Start: 17 @35891 has 166 MA's), (Start: 24 @35921 has 12 MA's), (Start: 28 @35957 has 1 MA's), (29, 35969), (31, 35993), (33, 36011), (35, 36020),

Gene: Juice456_53 Start: 38393, Stop: 38584, Start Num: 17

Candidate Starts for Juice456_53:

(11, 38345), (Start: 17 @38393 has 166 MA's), (Start: 24 @38423 has 12 MA's), (27, 38444), (Start: 28 @38462 has 1 MA's), (29, 38474), (31, 38498), (35, 38525),

Gene: Juniper1_52 Start: 36403, Stop: 36591, Start Num: 17

Candidate Starts for Juniper1_52:

(5, 36304), (Start: 17 @36403 has 166 MA's), (Start: 24 @36433 has 12 MA's), (Start: 28 @36469 has 1 MA's), (29, 36481), (31, 36505), (33, 36523), (35, 36532),

Gene: Karhdo_50 Start: 37051, Stop: 37239, Start Num: 17

Candidate Starts for Karhdo_50:

(Start: 17 @37051 has 166 MA's), (Start: 24 @37081 has 12 MA's), (Start: 28 @37117 has 1 MA's), (29, 37129), (31, 37153), (33, 37171), (35, 37180),

Gene: Kersh_54 Start: 39001, Stop: 39192, Start Num: 17

Candidate Starts for Kersh_54:

(Start: 17 @39001 has 166 MA's), (Start: 24 @39031 has 12 MA's), (Start: 28 @39070 has 1 MA's), (29, 39082), (31, 39106), (33, 39124), (35, 39133),

Gene: Kimberlium_54 Start: 38863, Stop: 39051, Start Num: 17

Candidate Starts for Kimberlium_54:

(Start: 17 @38863 has 166 MA's), (Start: 24 @38893 has 12 MA's), (Start: 28 @38929 has 1 MA's), (29, 38941), (31, 38965), (33, 38983), (35, 38992),

Gene: KingMidas_52 Start: 37553, Stop: 37741, Start Num: 17

Candidate Starts for KingMidas_52:

(Start: 17 @37553 has 166 MA's), (Start: 24 @37583 has 12 MA's), (Start: 28 @37619 has 1 MA's), (29, 37631), (31, 37655), (33, 37673), (35, 37682),

Gene: Kingsley_48 Start: 35985, Stop: 36176, Start Num: 17

Candidate Starts for Kingsley_48:

(Start: 17 @35985 has 166 MA's), (Start: 24 @36015 has 12 MA's), (27, 36036), (Start: 28 @36054 has 1 MA's), (29, 36066), (31, 36090), (33, 36108), (35, 36117), (36, 36138),

Gene: Koella_47 Start: 33403, Stop: 33591, Start Num: 17

Candidate Starts for Koella_47:

(4, 33286), (9, 33328), (11, 33349), (13, 33379), (15, 33385), (Start: 17 @33403 has 166 MA's), (Start: 24 @33433 has 12 MA's), (Start: 28 @33469 has 1 MA's), (29, 33481), (31, 33505), (33, 33523), (35, 33532),

Gene: Krakatau_49 Start: 36698, Stop: 36850, Start Num: 25

Candidate Starts for Krakatau_49:

(Start: 25 @36698 has 1 MA's), (Start: 28 @36728 has 1 MA's), (29, 36740), (31, 36764), (33, 36782), (35, 36791),

Gene: KristaRAM_54 Start: 39046, Stop: 39237, Start Num: 17

Candidate Starts for KristaRAM_54:

(11, 38998), (Start: 17 @39046 has 166 MA's), (Start: 24 @39076 has 12 MA's), (27, 39097), (Start: 28 @39115 has 1 MA's), (29, 39127), (31, 39151), (35, 39178),

Gene: LastJedi_47 Start: 34723, Stop: 34911, Start Num: 17

Candidate Starts for LastJedi_47:

(Start: 17 @34723 has 166 MA's), (Start: 24 @34753 has 12 MA's), (26, 34762), (Start: 28 @34789 has 1 MA's), (29, 34801), (31, 34825), (33, 34843), (35, 34852),

Gene: Latretium_54 Start: 37870, Stop: 38028, Start Num: 24

Candidate Starts for Latretium_54:

(Start: 17 @37840 has 166 MA's), (Start: 24 @37870 has 12 MA's), (Start: 28 @37906 has 1 MA's), (29, 37918), (31, 37942), (33, 37960), (35, 37969),

Gene: Leozinho_52 Start: 36801, Stop: 36992, Start Num: 17

Candidate Starts for Leozinho_52:

(Start: 17 @36801 has 166 MA's), (Start: 24 @36831 has 12 MA's), (Start: 28 @36870 has 1 MA's), (29, 36882), (31, 36906), (33, 36924), (35, 36933),

Gene: Leperchaun_45 Start: 35121, Stop: 35309, Start Num: 17

Candidate Starts for Leperchaun_45:

(Start: 17 @35121 has 166 MA's), (Start: 24 @35151 has 12 MA's), (Start: 28 @35187 has 1 MA's), (29, 35199), (31, 35223), (33, 35241), (35, 35250),

Gene: LilMoolah_50 Start: 36618, Stop: 36809, Start Num: 17

Candidate Starts for LilMoolah_50:

(Start: 17 @36618 has 166 MA's), (Start: 24 @36648 has 12 MA's), (Start: 28 @36687 has 1 MA's), (29, 36699), (31, 36723), (33, 36741), (35, 36750),

Gene: LittleShirley_52 Start: 37700, Stop: 37840, Start Num: 27

Candidate Starts for LittleShirley_52:

(Start: 17 @37649 has 166 MA's), (Start: 24 @37679 has 12 MA's), (27, 37700), (Start: 28 @37718 has 1 MA's), (29, 37730), (31, 37754), (33, 37772), (35, 37781),

Gene: Lizziana_59 Start: 38476, Stop: 38664, Start Num: 17

Candidate Starts for Lizziana_59:

(4, 38359), (9, 38401), (11, 38422), (13, 38452), (15, 38458), (Start: 17 @38476 has 166 MA's), (Start: 24 @38506 has 12 MA's), (Start: 28 @38542 has 1 MA's), (29, 38554), (31, 38578), (33, 38596), (35, 38605),

Gene: Llama_57 Start: 39229, Stop: 39417, Start Num: 17

Candidate Starts for Llama_57:

(7, 39145), (Start: 17 @39229 has 166 MA's), (Start: 24 @39259 has 12 MA's), (Start: 28 @39295 has 1 MA's), (29, 39307), (31, 39331), (33, 39349), (35, 39358),

Gene: Llij_48 Start: 36187, Stop: 36378, Start Num: 17

Candidate Starts for Llij_48:

(Start: 17 @36187 has 166 MA's), (Start: 24 @36217 has 12 MA's), (Start: 28 @36256 has 1 MA's), (29, 36268), (31, 36292), (33, 36310), (35, 36319),

Gene: Lorde_52 Start: 35381, Stop: 35530, Start Num: 22

Candidate Starts for Lorde_52:

(Start: 22 @35381 has 18 MA's), (Start: 28 @35408 has 1 MA's), (29, 35420), (31, 35444), (35, 35471),

Gene: LunaBlu_55 Start: 38087, Stop: 38275, Start Num: 17

Candidate Starts for LunaBlu_55:

(Start: 17 @38087 has 166 MA's), (Start: 24 @38117 has 12 MA's), (Start: 28 @38153 has 1 MA's), (29, 38165), (31, 38189), (33, 38207), (35, 38216),

Gene: LunaStella_46 Start: 35578, Stop: 35757, Start Num: 21

Candidate Starts for LunaStella_46:

(Start: 16 @35554 has 2 MA's), (21, 35578), (Start: 24 @35590 has 12 MA's), (29, 35638), (30, 35644), (33, 35689), (35, 35698), (36, 35719),

Gene: MadMen_47 Start: 36190, Stop: 36378, Start Num: 17

Candidate Starts for MadMen_47:

(4, 36073), (9, 36115), (11, 36136), (13, 36166), (15, 36172), (Start: 17 @36190 has 166 MA's), (Start: 24 @36220 has 12 MA's), (Start: 28 @36256 has 1 MA's), (29, 36268), (31, 36292), (33, 36310), (35, 36319), (36, 36340),

Gene: Madiba_49 Start: 35479, Stop: 35667, Start Num: 17

Candidate Starts for Madiba_49:

(4, 35362), (9, 35404), (11, 35425), (13, 35455), (15, 35461), (Start: 17 @35479 has 166 MA's), (Start: 24 @35509 has 12 MA's), (Start: 28 @35545 has 1 MA's), (29, 35557), (31, 35581), (33, 35599), (35, 35608),

Gene: Mahavrat_49 Start: 36148, Stop: 36336, Start Num: 17

Candidate Starts for Mahavrat_49:

(Start: 17 @36148 has 166 MA's), (Start: 24 @36178 has 12 MA's), (Start: 28 @36214 has 1 MA's), (29, 36226), (31, 36250), (33, 36268), (35, 36277), (36, 36298),

Gene: Mandlovu_48 Start: 35311, Stop: 35502, Start Num: 17

Candidate Starts for Mandlovu_48:

(Start: 17 @35311 has 166 MA's), (Start: 24 @35341 has 12 MA's), (Start: 28 @35380 has 1 MA's), (29, 35392), (31, 35416), (35, 35443),

Gene: Mantra_48 Start: 36205, Stop: 36327, Start Num: 28

Candidate Starts for Mantra_48:

(Start: 17 @36139 has 166 MA's), (Start: 24 @36169 has 12 MA's), (Start: 28 @36205 has 1 MA's), (29, 36217), (31, 36241), (33, 36259), (35, 36268),

Gene: Maravista_53 Start: 38622, Stop: 38810, Start Num: 17

Candidate Starts for Maravista_53:

(Start: 17 @38622 has 166 MA's), (Start: 24 @38652 has 12 MA's), (Start: 28 @38688 has 1 MA's), (29, 38700), (31, 38724), (33, 38742), (35, 38751),

Gene: Marker_57 Start: 36968, Stop: 37156, Start Num: 17

Candidate Starts for Marker_57:

(2, 36821), (3, 36839), (6, 36878), (8, 36884), (Start: 17 @36968 has 166 MA's), (Start: 24 @36998 has 12 MA's), (Start: 28 @37034 has 1 MA's), (29, 37046), (31, 37070), (33, 37088), (35, 37097),

Gene: Martik_53 Start: 37429, Stop: 37617, Start Num: 17

Candidate Starts for Martik_53:

(4, 37312), (9, 37354), (11, 37375), (13, 37405), (15, 37411), (Start: 17 @37429 has 166 MA's), (Start: 24 @37459 has 12 MA's), (Start: 28 @37495 has 1 MA's), (29, 37507), (31, 37531), (33, 37549), (35, 37558),

Gene: Mattes_55 Start: 38576, Stop: 38737, Start Num: 24

Candidate Starts for Mattes_55:

(Start: 17 @38546 has 166 MA's), (Start: 24 @38576 has 12 MA's), (Start: 28 @38615 has 1 MA's), (29, 38627), (31, 38651), (35, 38678), (36, 38699),

Gene: Melissauren88_49 Start: 36158, Stop: 36307, Start Num: 22
Candidate Starts for Melissauren88_49:
(Start: 22 @36158 has 18 MA's), (Start: 28 @36185 has 1 MA's), (29, 36197), (31, 36221), (35, 36248),

Gene: MilanaBonita_99 Start: 32688, Stop: 32879, Start Num: 17
Candidate Starts for MilanaBonita_99:
(Start: 17 @32688 has 166 MA's), (Start: 24 @32718 has 12 MA's), (27, 32739), (Start: 28 @32757 has 1 MA's), (29, 32769), (31, 32793), (35, 32820),

Gene: MilleniumForce_51 Start: 38152, Stop: 38328, Start Num: 20
Candidate Starts for MilleniumForce_51:
(Start: 19 @38149 has 1 MA's), (Start: 20 @38152 has 5 MA's), (27, 38188), (Start: 28 @38206 has 1 MA's), (29, 38218), (31, 38242), (35, 38269),

Gene: MinionDave_50 Start: 36695, Stop: 36844, Start Num: 22
Candidate Starts for MinionDave_50:
(Start: 22 @36695 has 18 MA's), (Start: 28 @36722 has 1 MA's), (29, 36734), (31, 36758), (35, 36785),

Gene: Minnie_56 Start: 39031, Stop: 39222, Start Num: 17
Candidate Starts for Minnie_56:
(Start: 17 @39031 has 166 MA's), (Start: 24 @39061 has 12 MA's), (27, 39082), (Start: 28 @39100 has 1 MA's), (29, 39112), (31, 39136), (33, 39154), (35, 39163), (36, 39184),

Gene: MisterCuddles_51 Start: 37228, Stop: 37419, Start Num: 17
Candidate Starts for MisterCuddles_51:
(Start: 17 @37228 has 166 MA's), (Start: 24 @37258 has 12 MA's), (Start: 28 @37297 has 1 MA's), (29, 37309), (31, 37333), (33, 37351), (35, 37360),

Gene: Modragons_56 Start: 39075, Stop: 39263, Start Num: 17
Candidate Starts for Modragons_56:
(7, 38991), (Start: 17 @39075 has 166 MA's), (Start: 24 @39105 has 12 MA's), (Start: 28 @39141 has 1 MA's), (29, 39153), (31, 39177), (33, 39195), (35, 39204),

Gene: MooMoo_47 Start: 35830, Stop: 36033, Start Num: 16
Candidate Starts for MooMoo_47:
(Start: 16 @35830 has 2 MA's), (21, 35854), (Start: 24 @35866 has 12 MA's), (29, 35914), (30, 35920), (33, 35965), (35, 35974), (36, 35995),

Gene: Moonbeam_47 Start: 36185, Stop: 36364, Start Num: 19
Candidate Starts for Moonbeam_47:
(Start: 19 @36185 has 1 MA's), (Start: 20 @36188 has 5 MA's), (27, 36224), (Start: 28 @36242 has 1 MA's), (29, 36254), (31, 36278), (35, 36305),

Gene: Mova_52 Start: 36496, Stop: 36687, Start Num: 17
Candidate Starts for Mova_52:
(Start: 17 @36496 has 166 MA's), (Start: 24 @36526 has 12 MA's), (27, 36547), (Start: 28 @36565 has 1 MA's), (29, 36577), (31, 36601), (35, 36628),

Gene: Mozy_61 Start: 39761, Stop: 39949, Start Num: 17
Candidate Starts for Mozy_61:

(Start: 17 @39761 has 166 MA's), (Start: 24 @39791 has 12 MA's), (Start: 28 @39827 has 1 MA's), (29, 39839), (31, 39863), (33, 39881), (35, 39890),

Gene: Ms6_45 Start: 31504, Stop: 31668, Start Num: 23

Candidate Starts for Ms6_45:

(10, 31420), (12, 31453), (18, 31480), (23, 31504), (Start: 28 @31546 has 1 MA's), (29, 31558), (31, 31582), (35, 31609),

Gene: Mutaforma13_55 Start: 39287, Stop: 39475, Start Num: 17

Candidate Starts for Mutaforma13_55:

(Start: 17 @39287 has 166 MA's), (Start: 24 @39317 has 12 MA's), (Start: 28 @39353 has 1 MA's), (29, 39365), (31, 39389), (35, 39416), (36, 39437),

Gene: Nimbo_47 Start: 35694, Stop: 35882, Start Num: 17

Candidate Starts for Nimbo_47:

(Start: 17 @35694 has 166 MA's), (Start: 24 @35724 has 12 MA's), (Start: 28 @35760 has 1 MA's), (29, 35772), (31, 35796), (33, 35814), (35, 35823),

Gene: Nitzel_48 Start: 35903, Stop: 36091, Start Num: 17

Candidate Starts for Nitzel_48:

(4, 35786), (9, 35828), (11, 35849), (13, 35879), (15, 35885), (Start: 17 @35903 has 166 MA's), (Start: 24 @35933 has 12 MA's), (Start: 28 @35969 has 1 MA's), (29, 35981), (31, 36005), (33, 36023), (35, 36032),

Gene: Nivrat_48 Start: 36491, Stop: 36682, Start Num: 17

Candidate Starts for Nivrat_48:

(Start: 17 @36491 has 166 MA's), (Start: 24 @36521 has 12 MA's), (Start: 28 @36560 has 1 MA's), (29, 36572), (31, 36596), (33, 36614), (35, 36623),

Gene: NormanBulbieJr_53 Start: 37416, Stop: 37604, Start Num: 17

Candidate Starts for NormanBulbieJr_53:

(4, 37299), (9, 37341), (11, 37362), (13, 37392), (15, 37398), (Start: 17 @37416 has 166 MA's), (Start: 24 @37446 has 12 MA's), (Start: 28 @37482 has 1 MA's), (29, 37494), (31, 37518), (33, 37536), (35, 37545),

Gene: Ochi17_55 Start: 38682, Stop: 38870, Start Num: 17

Candidate Starts for Ochi17_55:

(7, 38598), (Start: 17 @38682 has 166 MA's), (Start: 24 @38712 has 12 MA's), (Start: 28 @38748 has 1 MA's), (29, 38760), (31, 38784), (33, 38802), (35, 38811),

Gene: OfUltron_57 Start: 39231, Stop: 39419, Start Num: 17

Candidate Starts for OfUltron_57:

(7, 39147), (Start: 17 @39231 has 166 MA's), (Start: 24 @39261 has 12 MA's), (Start: 28 @39297 has 1 MA's), (29, 39309), (31, 39333), (33, 39351), (35, 39360),

Gene: Ogotogo_55 Start: 37249, Stop: 37437, Start Num: 17

Candidate Starts for Ogotogo_55:

(11, 37201), (Start: 17 @37249 has 166 MA's), (Start: 24 @37279 has 12 MA's), (Start: 28 @37315 has 1 MA's), (29, 37327), (31, 37351), (33, 37369), (35, 37378), (36, 37399),

Gene: OldBen_50 Start: 37409, Stop: 37597, Start Num: 17

Candidate Starts for OldBen_50:

(Start: 17 @37409 has 166 MA's), (Start: 24 @37439 has 12 MA's), (Start: 28 @37475 has 1 MA's), (29, 37487), (31, 37511), (33, 37529), (35, 37538),

Gene: OlympiaSaint_53 Start: 37453, Stop: 37644, Start Num: 17

Candidate Starts for OlympiaSaint_53:

(11, 37405), (Start: 17 @37453 has 166 MA's), (Start: 24 @37483 has 12 MA's), (27, 37504), (Start: 28 @37522 has 1 MA's), (29, 37534), (31, 37558), (33, 37576), (35, 37585), (36, 37606),

Gene: Ovechkin_48 Start: 36542, Stop: 36691, Start Num: 22

Candidate Starts for Ovechkin_48:

(Start: 22 @36542 has 18 MA's), (Start: 28 @36569 has 1 MA's), (29, 36581), (31, 36605), (35, 36632),

Gene: OwlsT2W_52 Start: 37458, Stop: 37649, Start Num: 17

Candidate Starts for OwlsT2W_52:

(11, 37410), (Start: 17 @37458 has 166 MA's), (Start: 24 @37488 has 12 MA's), (Start: 28 @37527 has 1 MA's), (29, 37539), (31, 37563), (33, 37581), (35, 37590),

Gene: PHappiness_48 Start: 35667, Stop: 35855, Start Num: 17

Candidate Starts for PHappiness_48:

(Start: 17 @35667 has 166 MA's), (Start: 24 @35697 has 12 MA's), (Start: 28 @35733 has 1 MA's), (29, 35745), (31, 35769), (33, 35787), (35, 35796),

Gene: PMC_46 Start: 36465, Stop: 36656, Start Num: 17

Candidate Starts for PMC_46:

(Start: 17 @36465 has 166 MA's), (Start: 24 @36495 has 12 MA's), (27, 36516), (Start: 28 @36534 has 1 MA's), (29, 36546), (31, 36570), (33, 36588), (35, 36597),

Gene: Pacc40_47 Start: 35741, Stop: 35929, Start Num: 17

Candidate Starts for Pacc40_47:

(Start: 17 @35741 has 166 MA's), (Start: 24 @35771 has 12 MA's), (Start: 28 @35807 has 1 MA's), (29, 35819), (31, 35843), (33, 35861), (35, 35870),

Gene: Phalconet_50 Start: 36462, Stop: 36611, Start Num: 22

Candidate Starts for Phalconet_50:

(Start: 22 @36462 has 18 MA's), (Start: 28 @36489 has 1 MA's), (29, 36501), (31, 36525), (35, 36552),

Gene: Phanphagia_49 Start: 37378, Stop: 37569, Start Num: 17

Candidate Starts for Phanphagia_49:

(11, 37330), (Start: 17 @37378 has 166 MA's), (Start: 24 @37408 has 12 MA's), (27, 37429), (Start: 28 @37447 has 1 MA's), (29, 37459), (31, 37483), (33, 37501), (35, 37510), (36, 37531),

Gene: Phatniss_50 Start: 37282, Stop: 37473, Start Num: 17

Candidate Starts for Phatniss_50:

(Start: 17 @37282 has 166 MA's), (Start: 24 @37312 has 12 MA's), (Start: 28 @37351 has 1 MA's), (29, 37363), (31, 37387), (33, 37405), (35, 37414),

Gene: PhesterPhotato_54 Start: 37420, Stop: 37596, Start Num: 20

Candidate Starts for PhesterPhotato_54:

(Start: 19 @37417 has 1 MA's), (Start: 20 @37420 has 5 MA's), (27, 37456), (Start: 28 @37474 has 1 MA's), (29, 37486), (31, 37510), (35, 37537),

Gene: Philus_55 Start: 38462, Stop: 38623, Start Num: 24

Candidate Starts for Philus_55:

(Start: 17 @38432 has 166 MA's), (Start: 24 @38462 has 12 MA's), (27, 38483), (Start: 28 @38501 has 1 MA's), (29, 38513), (31, 38537), (33, 38555), (35, 38564),

Gene: Pippy_51 Start: 36287, Stop: 36475, Start Num: 17

Candidate Starts for Pippy_51:

(Start: 17 @36287 has 166 MA's), (Start: 24 @36317 has 12 MA's), (26, 36326), (Start: 28 @36353 has 1 MA's), (29, 36365), (31, 36389), (33, 36407), (35, 36416),

Gene: Plumbus_54 Start: 37516, Stop: 37704, Start Num: 17

Candidate Starts for Plumbus_54:

(Start: 17 @37516 has 166 MA's), (Start: 24 @37546 has 12 MA's), (Start: 28 @37582 has 1 MA's), (29, 37594), (31, 37618), (33, 37636), (35, 37645),

Gene: Poenanya_51 Start: 37994, Stop: 38182, Start Num: 17

Candidate Starts for Poenanya_51:

(Start: 17 @37994 has 166 MA's), (Start: 24 @38024 has 12 MA's), (Start: 28 @38060 has 1 MA's), (29, 38072), (31, 38096), (35, 38123),

Gene: Polka14_49 Start: 36344, Stop: 36532, Start Num: 17

Candidate Starts for Polka14_49:

(Start: 17 @36344 has 166 MA's), (Start: 24 @36374 has 12 MA's), (29, 36422), (31, 36446), (33, 36464), (35, 36473),

Gene: Pollywog_53 Start: 37900, Stop: 38088, Start Num: 17

Candidate Starts for Pollywog_53:

(11, 37852), (Start: 17 @37900 has 166 MA's), (Start: 24 @37930 has 12 MA's), (Start: 28 @37966 has 1 MA's), (29, 37978), (31, 38002), (33, 38020), (35, 38029),

Gene: PopTart_46 Start: 36053, Stop: 36241, Start Num: 17

Candidate Starts for PopTart_46:

(Start: 17 @36053 has 166 MA's), (Start: 24 @36083 has 12 MA's), (26, 36092), (Start: 28 @36119 has 1 MA's), (29, 36131), (31, 36155), (33, 36173), (35, 36182),

Gene: Priscilla_53 Start: 37515, Stop: 37703, Start Num: 17

Candidate Starts for Priscilla_53:

(4, 37398), (9, 37440), (11, 37461), (13, 37491), (15, 37497), (Start: 17 @37515 has 166 MA's), (Start: 24 @37545 has 12 MA's), (Start: 28 @37581 has 1 MA's), (29, 37593), (31, 37617), (33, 37635), (35, 37644),

Gene: QuickMath_53 Start: 39086, Stop: 39274, Start Num: 17

Candidate Starts for QuickMath_53:

(Start: 17 @39086 has 166 MA's), (Start: 24 @39116 has 12 MA's), (Start: 28 @39152 has 1 MA's), (29, 39164), (31, 39188), (33, 39206), (35, 39215),

Gene: Quico_61 Start: 39522, Stop: 39710, Start Num: 17

Candidate Starts for Quico_61:

(Start: 17 @39522 has 166 MA's), (Start: 24 @39552 has 12 MA's), (Start: 28 @39588 has 1 MA's), (29, 39600), (31, 39624), (33, 39642), (35, 39651),

Gene: Radiance_52 Start: 37581, Stop: 37769, Start Num: 17

Candidate Starts for Radiance_52:

(Start: 17 @37581 has 166 MA's), (Start: 24 @37611 has 12 MA's), (Start: 28 @37647 has 1 MA's), (29, 37659), (31, 37683), (33, 37701), (35, 37710), (36, 37731),

Gene: Ramsey_53 Start: 38235, Stop: 38426, Start Num: 17

Candidate Starts for Ramsey_53:

(Start: 17 @38235 has 166 MA's), (Start: 24 @38265 has 12 MA's), (Start: 28 @38304 has 1 MA's), (29, 38316), (31, 38340), (33, 38358), (35, 38367),

Gene: RedBird_48 Start: 36378, Stop: 36569, Start Num: 17

Candidate Starts for RedBird_48:

(Start: 17 @36378 has 166 MA's), (Start: 24 @36408 has 12 MA's), (Start: 28 @36447 has 1 MA's), (29, 36459), (31, 36483), (33, 36501), (35, 36510),

Gene: Renaud18_57 Start: 38033, Stop: 38224, Start Num: 17

Candidate Starts for Renaud18_57:

(1, 37871), (6, 37946), (Start: 17 @38033 has 166 MA's), (Start: 24 @38063 has 12 MA's), (26, 38072), (27, 38084), (Start: 28 @38102 has 1 MA's), (29, 38114), (31, 38138), (33, 38156), (35, 38165),

Gene: Rialto_56 Start: 39673, Stop: 39864, Start Num: 17

Candidate Starts for Rialto_56:

(Start: 17 @39673 has 166 MA's), (Start: 24 @39703 has 12 MA's), (27, 39724), (Start: 28 @39742 has 1 MA's), (29, 39754), (31, 39778), (35, 39805),

Gene: RitaG_48 Start: 36012, Stop: 36200, Start Num: 17

Candidate Starts for RitaG_48:

(Start: 17 @36012 has 166 MA's), (Start: 24 @36042 has 12 MA's), (Start: 28 @36078 has 1 MA's), (29, 36090), (31, 36114), (33, 36132), (35, 36141),

Gene: Rockne_50 Start: 36465, Stop: 36656, Start Num: 17

Candidate Starts for Rockne_50:

(Start: 17 @36465 has 166 MA's), (Start: 24 @36495 has 12 MA's), (27, 36516), (Start: 28 @36534 has 1 MA's), (29, 36546), (31, 36570), (33, 36588), (35, 36597),

Gene: RockyHorror_52 Start: 36869, Stop: 37060, Start Num: 17

Candidate Starts for RockyHorror_52:

(Start: 17 @36869 has 166 MA's), (Start: 24 @36899 has 12 MA's), (27, 36920), (Start: 28 @36938 has 1 MA's), (29, 36950), (31, 36974), (33, 36992), (35, 37001),

Gene: Royals2015_54 Start: 37127, Stop: 37318, Start Num: 17

Candidate Starts for Royals2015_54:

(Start: 17 @37127 has 166 MA's), (Start: 24 @37157 has 12 MA's), (27, 37178), (Start: 28 @37196 has 1 MA's), (29, 37208), (31, 37232), (33, 37250), (35, 37259),

Gene: Ruby_49 Start: 37229, Stop: 37420, Start Num: 17

Candidate Starts for Ruby_49:

(Start: 17 @37229 has 166 MA's), (Start: 24 @37259 has 12 MA's), (Start: 28 @37298 has 1 MA's), (29, 37310), (31, 37334), (33, 37352), (35, 37361),

Gene: SG4_48 Start: 35891, Stop: 36040, Start Num: 22

Candidate Starts for SG4_48:

(Start: 22 @35891 has 18 MA's), (Start: 28 @35918 has 1 MA's), (29, 35930), (31, 35954), (35, 35981),

Gene: Saal_54 Start: 38405, Stop: 38554, Start Num: 22

Candidate Starts for Saal_54:

(Start: 22 @38405 has 18 MA's), (Start: 28 @38432 has 1 MA's), (29, 38444), (31, 38468), (35, 38495), (36, 38516),

Gene: Sabbb_57 Start: 38277, Stop: 38468, Start Num: 17

Candidate Starts for Sabbb_57:

(Start: 17 @38277 has 166 MA's), (Start: 24 @38307 has 12 MA's), (Start: 28 @38346 has 1 MA's), (29, 38358), (31, 38382), (33, 38400), (35, 38409),

Gene: Sandalphon_54 Start: 38188, Stop: 38376, Start Num: 17

Candidate Starts for Sandalphon_54:

(Start: 17 @38188 has 166 MA's), (Start: 24 @38218 has 12 MA's), (26, 38227), (Start: 28 @38254 has 1 MA's), (29, 38266), (31, 38290), (33, 38308), (35, 38317),

Gene: Sarma624_49 Start: 33177, Stop: 33368, Start Num: 17

Candidate Starts for Sarma624_49:

(Start: 17 @33177 has 166 MA's), (Start: 24 @33207 has 12 MA's), (27, 33228), (Start: 28 @33246 has 1 MA's), (29, 33258), (31, 33282), (33, 33300), (35, 33309), (36, 33330),

Gene: Sassafras_49 Start: 35976, Stop: 36164, Start Num: 17

Candidate Starts for Sassafras_49:

(Start: 17 @35976 has 166 MA's), (Start: 24 @36006 has 12 MA's), (Start: 28 @36042 has 1 MA's), (29, 36054), (31, 36078), (33, 36096), (35, 36105),

Gene: SassyB_46 Start: 36053, Stop: 36241, Start Num: 17

Candidate Starts for SassyB_46:

(Start: 17 @36053 has 166 MA's), (Start: 24 @36083 has 12 MA's), (26, 36092), (Start: 28 @36119 has 1 MA's), (29, 36131), (31, 36155), (33, 36173), (35, 36182),

Gene: Scottish_51 Start: 37024, Stop: 37212, Start Num: 17

Candidate Starts for Scottish_51:

(Start: 17 @37024 has 166 MA's), (Start: 24 @37054 has 12 MA's), (Start: 28 @37090 has 1 MA's), (29, 37102), (31, 37126), (33, 37144), (35, 37153),

Gene: Seabastian_57 Start: 39232, Stop: 39420, Start Num: 17

Candidate Starts for Seabastian_57:

(7, 39148), (Start: 17 @39232 has 166 MA's), (Start: 24 @39262 has 12 MA's), (Start: 28 @39298 has 1 MA's), (29, 39310), (31, 39334), (33, 39352), (35, 39361),

Gene: Seagreen_52 Start: 36781, Stop: 36969, Start Num: 17

Candidate Starts for Seagreen_52:

(Start: 17 @36781 has 166 MA's), (Start: 24 @36811 has 12 MA's), (Start: 28 @36847 has 1 MA's), (29, 36859), (31, 36883), (33, 36901), (35, 36910),

Gene: Shauna1_50 Start: 37389, Stop: 37550, Start Num: 24

Candidate Starts for Shauna1_50:

(11, 37311), (Start: 17 @37359 has 166 MA's), (Start: 24 @37389 has 12 MA's), (27, 37410), (Start: 28 @37428 has 1 MA's), (29, 37440), (31, 37464), (33, 37482), (35, 37491), (36, 37512),

Gene: ShiLan_52 Start: 37462, Stop: 37650, Start Num: 17

Candidate Starts for ShiLan_52:

(4, 37345), (9, 37387), (11, 37408), (13, 37438), (15, 37444), (Start: 17 @37462 has 166 MA's), (Start: 24 @37492 has 12 MA's), (Start: 28 @37528 has 1 MA's), (29, 37540), (31, 37564), (33, 37582), (35, 37591),

Gene: ShowerHandel_54 Start: 37459, Stop: 37617, Start Num: 24

Candidate Starts for ShowerHandel_54:

(4, 37312), (9, 37354), (11, 37375), (13, 37405), (15, 37411), (Start: 17 @37429 has 166 MA's), (Start: 24 @37459 has 12 MA's), (Start: 28 @37495 has 1 MA's), (29, 37507), (31, 37531), (33, 37549), (35, 37558),

Gene: ShroomBoi_54 Start: 37646, Stop: 37837, Start Num: 17

Candidate Starts for ShroomBoi_54:

(Start: 17 @37646 has 166 MA's), (Start: 24 @37676 has 12 MA's), (27, 37697), (Start: 28 @37715 has 1 MA's), (29, 37727), (31, 37751), (33, 37769), (35, 37778),

Gene: SiSi_50 Start: 36603, Stop: 36791, Start Num: 17

Candidate Starts for SiSi_50:

(Start: 17 @36603 has 166 MA's), (Start: 24 @36633 has 12 MA's), (Start: 28 @36669 has 1 MA's), (29, 36681), (31, 36705), (33, 36723), (35, 36732),

Gene: SimranZ1_50 Start: 36116, Stop: 36304, Start Num: 17

Candidate Starts for SimranZ1_50:

(5, 36017), (Start: 17 @36116 has 166 MA's), (Start: 24 @36146 has 12 MA's), (Start: 28 @36182 has 1 MA's), (29, 36194), (31, 36218), (33, 36236), (34, 36242), (35, 36245), (36, 36266),

Gene: Soul22_55 Start: 37253, Stop: 37414, Start Num: 24

Candidate Starts for Soul22_55:

(11, 37175), (Start: 17 @37223 has 166 MA's), (Start: 24 @37253 has 12 MA's), (27, 37274), (Start: 28 @37292 has 1 MA's), (29, 37304), (31, 37328), (35, 37355),

Gene: Sparkdehlily_57 Start: 38118, Stop: 38306, Start Num: 17

Candidate Starts for Sparkdehlily_57:

(4, 38001), (9, 38043), (11, 38064), (13, 38094), (15, 38100), (Start: 17 @38118 has 166 MA's), (Start: 24 @38148 has 12 MA's), (Start: 28 @38184 has 1 MA's), (29, 38196), (31, 38220), (33, 38238), (35, 38247), (36, 38268),

Gene: Spartacus_53 Start: 37262, Stop: 37453, Start Num: 17

Candidate Starts for Spartacus_53:

(Start: 17 @37262 has 166 MA's), (Start: 24 @37292 has 12 MA's), (27, 37313), (Start: 28 @37331 has 1 MA's), (29, 37343), (31, 37367), (33, 37385), (35, 37394), (36, 37415),

Gene: Spikelee_58 Start: 38764, Stop: 38955, Start Num: 17

Candidate Starts for Spikelee_58:

(Start: 17 @38764 has 166 MA's), (Start: 24 @38794 has 12 MA's), (Start: 28 @38833 has 1 MA's), (29, 38845), (31, 38869), (33, 38887), (35, 38896), (36, 38917),

Gene: Spoonbill_50 Start: 35966, Stop: 36154, Start Num: 17

Candidate Starts for Spoonbill_50:

(Start: 17 @35966 has 166 MA's), (Start: 24 @35996 has 12 MA's), (Start: 28 @36032 has 1 MA's), (29, 36044), (31, 36068), (33, 36086), (35, 36095),

Gene: StAnnes_50 Start: 37137, Stop: 37286, Start Num: 22

Candidate Starts for StAnnes_50:

(Start: 22 @37137 has 18 MA's), (Start: 28 @37164 has 1 MA's), (29, 37176), (31, 37200), (35, 37227),

Gene: Stap_51 Start: 36767, Stop: 36955, Start Num: 17

Candidate Starts for Stap_51:

(Start: 17 @36767 has 166 MA's), (Start: 24 @36797 has 12 MA's), (Start: 28 @36833 has 1 MA's), (29, 36845), (31, 36869), (33, 36887), (35, 36896),

Gene: Starcevich_51 Start: 37233, Stop: 37421, Start Num: 17

Candidate Starts for Starcevich_51:

(Start: 17 @37233 has 166 MA's), (Start: 24 @37263 has 12 MA's), (Start: 28 @37299 has 1 MA's), (29, 37311), (31, 37335), (33, 37353), (35, 37362),

Gene: Strokeseat_48 Start: 35368, Stop: 35559, Start Num: 17

Candidate Starts for Strokeseat_48:

(Start: 17 @35368 has 166 MA's), (Start: 24 @35398 has 12 MA's), (Start: 28 @35437 has 1 MA's), (29, 35449), (31, 35473), (35, 35500),

Gene: SuperGrey_55 Start: 38785, Stop: 38976, Start Num: 17

Candidate Starts for SuperGrey_55:

(11, 38737), (Start: 17 @38785 has 166 MA's), (Start: 24 @38815 has 12 MA's), (27, 38836), (Start: 28 @38854 has 1 MA's), (29, 38866), (31, 38890), (33, 38908), (35, 38917), (36, 38938),

Gene: SwagPigglett_57 Start: 39437, Stop: 39628, Start Num: 17

Candidate Starts for SwagPigglett_57:

(Start: 17 @39437 has 166 MA's), (Start: 24 @39467 has 12 MA's), (27, 39488), (Start: 28 @39506 has 1 MA's), (29, 39518), (31, 39542), (33, 39560), (35, 39569),

Gene: TChen_51 Start: 37505, Stop: 37708, Start Num: 16

Candidate Starts for TChen_51:

(Start: 16 @37505 has 2 MA's), (21, 37529), (Start: 24 @37541 has 12 MA's), (29, 37589), (30, 37595), (33, 37640), (35, 37649), (36, 37670),

Gene: TDanisky_57 Start: 38118, Stop: 38306, Start Num: 17

Candidate Starts for TDanisky_57:

(4, 38001), (9, 38043), (11, 38064), (13, 38094), (15, 38100), (Start: 17 @38118 has 166 MA's), (Start: 24 @38148 has 12 MA's), (Start: 28 @38184 has 1 MA's), (29, 38196), (31, 38220), (33, 38238), (35, 38247), (36, 38268),

Gene: Taj_55 Start: 37954, Stop: 38145, Start Num: 17

Candidate Starts for Taj_55:

(1, 37792), (6, 37867), (Start: 17 @37954 has 166 MA's), (Start: 24 @37984 has 12 MA's), (26, 37993), (27, 38005), (Start: 28 @38023 has 1 MA's), (29, 38035), (31, 38059), (33, 38077), (35, 38086),

Gene: ThetaBob_56 Start: 37454, Stop: 37612, Start Num: 24

Candidate Starts for ThetaBob_56:

(Start: 17 @37424 has 166 MA's), (Start: 24 @37454 has 12 MA's), (26, 37463), (Start: 28 @37490 has 1 MA's), (29, 37502), (31, 37526), (35, 37553),

Gene: Tootsieroll_54 Start: 36790, Stop: 36981, Start Num: 17

Candidate Starts for Tootsieroll_54:

(Start: 17 @36790 has 166 MA's), (Start: 24 @36820 has 12 MA's), (Start: 28 @36859 has 1 MA's), (29, 36871), (31, 36895), (33, 36913), (35, 36922),

Gene: Totinger_54 Start: 36375, Stop: 36566, Start Num: 17

Candidate Starts for Totinger_54:

(Start: 17 @36375 has 166 MA's), (Start: 24 @36405 has 12 MA's), (27, 36426), (Start: 28 @36444 has 1 MA's), (29, 36456), (31, 36480), (33, 36498), (35, 36507),

Gene: Tweety_51 Start: 37589, Stop: 37777, Start Num: 17

Candidate Starts for Tweety_51:

(Start: 17 @37589 has 166 MA's), (Start: 24 @37619 has 12 MA's), (Start: 28 @37655 has 1 MA's), (29, 37667), (31, 37691), (33, 37709), (35, 37718),

Gene: UncleRicky_51 Start: 37530, Stop: 37721, Start Num: 17

Candidate Starts for UncleRicky_51:

(Start: 17 @37530 has 166 MA's), (Start: 24 @37560 has 12 MA's), (Start: 28 @37599 has 1 MA's), (29, 37611), (31, 37635), (33, 37653), (35, 37662),

Gene: VRedHorse_51 Start: 36379, Stop: 36528, Start Num: 22

Candidate Starts for VRedHorse_51:

(Start: 22 @36379 has 18 MA's), (Start: 28 @36406 has 1 MA's), (29, 36418), (31, 36442), (35, 36469),

Gene: Velveteen_46 Start: 33177, Stop: 33368, Start Num: 17

Candidate Starts for Velveteen_46:

(Start: 17 @33177 has 166 MA's), (Start: 24 @33207 has 12 MA's), (27, 33228), (Start: 28 @33246 has 1 MA's), (29, 33258), (31, 33282), (33, 33300), (35, 33309), (36, 33330),

Gene: Veteran_48 Start: 36247, Stop: 36435, Start Num: 17

Candidate Starts for Veteran_48:

(Start: 17 @36247 has 166 MA's), (Start: 24 @36277 has 12 MA's), (Start: 28 @36313 has 1 MA's), (29, 36325), (31, 36349), (33, 36367), (35, 36376),

Gene: Wachhund_53 Start: 36783, Stop: 36974, Start Num: 17

Candidate Starts for Wachhund_53:

(Start: 17 @36783 has 166 MA's), (Start: 24 @36813 has 12 MA's), (27, 36834), (Start: 28 @36852 has 1 MA's), (29, 36864), (31, 36888), (33, 36906), (35, 36915),

Gene: Wee_54 Start: 38226, Stop: 38417, Start Num: 17

Candidate Starts for Wee_54:

(1, 38064), (6, 38139), (Start: 17 @38226 has 166 MA's), (Start: 24 @38256 has 12 MA's), (26, 38265), (27, 38277), (Start: 28 @38295 has 1 MA's), (29, 38307), (31, 38331), (33, 38349), (35, 38358),

Gene: Whatsapiecost_51 Start: 36251, Stop: 36439, Start Num: 17

Candidate Starts for Whatsapiecost_51:

(11, 36203), (Start: 17 @36251 has 166 MA's), (Start: 24 @36281 has 12 MA's), (Start: 28 @36317 has 1 MA's), (29, 36329), (31, 36353), (35, 36380), (36, 36401),

Gene: Whouxphf_50 Start: 37267, Stop: 37455, Start Num: 17

Candidate Starts for Whouxphf_50:

(Start: 17 @37267 has 166 MA's), (Start: 24 @37297 has 12 MA's), (Start: 28 @37333 has 1 MA's), (29, 37345), (31, 37369), (33, 37387), (35, 37396),

Gene: WillSterrel_52 Start: 38378, Stop: 38569, Start Num: 17

Candidate Starts for WillSterrel_52:

(Start: 17 @38378 has 166 MA's), (Start: 24 @38408 has 12 MA's), (27, 38429), (Start: 28 @38447 has 1 MA's), (29, 38459), (31, 38483), (33, 38501), (35, 38510), (36, 38531),

Gene: XFactor_49 Start: 35866, Stop: 36015, Start Num: 22

Candidate Starts for XFactor_49:

(Start: 22 @35866 has 18 MA's), (Start: 28 @35893 has 1 MA's), (29, 35905), (31, 35929), (35, 35956),

Gene: Yorick_52 Start: 37803, Stop: 37991, Start Num: 17

Candidate Starts for Yorick_52:

(4, 37686), (9, 37728), (11, 37749), (13, 37779), (15, 37785), (Start: 17 @37803 has 166 MA's), (Start: 24 @37833 has 12 MA's), (Start: 28 @37869 has 1 MA's), (29, 37881), (31, 37905), (33, 37923), (35, 37932),

Gene: Yoshi_63 Start: 38592, Stop: 38750, Start Num: 24

Candidate Starts for Yoshi_63:

(Start: 17 @38562 has 166 MA's), (Start: 24 @38592 has 12 MA's), (Start: 28 @38628 has 1 MA's), (29, 38640), (31, 38664), (33, 38682), (35, 38691),

Gene: Zapner_64 Start: 38132, Stop: 38290, Start Num: 24

Candidate Starts for Zapner_64:

(Start: 17 @38102 has 166 MA's), (Start: 24 @38132 has 12 MA's), (Start: 28 @38168 has 1 MA's), (29, 38180), (31, 38204), (33, 38222), (35, 38231), (36, 38252),

Gene: Zerg_51 Start: 36978, Stop: 37169, Start Num: 17

Candidate Starts for Zerg_51:

(Start: 17 @36978 has 166 MA's), (Start: 24 @37008 has 12 MA's), (27, 37029), (Start: 28 @37047 has 1 MA's), (29, 37059), (31, 37083), (33, 37101), (35, 37110),

Gene: Zizzle_57 Start: 39121, Stop: 39309, Start Num: 17

Candidate Starts for Zizzle_57:

(Start: 17 @39121 has 166 MA's), (Start: 24 @39151 has 12 MA's), (Start: 28 @39187 has 1 MA's), (29, 39199), (31, 39223), (33, 39241), (35, 39250),