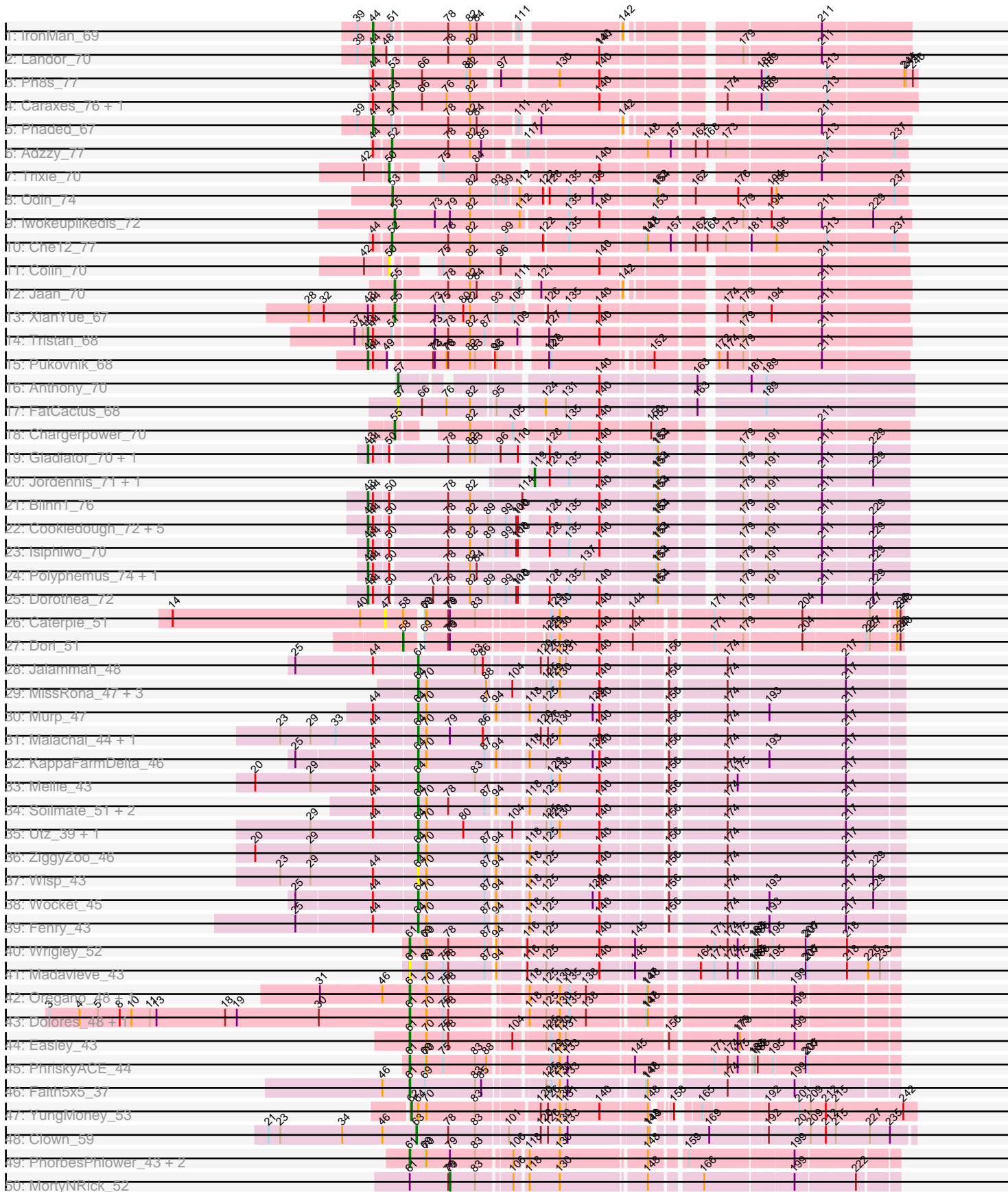
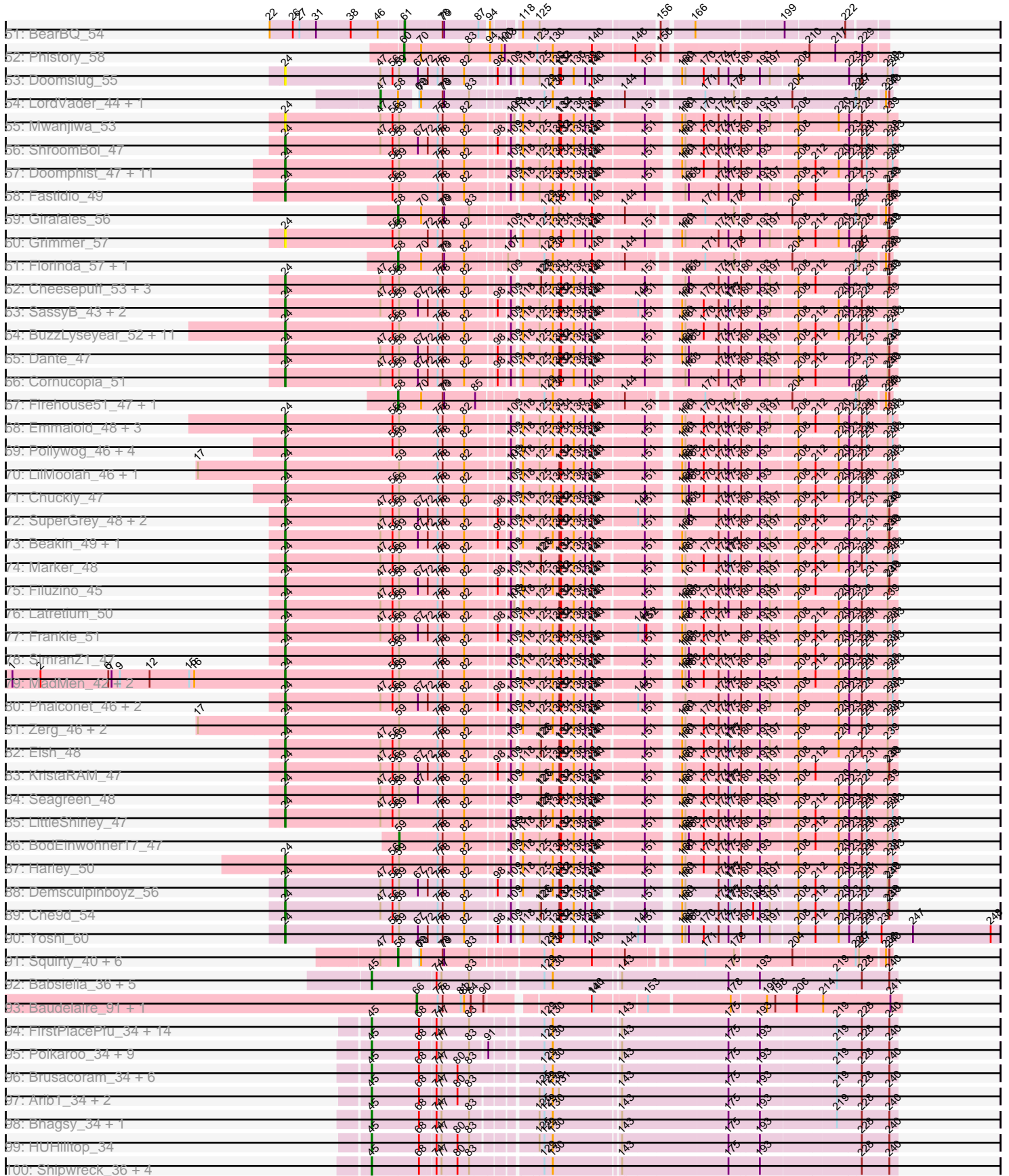


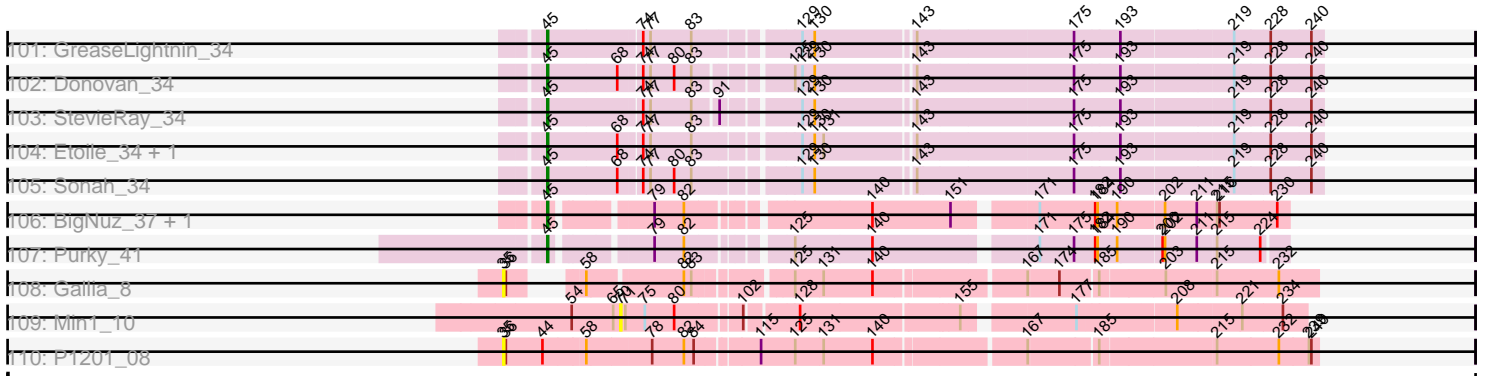
Pham 304701



Pham 304701



Pham 304701



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 304701 Report

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

Pham number 304701 has 227 members, 26 are drafts.

Phages represented in each track:

- Track 1 : IronMan_69
- Track 2 : Landor_70
- Track 3 : Ph8s_77
- Track 4 : Caraxes_76, Superchunk_75
- Track 5 : Phaded_67
- Track 6 : Adzzy_77
- Track 7 : Trixie_70
- Track 8 : Odin_74
- Track 9 : Iwokeuplikedis_72
- Track 10 : Che12_77
- Track 11 : Colin_70
- Track 12 : Jaan_70
- Track 13 : XianYue_67
- Track 14 : Tristan_68
- Track 15 : Pukovnik_68
- Track 16 : Anthony_70
- Track 17 : FatCactus_68
- Track 18 : Chargerpower_70
- Track 19 : Gladiator_70, Newrala_72
- Track 20 : Jordennis_71, Priamo_74
- Track 21 : Blinn1_76
- Track 22 : Cookiedough_72, Neeharika16_71, BABullseye_65, SuperCallie99_69, SuperAwesome_72, Pmask_71
- Track 23 : Isiphiwo_70
- Track 24 : Polyphemus_74, JewelBug_72
- Track 25 : Dorothea_72
- Track 26 : Caterpie_51
- Track 27 : Dori_51
- Track 28 : Jalammah_48
- Track 29 : MissRona_47, Blueberry_46, Gambino_49, Azula_47
- Track 30 : Murp_47
- Track 31 : Malachai_44, Begonia_44
- Track 32 : KappaFarmDelta_46
- Track 33 : Mellie_43
- Track 34 : Soilmate_51, CarolAnn_48, Blino_49
- Track 35 : Utz_39, Samba_44
- Track 36 : ZiggyZoo_46

- Track 37 : Wisp_43
- Track 38 : Wocket_45
- Track 39 : Fenry_43
- Track 40 : Wrigley_52
- Track 41 : Madavieve_43
- Track 42 : Oregano_48, Annalisa_45
- Track 43 : Dolores_48, WinkNick_49
- Track 44 : Easley_43
- Track 45 : PhriskyACE_44
- Track 46 : Faith5x5_37
- Track 47 : YungMoney_53
- Track 48 : Clown_59
- Track 49 : PhorbesPhlower_43, Pepperoni_38, InLimbo_43
- Track 50 : MortyNRick_52
- Track 51 : BearBQ_54
- Track 52 : Phistory_58
- Track 53 : Doomslug_55
- Track 54 : LordVader_44, LastJedi_41
- Track 55 : Mwanjiwa_53
- Track 56 : ShroomBoi_47
- Track 57 : Doomphist_47, Girr_48, Poenanya_47, Job42_48, Blexus_45, Ruby_46, Dorothy_44, Stap_46, RedBird_44, BlueCrab_45, MisterCuddles_47, Madiba_43
- Track 58 : Fastidio_49
- Track 59 : Girafales_56
- Track 60 : Grimmer_57
- Track 61 : Florinda_57, Quico_55
- Track 62 : Cheesepuff_53, DaWorst_49, OgoPogo_48, DillTech15_46
- Track 63 : SassyB_43, Estave1_48, PopTart_43
- Track 64 : BuzzLyseyear_52, Karhdo_46, Veteran_45, GUmbie_45, Tweety_47, Mantra_44, GigiOuiOui_44, Starceвич_47, Vivum_50, Wee_50, SiSi_47, Hamulus_48
- Track 65 : Dante_47
- Track 66 : Cornucopia_51
- Track 67 : Firehouse51_47, DosHalletts_47
- Track 68 : Emmaloid_48, DotProduct_44, Totinger_47, Slim_48
- Track 69 : Pollywog_46, Topiatin_52, Rockne_45, PMC_42, Boomer_50
- Track 70 : LilMoolah_46, Nivrat_45
- Track 71 : Chuckly_47
- Track 72 : SuperGrey_48, Fruitloop_46, Brushbloom_50
- Track 73 : Beakin_49, Jant_52
- Track 74 : Marker_48
- Track 75 : Filuzino_45
- Track 76 : Latretium_50
- Track 77 : Frankie_51
- Track 78 : SimranZ1_47
- Track 79 : MadMen_42, Beanstalk_50, Krakatau_45
- Track 80 : Phalconet_46, PhesterPhotato_49, Okabe_43
- Track 81 : Zerg_46, RockyHorror_48, Phasih_45
- Track 82 : Eish_48
- Track 83 : KristaRAM_47
- Track 84 : Seagreen_48
- Track 85 : LittleShirley_47
- Track 86 : BodEinwohner17_47

- Track 87 : Harley_50
- Track 88 : Demsculpinboyz_56
- Track 89 : Che9d_54
- Track 90 : Yoshi_60
- Track 91 : Squirty_40, Pippy_45, Jennelsea_44, Donkeykong_46, Zizzle_51, Brocalys_43, Clifton_42
- Track 92 : Babsiella_36, Brujita_36, HC_34, Island3_36, QueenHazel_32, Xula_31
- Track 93 : Baudelaire_91, Aegeus_91
- Track 94 : FirstPlacePfu_34, Fishburne_34, Bartholomew_33, Venti_34, Dynamo_34, BronnyJr_34, Mangethe_34, Phineas_34, Majeke_34, Vidya_34, Necropolis_34, Chubbello_34, Kari_34, Zilizebeth_34, Phegasus_34
- Track 95 : Polkaroo_34, KilKor_34, Gavriela_34, Jung_33, Phalm_34, Willsammy_33, Glaske_34, Megiddo_34, CactusJack_34, StressBall_34
- Track 96 : Brusacoram_34, Atcoo_34, Juniormint_34, Jebeks_35, Ksqured_34, Bunnies_34, Thespis_34
- Track 97 : Arib1_34, Langerak_34, GaloreK_34
- Track 98 : Bhagsy_34, PeanutPie_34
- Track 99 : HUHilltop_34
- Track 100 : Shipwreck_36, Pygmy_36, Camster_34, Bogie_36, Malithi_34
- Track 101 : GreaseLightnin_34
- Track 102 : Donovan_34
- Track 103 : StevieRay_34
- Track 104 : Etoile_34, Techage_34
- Track 105 : Sonah_34
- Track 106 : BigNuz_37, Nazo_38
- Track 107 : Purky_41
- Track 108 : Gallia_8
- Track 109 : Min1_10
- Track 110 : P1201_08

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

The start number called the most often in the published annotations is 24, it was called in 70 of the 201 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Beakin_49, Beanstalk_50, Blexus_45, BlueCrab_45, Boomer_50, Brushbloom_50, BuzzLyseyear_52, Che9d_54, CheesePuff_53, Chuckly_47, Cornucopia_51, DaWorst_49, Dante_47, Demsculpinboyz_56, DillTech15_46, Doomphist_47, Doomslug_55, Dorothy_44, DotProduct_44, Eish_48, Emmaloid_48, Estave1_48, Fastidio_49, Filuzino_45, Frankie_51, Fruitloop_46, GUmbe_45, GigiOuiOui_44, Girr_48, Grimmer_57, Hamulus_48, Harley_50, Jant_52, Job42_48, Karhdo_46, Krakatau_45, KristaRAM_47, Latretium_50, LilMoolah_46, LittleShirley_47, MadMen_42, Madiba_43, Mantra_44, Marker_48, MisterCuddles_47, Mwanjiwa_53, Nivrat_45, OgoPogo_48, Okabe_43, PMC_42, Phalconet_46, Phasih_45, PhesterPotato_49, Poenanya_47, Pollywog_46, PopTart_43, RedBird_44, Rockne_45, RockyHorror_48, Ruby_46, SassyB_43, Seagreen_48, ShroomBoi_47, SiSi_47, SimranZ1_47, Slim_48, Stap_46, StarceVich_47, SuperGrey_48, Topiatin_52, Totinger_47, Tweety_47, Veteran_45, Vivum_50, Wee_50, Yoshi_60, Zerg_46,

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

-

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

- Adzzy_77, Aegeus_91, Annalisa_45, Anthony_70, Arib1_34, Atcoo_34, Azula_47, BABullseye_65, Babsiella_36, Bartholomew_33, Baudelaire_91, BearBQ_54, Begonia_44, Bhagsy_34, BigNuz_37, Blinn1_76, Blino_49, Blueberry_46, BodEinwohner17_47, Bogie_36, Brocalys_43, BronnyJr_34, Brujita_36, Brusacoram_34, Bunnies_34, CactusJack_34, Camster_34, Caraxes_76, CarolAnn_48, Caterpie_51, Chargerpower_70, Che12_77, Chubbello_34, Clifton_42, Clown_59, Colin_70, Cookiedough_72, Dolores_48, Donkeykong_46, Donovan_34, Dori_51, Dorothea_72, DosHalletts_47, Dynamo_34, Easley_43, Etoile_34, Faith5x5_37, FatCactus_68, Fenry_43, Firehouse51_47, FirstPlacePfu_34, Fishburne_34, Florinda_57, Gallia_8, GaloreK_34, Gambino_49, Gavriela_34, Girafales_56, Gladiator_70, Glaske_34, GreaseLightnin_34, HC_34, HUHilltop_34, InLimbo_43, IronMan_69, Isiphiwo_70, Island3_36, Iwokeuplikedis_72, Jaan_70, Jalammah_48, Jebeks_35, Jennelsea_44, JewelBug_72, Jordennis_71, Jung_33, Junormint_34, KappaFarmDelta_46, Kari_34, KilKor_34, Ksquared_34, Landor_70, Langerak_34, LastJedi_41, LordVader_44, Madavieve_43, Majeke_34, Malachai_44, Malithi_34, Mangethe_34, Megiddo_34, Mellie_43, Min1_10, MissRona_47, MortyNRick_52, Murp_47, Nazo_38, Necropolis_34, Neeharika16_71, Newrala_72, Odin_74, Oregano_48, P1201_08, PeanutPie_34, Pepperoni_38, Ph8s_77, Phaded_67, Phalm_34, Phegasus_34, Phineas_34, Phistory_58, PhorbesPhlower_43, PhriskyACE_44, Pippy_45, Pmask_71, Polkaroo_34, Polyphemos_74, Priamo_74, Pukovnik_68, Purky_41, Pygmy_36, QueenHazel_32, Quico_55, Samba_44, Shipwreck_36, Soilmate_51, Sonah_34, Squirty_40, StevieRay_34, StressBall_34, SuperAwesome_72, SuperCallie99_69, Superchunk_75, Techage_34, Thespis_34, Tristan_68, Trixie_70, Utz_39, Venti_34, Vidya_34, Willsammy_33, WinkNick_49, Wisp_43, Wocket_45, Wrigley_52, XianYue_67, Xula_31, YungMoney_53, ZiggyZoo_46, Zilizebeth_34, Zizzle_51,

Summary by start number:

Start 24:

- Found in 77 of 227 (33.9%) of genes in pham
- Manual Annotations of this start: 70 of 201
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Beakin_49 (F1), Beanstalk_50 (F1), Blexus_45 (F1), BlueCrab_45 (F1), Boomer_50 (F1), Brushbloom_50 (F1), BuzzLyseyear_52 (F1), Che9d_54 (F2), Cheesepuff_53 (F1), Chuckly_47 (F1), Cornucopia_51 (F1), DaWorst_49 (F1), Dante_47 (F1), Demsculpinboyz_56 (F2), DillTech15_46 (F1), Doomphist_47 (F1), Doomslug_55 (F), Dorothy_44 (F1), DotProduct_44 (F1), Eish_48 (F1), Emmaloid_48 (F1), Estave1_48 (F1), Fastidio_49 (F1), Filuzino_45 (F1), Frankie_51 (F1), Fruitloop_46 (F1), GUmbie_45 (F1), GigiOuiOui_44 (F1), Girr_48 (F1), Grimmer_57 (F1), Hamulus_48 (F1), Harley_50 (F1), Jant_52 (F1), Job42_48 (F1), Karhdo_46 (F1), Krakatau_45 (F1), KristaRAM_47 (F1), Latretium_50 (F1), LilMoolah_46 (F1), LittleShirley_47 (F1), MadMen_42 (F1), Madiba_43 (F1), Mantra_44 (F1), Marker_48 (F1), MisterCuddles_47 (F1), Mwanjiwa_53 (F1), Nivrat_45 (F1), Ogopogo_48 (F1), Okabe_43 (F8), PMC_42 (F1), Phalconet_46 (F1), Phasih_45 (F1), PhesterPotato_49 (F1), Poenanya_47 (F1), Pollywog_46 (F1), PopTart_43 (F1), RedBird_44 (F1), Rockne_45 (F1), RockyHorror_48 (F1), Ruby_46 (F1), SassyB_43 (F1), Seagreen_48 (F1),

ShroomBoi_47 (F1), SiSi_47 (F1), SimranZ1_47 (F1), Slim_48 (F1), Stap_46 (F1), Starcevich_47 (F1), SuperGrey_48 (F1), Topiatin_52 (F1), Totinger_47 (F1), Tweety_47 (F1), Veteran_45 (F1), Vivum_50 (F1), Wee_50 (F1), Yoshi_60 (F2), Zerg_46 (F1),

Start 35:

- Found in 2 of 227 (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: Gallia_8 (singleton), P1201_08 (singleton),

Start 43:

- Found in 16 of 227 (7.0%) of genes in pham
- Manual Annotations of this start: 15 of 201
- Called 93.8% of time when present
- Phage (with cluster) where this start called: BABullseye_65 (A6), Blinn1_76 (A6), Cookiedough_72 (A6), Dorothea_72 (A6), Gladiator_70 (A6), Isiphiwo_70 (A6), JewelBug_72 (A6), Neeharika16_71 (A6), Newrala_72 (A6), Pmask_71 (A6), Polyphemos_74 (A6), Pukovnik_68 (A2), SuperAwesome_72 (A6), SuperCallie99_69 (A6), Tristan_68 (A2),

Start 44:

- Found in 39 of 227 (17.2%) of genes in pham
- Manual Annotations of this start: 3 of 201
- Called 7.7% of time when present
- Phage (with cluster) where this start called: IronMan_69 (A2), Landor_70 (A2), Phaded_67 (A2),

Start 45:

- Found in 58 of 227 (25.6%) of genes in pham
- Manual Annotations of this start: 52 of 201
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Arib1_34 (P1), Atcoo_34 (P1), Babsiella_36 (I1), Bartholomew_33 (P1), Bhagsy_34 (P1), BigNuz_37 (P4), Bogie_36 (P1), BronnyJr_34 (P1), Brujita_36 (I1), Brusacoram_34 (P1), Bunnies_34 (P1), CactusJack_34 (P1), Camster_34 (P1), Chubbello_34 (P1), Donovan_34 (P1), Dynamo_34 (P1), Etoile_34 (P1), FirstPlacePfu_34 (P1), Fishburne_34 (P1), GaloreK_34 (P1), Gavriela_34 (P1), Glaske_34 (P1), GreaseLightnin_34 (P1), HC_34 (I1), HUHilltop_34 (P1), Island3_36 (I1), Jebeks_35 (P1), Jung_33 (P1), Juniormint_34 (P1), Kari_34 (P1), KilKor_34 (P1), Ksquared_34 (P1), Langerak_34 (P1), Majeke_34 (P1), Malithi_34 (P1), Mangethe_34 (P1), Megiddo_34 (P1), Nazo_38 (P4), Necropolis_34 (P1), PeanutPie_34 (P1), Phalm_34 (P1), Phegasus_34 (P1), Phineas_34 (P1), Polkaroo_34 (P1), Purky_41 (P6), Pygmy_36 (P1), QueenHazel_32 (I1), Shipwreck_36 (P1), Sonah_34 (P1), StevieRay_34 (P1), StressBall_34 (P1), Techage_34 (P1), Thespis_34 (P1), Venti_34 (P1), Vidya_34 (P1), Willsammy_33 (P1), Xula_31 (I1), Zilizebeth_34 (P1),

Start 47:

- Found in 40 of 227 (17.6%) of genes in pham
- Manual Annotations of this start: 1 of 201
- Called 7.5% of time when present

- Phage (with cluster) where this start called: Caterpie_51 (AD), LastJedi_41 (F1), LordVader_44 (F),

Start 50:

- Found in 15 of 227 (6.6%) of genes in pham
- Manual Annotations of this start: 1 of 201
- Called 13.3% of time when present
- Phage (with cluster) where this start called: Colin_70 (A2), Trixie_70 (A2),

Start 52:

- Found in 2 of 227 (0.9%) of genes in pham
- Manual Annotations of this start: 2 of 201
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Adzzy_77 (A2), Che12_77 (A2),

Start 53:

- Found in 4 of 227 (1.8%) of genes in pham
- Manual Annotations of this start: 3 of 201
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Caraxes_76 (A2), Odin_74 (A2), Ph8s_77 (A2), Superchunk_75 (A2),

Start 55:

- Found in 4 of 227 (1.8%) of genes in pham
- Manual Annotations of this start: 4 of 201
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Chargerpower_70 (A22), Iwokeuplikedis_72 (A2), Jaan_70 (A2), XianYue_67 (A2),

Start 57:

- Found in 2 of 227 (0.9%) of genes in pham
- Manual Annotations of this start: 1 of 201
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Anthony_70 (A20), FatCactus_68 (A20),

Start 58:

- Found in 18 of 227 (7.9%) of genes in pham
- Manual Annotations of this start: 12 of 201
- Called 72.2% of time when present
- Phage (with cluster) where this start called: Brocalys_43 (F1), Clifton_42 (F1), Donkeykong_46 (F1), Dori_51 (AD), DosHalletts_47 (F1), Firehouse51_47 (F1), Florinda_57 (F1), Girafales_56 (F1), Jennelsea_44 (F1), Pippy_45 (F1), Quico_55 (F1), Squirty_40 (F3), Zizzle_51 (F1),

Start 59:

- Found in 78 of 227 (34.4%) of genes in pham
- Manual Annotations of this start: 1 of 201
- Called 1.3% of time when present
- Phage (with cluster) where this start called: BodEinwohner17_47 (F1),

Start 60:

- Found in 1 of 227 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 201

- Called 100.0% of time when present
- Phage (with cluster) where this start called: Phistory_58 (DN1),

Start 61:

- Found in 14 of 227 (6.2%) of genes in pham
- Manual Annotations of this start: 11 of 201
- Called 92.9% of time when present
- Phage (with cluster) where this start called: Annalisa_45 (CZ4), BearBQ_54 (DN), Dolores_48 (CZ4), Easley_43 (CZ4), Faith5x5_37 (CZ6), InLimbo_43 (DH), Madavieve_43 (CZ1), Oregano_48 (CZ4), Pepperoni_38 (CZ), PhorbesPhlower_43 (DH), PhriskyACE_44 (CZ4), WinkNick_49 (CZ4), Wrigley_52 (CY4),

Start 62:

- Found in 1 of 227 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 201
- Called 100.0% of time when present
- Phage (with cluster) where this start called: YungMoney_53 (DC1),

Start 63:

- Found in 1 of 227 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 201
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Clown_59 (DC2),

Start 64:

- Found in 20 of 227 (8.8%) of genes in pham
- Manual Annotations of this start: 17 of 201
- Called 95.0% of time when present
- Phage (with cluster) where this start called: Azula_47 (CV), Begonia_44 (CV), Blino_49 (CV), Blueberry_46 (CV), CarolAnn_48 (CV), Fenry_43 (CV), Gambino_49 (CV), Jalammah_48 (CV), KappaFarmDelta_46 (CV), Malachai_44 (CV), Mellie_43 (CV), MissRona_47 (CV), Murp_47 (CV), Samba_44 (CV), Soilmate_51 (CV), Utz_39 (CV), Wisp_43 (CV), Wocket_45 (CV), ZiggyZoo_46 (CV),

Start 66:

- Found in 6 of 227 (2.6%) of genes in pham
- Manual Annotations of this start: 2 of 201
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Aegeus_91 (L5), Baudelaire_91 (L5),

Start 70:

- Found in 46 of 227 (20.3%) of genes in pham
- No Manual Annotations of this start.
- Called 2.2% of time when present
- Phage (with cluster) where this start called: Min1_10 (singleton),

Start 79:

- Found in 27 of 227 (11.9%) of genes in pham
- Manual Annotations of this start: 1 of 201
- Called 3.7% of time when present
- Phage (with cluster) where this start called: MortyNRick_52 (DN),

Start 119:

- Found in 2 of 227 (0.9%) of genes in pham
- Manual Annotations of this start: 2 of 201
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Jordennis_71 (A6), Priamo_74 (A6),

Summary by clusters:

There are 27 clusters represented in this pham: DN, singleton, DH, CZ1, CZ6, CZ4, I1, CY4, A2, DN1, A6, P1, P6, AD, P4, F, A22, CZ, L5, DC2, CV, DC1, A20, F1, F2, F3, F8,

Info for manual annotations of cluster A2:

- Start number 43 was manually annotated 2 times for cluster A2.
- Start number 44 was manually annotated 3 times for cluster A2.
- Start number 50 was manually annotated 1 time for cluster A2.
- Start number 52 was manually annotated 2 times for cluster A2.
- Start number 53 was manually annotated 3 times for cluster A2.
- Start number 55 was manually annotated 3 times for cluster A2.

Info for manual annotations of cluster A20:

- Start number 57 was manually annotated 1 time for cluster A20.

Info for manual annotations of cluster A22:

- Start number 55 was manually annotated 1 time for cluster A22.

Info for manual annotations of cluster A6:

- Start number 43 was manually annotated 13 times for cluster A6.
- Start number 119 was manually annotated 2 times for cluster A6.

Info for manual annotations of cluster AD:

- Start number 58 was manually annotated 1 time for cluster AD.

Info for manual annotations of cluster CV:

- Start number 64 was manually annotated 17 times for cluster CV.

Info for manual annotations of cluster CY4:

- Start number 61 was manually annotated 1 time for cluster CY4.

Info for manual annotations of cluster CZ:

- Start number 61 was manually annotated 1 time for cluster CZ.

Info for manual annotations of cluster CZ4:

- Start number 61 was manually annotated 6 times for cluster CZ4.

Info for manual annotations of cluster CZ6:

- Start number 61 was manually annotated 1 time for cluster CZ6.

Info for manual annotations of cluster DC1:

- Start number 62 was manually annotated 1 time for cluster DC1.

Info for manual annotations of cluster DC2:

- Start number 63 was manually annotated 1 time for cluster DC2.

Info for manual annotations of cluster DH:

- Start number 61 was manually annotated 1 time for cluster DH.

Info for manual annotations of cluster DN:

- Start number 61 was manually annotated 1 time for cluster DN.
- Start number 79 was manually annotated 1 time for cluster DN.

Info for manual annotations of cluster DN1:

- Start number 60 was manually annotated 1 time for cluster DN1.

Info for manual annotations of cluster F1:

- Start number 24 was manually annotated 67 times for cluster F1.
- Start number 47 was manually annotated 1 time for cluster F1.
- Start number 58 was manually annotated 10 times for cluster F1.
- Start number 59 was manually annotated 1 time for cluster F1.

Info for manual annotations of cluster F2:

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

Info for manual annotations of cluster F3:

- Start number 58 was manually annotated 1 time for cluster F3.

Info for manual annotations of cluster I1:

- Start number 45 was manually annotated 6 times for cluster I1.

Info for manual annotations of cluster L5:

- Start number 66 was manually annotated 2 times for cluster L5.

Info for manual annotations of cluster P1:

- Start number 45 was manually annotated 43 times for cluster P1.

Info for manual annotations of cluster P4:

- Start number 45 was manually annotated 2 times for cluster P4.

Info for manual annotations of cluster P6:

- Start number 45 was manually annotated 1 time for cluster P6.

Gene Information:

Gene: Adzzy_77 Start: 43239, Stop: 42412, Start Num: 52

Candidate Starts for Adzzy_77:

(Start: 44 @43266 has 3 MA's), (Start: 52 @43239 has 2 MA's), (78, 43146), (82, 43107), (85, 43089), (117, 43032), (148, 42843), (157, 42804), (162, 42768), (168, 42747), (173, 42714), (213, 42543), (237, 42435),

Gene: Aegeus_91 Start: 56094, Stop: 56897, Start Num: 66

Candidate Starts for Aegeus_91:

(Start: 66 @56094 has 2 MA's), (75, 56127), (78, 56136), (81, 56169), (82, 56175), (84, 56187), (90, 56208), (140, 56373), (141, 56376), (153, 56457), (178, 56595), (196, 56655), (198, 56670), (206, 56709), (214, 56757), (241, 56877),

Gene: Annalisa_45 Start: 33306, Stop: 34055, Start Num: 61

Candidate Starts for Annalisa_45:

(31, 33153), (46, 33261), (Start: 61 @33306 has 11 MA's), (70, 33336), (75, 33363), (78, 33372), (118, 33489), (125, 33516), (130, 33540), (135, 33555), (138, 33585), (147, 33675), (148, 33678), (199, 33900),

Gene: Anthony_70 Start: 42960, Stop: 42178, Start Num: 57

Candidate Starts for Anthony_70:

(Start: 57 @42960 has 1 MA's), (140, 42675), (163, 42528), (181, 42453), (189, 42426),

Gene: Arib1_34 Start: 27945, Stop: 28808, Start Num: 45

Candidate Starts for Arib1_34:

(Start: 45 @27945 has 52 MA's), (68, 28026), (74, 28050), (77, 28059), (80, 28086), (83, 28107), (125, 28203), (129, 28212), (130, 28227), (131, 28236), (143, 28338), (175, 28521), (193, 28575), (219, 28704), (228, 28746), (240, 28794),

Gene: Atcoo_34 Start: 28426, Stop: 29292, Start Num: 45

Candidate Starts for Atcoo_34:

(Start: 45 @28426 has 52 MA's), (68, 28507), (74, 28531), (77, 28540), (80, 28567), (83, 28588), (129, 28696), (130, 28711), (143, 28822), (175, 29005), (193, 29059), (219, 29188), (228, 29230), (240, 29278),

Gene: Azula_47 Start: 35195, Stop: 35956, Start Num: 64

Candidate Starts for Azula_47:

(Start: 64 @35195 has 17 MA's), (70, 35210), (88, 35312), (104, 35345), (125, 35390), (129, 35399), (130, 35414), (140, 35483), (156, 35579), (174, 35669), (217, 35861),

Gene: BABullseye_65 Start: 39826, Stop: 38978, Start Num: 43

Candidate Starts for BABullseye_65:

(Start: 43 @39826 has 15 MA's), (Start: 44 @39817 has 3 MA's), (Start: 50 @39793 has 1 MA's), (78, 39703), (82, 39664), (89, 39634), (99, 39610), (108, 39592), (110, 39589), (128, 39550), (135, 39517), (140, 39463), (153, 39376), (154, 39373), (179, 39253), (191, 39214), (211, 39121), (229, 39040),

Gene: Babsiella_36 Start: 28877, Stop: 29746, Start Num: 45

Candidate Starts for Babsiella_36:

(Start: 45 @28877 has 52 MA's), (74, 28985), (77, 28994), (83, 29042), (129, 29150), (130, 29165), (143, 29276), (175, 29459), (193, 29513), (219, 29642), (228, 29684), (240, 29732),

Gene: Bartholomew_33 Start: 27939, Stop: 28805, Start Num: 45

Candidate Starts for Bartholomew_33:

(Start: 45 @27939 has 52 MA's), (68, 28020), (74, 28044), (77, 28053), (83, 28101), (129, 28209), (130, 28224), (143, 28335), (175, 28518), (193, 28572), (219, 28701), (228, 28743), (240, 28791),

Gene: Baudelaire_91 Start: 56094, Stop: 56897, Start Num: 66

Candidate Starts for Baudelaire_91:

(Start: 66 @56094 has 2 MA's), (75, 56127), (78, 56136), (81, 56169), (82, 56175), (84, 56187), (90, 56208), (140, 56373), (141, 56376), (153, 56457), (178, 56595), (196, 56655), (198, 56670), (206, 56709), (214, 56757), (241, 56877),

Gene: Beakin_49 Start: 35134, Stop: 36138, Start Num: 24

Candidate Starts for Beakin_49:

(Start: 24 @35134 has 70 MA's), (Start: 47 @35302 has 1 MA's), (56, 35323), (Start: 59 @35335 has 1 MA's), (67, 35368), (72, 35383), (75, 35401), (78, 35410), (82, 35446), (98, 35494), (109, 35512), (118, 35524), (125, 35551), (130, 35575), (132, 35587), (134, 35590), (136, 35611), (139, 35632), (140, 35644), (141, 35647), (151, 35731), (160, 35776), (161, 35782), (174, 35839), (175, 35857), (180, 35878), (193, 35911), (197, 35929), (208, 35971), (212, 35998), (223, 36055), (231, 36085), (239, 36121), (240, 36124),

Gene: Beanstalk_50 Start: 34763, Stop: 35770, Start Num: 24

Candidate Starts for Beanstalk_50:

(1, 34268), (2, 34319), (6, 34442), (7, 34448), (9, 34463), (12, 34517), (15, 34589), (16, 34598), (Start: 24 @34763 has 70 MA's), (56, 34955), (Start: 59 @34967 has 1 MA's), (75, 35033), (78, 35042), (82, 35078), (109, 35144), (118, 35156), (125, 35183), (130, 35207), (134, 35222), (136, 35243), (139, 35264), (140, 35276), (141, 35279), (151, 35363), (160, 35408), (161, 35414), (163, 35420), (170, 35444), (174, 35471), (175, 35489), (180, 35510), (193, 35543), (208, 35603), (212, 35630), (220, 35669), (223, 35687), (228, 35708), (231, 35717), (239, 35753), (243, 35762),

Gene: BearBQ_54 Start: 38297, Stop: 39052, Start Num: 61

Candidate Starts for BearBQ_54:

(22, 38063), (26, 38105), (27, 38117), (31, 38144), (38, 38207), (46, 38255), (Start: 61 @38297 has 11 MA's), (78, 38363), (Start: 79 @38366 has 1 MA's), (87, 38426), (94, 38438), (118, 38480), (125, 38507), (156, 38702), (166, 38753), (199, 38897), (222, 38990),

Gene: Begonia_44 Start: 35305, Stop: 36069, Start Num: 64

Candidate Starts for Begonia_44:

(23, 35065), (29, 35119), (33, 35164), (Start: 44 @35230 has 3 MA's), (Start: 64 @35305 has 17 MA's), (70, 35320), (Start: 79 @35359 has 1 MA's), (86, 35416), (120, 35494), (126, 35506), (130, 35527), (140, 35596), (156, 35692), (174, 35782), (217, 35974),

Gene: Bhagsy_34 Start: 27935, Stop: 28798, Start Num: 45

Candidate Starts for Bhagsy_34:

(Start: 45 @27935 has 52 MA's), (68, 28016), (74, 28040), (77, 28049), (83, 28097), (125, 28193), (129, 28202), (130, 28217), (143, 28328), (175, 28511), (193, 28565), (219, 28694), (228, 28736), (240, 28784),

Gene: BigNuz_37 Start: 30064, Stop: 30867, Start Num: 45

Candidate Starts for BigNuz_37:

(Start: 45 @30064 has 52 MA's), (Start: 79 @30166 has 1 MA's), (82, 30202), (140, 30394), (151, 30490), (171, 30574), (182, 30640), (184, 30643), (190, 30667), (202, 30721), (211, 30760), (215, 30781), (216, 30784), (230, 30853),

Gene: Blexus_45 Start: 35131, Stop: 36135, Start Num: 24

Candidate Starts for Blexus_45:

(Start: 24 @35131 has 70 MA's), (56, 35320), (Start: 59 @35332 has 1 MA's), (75, 35398), (78, 35407), (82, 35443), (109, 35509), (118, 35521), (125, 35548), (130, 35572), (134, 35587), (136, 35608), (139, 35629), (140, 35641), (141, 35644), (151, 35728), (160, 35773), (161, 35779), (170, 35809), (174, 35836), (175, 35854), (180, 35875), (193, 35908), (208, 35968), (212, 35995), (220, 36034), (223, 36052), (228, 36073), (231, 36082), (239, 36118), (243, 36127),

Gene: Blinn1_76 Start: 42445, Stop: 41582, Start Num: 43

Candidate Starts for Blinn1_76:

(Start: 43 @42445 has 15 MA's), (Start: 44 @42436 has 3 MA's), (Start: 50 @42412 has 1 MA's), (78, 42322), (82, 42283), (114, 42196), (140, 42067), (153, 41980), (154, 41977), (179, 41857), (191, 41818), (211, 41725),

Gene: Blino_49 Start: 38491, Stop: 39252, Start Num: 64

Candidate Starts for Blino_49:

(Start: 44 @38416 has 3 MA's), (Start: 64 @38491 has 17 MA's), (70, 38506), (78, 38542), (87, 38605), (94, 38617), (118, 38659), (125, 38686), (140, 38779), (156, 38875), (174, 38965), (217, 39157),

Gene: BlueCrab_45 Start: 34857, Stop: 35861, Start Num: 24

Candidate Starts for BlueCrab_45:

(Start: 24 @34857 has 70 MA's), (56, 35046), (Start: 59 @35058 has 1 MA's), (75, 35124), (78, 35133), (82, 35169), (109, 35235), (118, 35247), (125, 35274), (130, 35298), (134, 35313), (136, 35334), (139, 35355), (140, 35367), (141, 35370), (151, 35454), (160, 35499), (161, 35505), (170, 35535), (174, 35562), (175, 35580), (180, 35601), (193, 35634), (208, 35694), (212, 35721), (220, 35760), (223, 35778), (228, 35799), (231, 35808), (239, 35844), (243, 35853),

Gene: Blueberry_46 Start: 35195, Stop: 35956, Start Num: 64

Candidate Starts for Blueberry_46:

(Start: 64 @35195 has 17 MA's), (70, 35210), (88, 35312), (104, 35345), (125, 35390), (129, 35399), (130, 35414), (140, 35483), (156, 35579), (174, 35669), (217, 35861),

Gene: BodEinwohner17_47 Start: 35274, Stop: 36077, Start Num: 59

Candidate Starts for BodEinwohner17_47:

(Start: 59 @35274 has 1 MA's), (75, 35340), (78, 35349), (82, 35385), (109, 35451), (113, 35457), (118, 35463), (125, 35490), (132, 35526), (134, 35529), (136, 35550), (139, 35571), (140, 35583), (141, 35586), (151, 35670), (160, 35715), (161, 35721), (163, 35727), (170, 35751), (174, 35778), (175, 35796), (180, 35817), (193, 35850), (208, 35910), (212, 35937), (220, 35976), (223, 35994), (228, 36015), (231, 36024), (239, 36060), (243, 36069),

Gene: Bogie_36 Start: 29722, Stop: 30588, Start Num: 45

Candidate Starts for Bogie_36:

(Start: 45 @29722 has 52 MA's), (68, 29803), (74, 29827), (77, 29836), (80, 29863), (83, 29884), (129, 29992), (130, 30007), (143, 30118), (175, 30301), (193, 30355), (228, 30526), (240, 30574),

Gene: Boomer_50 Start: 36306, Stop: 37310, Start Num: 24

Candidate Starts for Boomer_50:

(Start: 24 @36306 has 70 MA's), (56, 36495), (Start: 59 @36507 has 1 MA's), (75, 36573), (78, 36582), (82, 36618), (109, 36684), (118, 36696), (125, 36723), (130, 36747), (134, 36762), (136, 36783), (139, 36804), (140, 36816), (141, 36819), (151, 36903), (160, 36948), (161, 36954), (170, 36984), (174, 37011), (175, 37029), (180, 37050), (193, 37083), (208, 37143), (220, 37209), (223, 37227), (228, 37248), (231, 37257), (239, 37293), (243, 37302),

Gene: Brocalys_43 Start: 31207, Stop: 31986, Start Num: 58

Candidate Starts for Brocalys_43:

(Start: 47 @31177 has 1 MA's), (Start: 58 @31207 has 12 MA's), (69, 31231), (70, 31234), (78, 31270), (Start: 79 @31273 has 1 MA's), (83, 31318), (129, 31426), (130, 31441), (140, 31510), (144, 31558), (171, 31675), (179, 31726), (204, 31822), (225, 31927), (227, 31933), (238, 31975), (240, 31981),

Gene: BronnyJr_34 Start: 28436, Stop: 29302, Start Num: 45

Candidate Starts for BronnyJr_34:

(Start: 45 @28436 has 52 MA's), (68, 28517), (74, 28541), (77, 28550), (83, 28598), (129, 28706), (130, 28721), (143, 28832), (175, 29015), (193, 29069), (219, 29198), (228, 29240), (240, 29288),

Gene: Brujita_36 Start: 29775, Stop: 30644, Start Num: 45

Candidate Starts for Brujita_36:

(Start: 45 @29775 has 52 MA's), (74, 29883), (77, 29892), (83, 29940), (129, 30048), (130, 30063), (143, 30174), (175, 30357), (193, 30411), (219, 30540), (228, 30582), (240, 30630),

Gene: Brusacoram_34 Start: 27932, Stop: 28798, Start Num: 45

Candidate Starts for Brusacoram_34:

(Start: 45 @27932 has 52 MA's), (68, 28013), (74, 28037), (77, 28046), (80, 28073), (83, 28094), (129, 28202), (130, 28217), (143, 28328), (175, 28511), (193, 28565), (219, 28694), (228, 28736), (240, 28784),

Gene: Brushbloom_50 Start: 35774, Stop: 36778, Start Num: 24

Candidate Starts for Brushbloom_50:

(Start: 24 @35774 has 70 MA's), (Start: 47 @35942 has 1 MA's), (56, 35963), (Start: 59 @35975 has 1 MA's), (67, 36008), (72, 36023), (75, 36041), (78, 36050), (82, 36086), (98, 36134), (109, 36152), (118, 36164), (125, 36191), (130, 36215), (132, 36227), (134, 36230), (136, 36251), (139, 36272), (140, 36284), (141, 36287), (147, 36359), (151, 36371), (161, 36422), (163, 36428), (174, 36479), (175, 36497), (180, 36518), (193, 36551), (197, 36569), (208, 36611), (212, 36638), (223, 36695), (231, 36725), (239, 36761), (240, 36764),

Gene: Bunnies_34 Start: 27953, Stop: 28819, Start Num: 45

Candidate Starts for Bunnies_34:

(Start: 45 @27953 has 52 MA's), (68, 28034), (74, 28058), (77, 28067), (80, 28094), (83, 28115), (129, 28223), (130, 28238), (143, 28349), (175, 28532), (193, 28586), (219, 28715), (228, 28757), (240, 28805),

Gene: BuzzLyseyear_52 Start: 36683, Stop: 37687, Start Num: 24

Candidate Starts for BuzzLyseyear_52:

(Start: 24 @36683 has 70 MA's), (56, 36872), (Start: 59 @36884 has 1 MA's), (75, 36950), (78, 36959), (82, 36995), (109, 37061), (118, 37073), (125, 37100), (130, 37124), (134, 37139), (136, 37160), (139, 37181), (140, 37193), (141, 37196), (151, 37280), (160, 37325), (161, 37331), (170, 37361), (174, 37388), (175, 37406), (180, 37427), (193, 37460), (208, 37520), (212, 37547), (220, 37586), (223, 37604), (228, 37625), (231, 37634), (239, 37670), (243, 37679),

Gene: CactusJack_34 Start: 28196, Stop: 29059, Start Num: 45

Candidate Starts for CactusJack_34:

(Start: 45 @28196 has 52 MA's), (68, 28277), (74, 28301), (77, 28310), (83, 28358), (91, 28382), (129, 28463), (130, 28478), (143, 28589), (175, 28772), (193, 28826), (219, 28955), (228, 28997), (240, 29045),

Gene: Camster_34 Start: 27969, Stop: 28835, Start Num: 45

Candidate Starts for Camster_34:

(Start: 45 @27969 has 52 MA's), (68, 28050), (74, 28074), (77, 28083), (80, 28110), (83, 28131), (129, 28239), (130, 28254), (143, 28365), (175, 28548), (193, 28602), (228, 28773), (240, 28821),

Gene: Caraxes_76 Start: 43021, Stop: 42170, Start Num: 53

Candidate Starts for Caraxes_76:

(Start: 44 @43054 has 3 MA's), (Start: 53 @43021 has 3 MA's), (Start: 66 @42970 has 2 MA's), (76, 42931), (82, 42889), (140, 42673), (174, 42493), (187, 42433), (189, 42424), (213, 42319),

Gene: CarolAnn_48 Start: 38490, Stop: 39251, Start Num: 64

Candidate Starts for CarolAnn_48:

(Start: 44 @38415 has 3 MA's), (Start: 64 @38490 has 17 MA's), (70, 38505), (78, 38541), (87, 38604), (94, 38616), (118, 38658), (125, 38685), (140, 38778), (156, 38874), (174, 38964), (217, 39156),

Gene: Caterpie_51 Start: 43734, Stop: 44543, Start Num: 47

Candidate Starts for Caterpie_51:

(14, 43353), (40, 43689), (Start: 47 @43734 has 1 MA's), (Start: 58 @43764 has 12 MA's), (69, 43788), (70, 43791), (78, 43827), (Start: 79 @43830 has 1 MA's), (83, 43875), (129, 43983), (130, 43998), (140, 44067), (144, 44115), (171, 44232), (179, 44283), (204, 44379), (227, 44490), (238, 44532), (240, 44538),

Gene: Chargerpower_70 Start: 41985, Stop: 41206, Start Num: 55

Candidate Starts for Chargerpower_70:

(Start: 55 @41985 has 4 MA's), (82, 41895), (105, 41829), (135, 41745), (140, 41691), (150, 41613), (153, 41604), (211, 41349),

Gene: Che12_77 Start: 43138, Stop: 42296, Start Num: 52

Candidate Starts for Che12_77:

(Start: 44 @43165 has 3 MA's), (Start: 52 @43138 has 2 MA's), (78, 43045), (82, 43006), (99, 42952), (122, 42889), (135, 42850), (147, 42730), (148, 42727), (157, 42688), (162, 42652), (168, 42631), (173, 42598), (181, 42559), (196, 42514), (213, 42427), (237, 42319),

Gene: Che9d_54 Start: 34668, Stop: 35669, Start Num: 24

Candidate Starts for Che9d_54:

(Start: 24 @34668 has 70 MA's), (Start: 47 @34836 has 1 MA's), (56, 34857), (Start: 59 @34869 has 1 MA's), (75, 34935), (78, 34944), (82, 34980), (109, 35046), (125, 35085), (126, 35088), (132, 35121), (134, 35124), (136, 35145), (139, 35166), (140, 35178), (141, 35181), (151, 35262), (160, 35307), (161, 35313), (174, 35370), (175, 35388), (177, 35391), (180, 35409), (188, 35430), (193, 35442), (197, 35460), (208, 35502), (212, 35529), (220, 35568), (223, 35586), (228, 35607), (239, 35652), (240, 35655),

Gene: Cheesepuff_53 Start: 37297, Stop: 38301, Start Num: 24

Candidate Starts for Cheesepuff_53:

(Start: 24 @37297 has 70 MA's), (Start: 47 @37465 has 1 MA's), (56, 37486), (Start: 59 @37498 has 1 MA's), (75, 37564), (78, 37573), (82, 37609), (109, 37675), (125, 37714), (126, 37717), (130, 37738), (134, 37753), (136, 37774), (139, 37795), (140, 37807), (141, 37810), (151, 37894), (161, 37945), (163, 37951), (174, 38002), (175, 38020), (180, 38041), (193, 38074), (197, 38092), (208, 38134), (212, 38161), (223, 38218), (231, 38248), (239, 38284), (240, 38287),

Gene: Chubbello_34 Start: 27935, Stop: 28801, Start Num: 45

Candidate Starts for Chubbello_34:

(Start: 45 @27935 has 52 MA's), (68, 28016), (74, 28040), (77, 28049), (83, 28097), (129, 28205), (130, 28220), (143, 28331), (175, 28514), (193, 28568), (219, 28697), (228, 28739), (240, 28787),

Gene: Chuckly_47 Start: 35101, Stop: 36108, Start Num: 24

Candidate Starts for Chuckly_47:

(Start: 24 @35101 has 70 MA's), (56, 35293), (Start: 59 @35305 has 1 MA's), (75, 35371), (78, 35380), (82, 35416), (109, 35482), (118, 35494), (125, 35521), (130, 35545), (134, 35560), (136, 35581), (139, 35602), (140, 35614), (141, 35617), (151, 35701), (160, 35746), (161, 35752), (163, 35758), (170, 35782), (174, 35809), (175, 35827), (180, 35848), (193, 35881), (208, 35941), (212, 35968), (220, 36007), (223, 36025), (228, 36046), (231, 36055), (239, 36091), (243, 36100),

Gene: Clifton_42 Start: 31558, Stop: 32337, Start Num: 58

Candidate Starts for Clifton_42:

(Start: 47 @31528 has 1 MA's), (Start: 58 @31558 has 12 MA's), (69, 31582), (70, 31585), (78, 31621), (Start: 79 @31624 has 1 MA's), (83, 31669), (129, 31777), (130, 31792), (140, 31861), (144, 31909), (171, 32026), (179, 32077), (204, 32173), (225, 32278), (227, 32284), (238, 32326), (240, 32332),

Gene: Clown_59 Start: 43467, Stop: 44249, Start Num: 63

Candidate Starts for Clown_59:

(21, 43209), (23, 43230), (34, 43341), (46, 43410), (Start: 63 @43467 has 1 MA's), (78, 43518), (83, 43566), (101, 43611), (120, 43656), (126, 43668), (130, 43689), (133, 43701), (148, 43833), (149, 43836), (169, 43908), (192, 44004), (201, 44055), (209, 44076), (212, 44103), (215, 44118), (227, 44178), (235, 44214),

Gene: Colin_70 Start: 43999, Stop: 43229, Start Num: 50

Candidate Starts for Colin_70:

(42, 44038), (Start: 50 @43999 has 1 MA's), (75, 43957), (82, 43909), (96, 43861), (140, 43711), (211, 43372),

Gene: Cookiedough_72 Start: 42134, Stop: 41286, Start Num: 43

Candidate Starts for Cookiedough_72:

(Start: 43 @42134 has 15 MA's), (Start: 44 @42125 has 3 MA's), (Start: 50 @42101 has 1 MA's), (78, 42011), (82, 41972), (89, 41942), (99, 41918), (108, 41900), (110, 41897), (128, 41858), (135, 41825), (140, 41771), (153, 41684), (154, 41681), (179, 41561), (191, 41522), (211, 41429), (229, 41348),

Gene: Cornucopia_51 Start: 36403, Stop: 37407, Start Num: 24

Candidate Starts for Cornucopia_51:

(Start: 24 @36403 has 70 MA's), (Start: 47 @36571 has 1 MA's), (56, 36592), (Start: 59 @36604 has 1 MA's), (67, 36637), (72, 36652), (75, 36670), (78, 36679), (82, 36715), (98, 36763), (109, 36781), (118, 36793), (125, 36820), (130, 36844), (132, 36856), (134, 36859), (136, 36880), (139, 36901), (140, 36913), (141, 36916), (151, 37000), (161, 37051), (163, 37057), (174, 37108), (175, 37126), (180, 37147), (193, 37180), (197, 37198), (208, 37240), (212, 37267), (223, 37324), (231, 37354), (239, 37390), (240, 37393),

Gene: DaWorst_49 Start: 35931, Stop: 36935, Start Num: 24

Candidate Starts for DaWorst_49:

(Start: 24 @35931 has 70 MA's), (Start: 47 @36099 has 1 MA's), (56, 36120), (Start: 59 @36132 has 1 MA's), (75, 36198), (78, 36207), (82, 36243), (109, 36309), (125, 36348), (126, 36351), (130, 36372), (134, 36387), (136, 36408), (139, 36429), (140, 36441), (141, 36444), (151, 36528), (161, 36579), (163, 36585), (174, 36636), (175, 36654), (180, 36675), (193, 36708), (197, 36726), (208, 36768), (212, 36795), (223, 36852), (231, 36882), (239, 36918), (240, 36921),

Gene: Dante_47 Start: 34836, Stop: 35840, Start Num: 24

Candidate Starts for Dante_47:

(Start: 24 @34836 has 70 MA's), (Start: 47 @35004 has 1 MA's), (56, 35025), (Start: 59 @35037 has 1 MA's), (67, 35070), (72, 35085), (75, 35103), (78, 35112), (82, 35148), (98, 35196), (109, 35214), (118, 35226), (125, 35253), (130, 35277), (132, 35289), (134, 35292), (136, 35313), (139, 35334), (140, 35346), (141, 35349), (151, 35433), (160, 35478), (161, 35484), (163, 35490), (174, 35541), (175, 35559), (180, 35580), (193, 35613), (197, 35631), (208, 35673), (212, 35700), (223, 35757), (231, 35787), (239, 35823), (240, 35826),

Gene: Demsculpinboyz_56 Start: 34780, Stop: 35781, Start Num: 24

Candidate Starts for Demsculpinboyz_56:

(Start: 24 @34780 has 70 MA's), (Start: 47 @34948 has 1 MA's), (56, 34969), (Start: 59 @34981 has 1 MA's), (67, 35014), (72, 35029), (75, 35047), (78, 35056), (82, 35092), (98, 35140), (109, 35158), (118, 35170), (125, 35197), (130, 35221), (132, 35233), (134, 35236), (136, 35257), (139, 35278), (140,

35290), (141, 35293), (151, 35374), (160, 35419), (161, 35425), (174, 35482), (175, 35500), (177, 35503), (180, 35521), (193, 35554), (197, 35572), (208, 35614), (212, 35641), (220, 35680), (223, 35698), (228, 35719), (231, 35728), (239, 35764), (240, 35767),

Gene: DillTech15_46 Start: 34346, Stop: 35350, Start Num: 24

Candidate Starts for DillTech15_46:

(Start: 24 @34346 has 70 MA's), (Start: 47 @34514 has 1 MA's), (56, 34535), (Start: 59 @34547 has 1 MA's), (75, 34613), (78, 34622), (82, 34658), (109, 34724), (125, 34763), (126, 34766), (130, 34787), (134, 34802), (136, 34823), (139, 34844), (140, 34856), (141, 34859), (151, 34943), (161, 34994), (163, 35000), (174, 35051), (175, 35069), (180, 35090), (193, 35123), (197, 35141), (208, 35183), (212, 35210), (223, 35267), (231, 35297), (239, 35333), (240, 35336),

Gene: Dolores_48 Start: 34386, Stop: 35135, Start Num: 61

Candidate Starts for Dolores_48:

(3, 33747), (4, 33801), (5, 33834), (8, 33873), (10, 33894), (11, 33927), (13, 33939), (18, 34062), (19, 34083), (30, 34230), (Start: 61 @34386 has 11 MA's), (70, 34416), (75, 34443), (78, 34452), (118, 34569), (125, 34596), (130, 34620), (135, 34635), (138, 34665), (147, 34755), (148, 34758), (199, 34980),

Gene: Donkeykong_46 Start: 35576, Stop: 36355, Start Num: 58

Candidate Starts for Donkeykong_46:

(Start: 47 @35546 has 1 MA's), (Start: 58 @35576 has 12 MA's), (69, 35600), (70, 35603), (78, 35639), (Start: 79 @35642 has 1 MA's), (83, 35687), (129, 35795), (130, 35810), (140, 35879), (144, 35927), (171, 36044), (179, 36095), (204, 36191), (225, 36296), (227, 36302), (238, 36344), (240, 36350),

Gene: Donovan_34 Start: 27961, Stop: 28824, Start Num: 45

Candidate Starts for Donovan_34:

(Start: 45 @27961 has 52 MA's), (68, 28042), (74, 28066), (77, 28075), (80, 28102), (83, 28123), (125, 28219), (129, 28228), (130, 28243), (143, 28354), (175, 28537), (193, 28591), (219, 28720), (228, 28762), (240, 28810),

Gene: Doomphist_47 Start: 36071, Stop: 37075, Start Num: 24

Candidate Starts for Doomphist_47:

(Start: 24 @36071 has 70 MA's), (56, 36260), (Start: 59 @36272 has 1 MA's), (75, 36338), (78, 36347), (82, 36383), (109, 36449), (118, 36461), (125, 36488), (130, 36512), (134, 36527), (136, 36548), (139, 36569), (140, 36581), (141, 36584), (151, 36668), (160, 36713), (161, 36719), (170, 36749), (174, 36776), (175, 36794), (180, 36815), (193, 36848), (208, 36908), (212, 36935), (220, 36974), (223, 36992), (228, 37013), (231, 37022), (239, 37058), (243, 37067),

Gene: Doomslug_55 Start: 35048, Stop: 36052, Start Num: 24

Candidate Starts for Doomslug_55:

(Start: 24 @35048 has 70 MA's), (Start: 47 @35216 has 1 MA's), (56, 35237), (Start: 59 @35249 has 1 MA's), (67, 35282), (72, 35297), (75, 35315), (78, 35324), (82, 35360), (98, 35408), (109, 35426), (118, 35438), (125, 35465), (130, 35489), (132, 35501), (134, 35504), (136, 35525), (139, 35546), (140, 35558), (141, 35561), (151, 35645), (160, 35690), (161, 35696), (170, 35726), (174, 35753), (175, 35771), (180, 35792), (193, 35825), (197, 35843), (208, 35885), (223, 35969), (228, 35990), (239, 36035), (243, 36044),

Gene: Dori_51 Start: 44920, Stop: 45693, Start Num: 58

Candidate Starts for Dori_51:

(Start: 58 @44920 has 12 MA's), (69, 44941), (78, 44980), (Start: 79 @44983 has 1 MA's), (125, 45124), (129, 45133), (130, 45148), (140, 45217), (144, 45265), (171, 45382), (179, 45433), (204, 45529), (225, 45634), (227, 45640), (238, 45682), (240, 45688),

Gene: Dorothea_72 Start: 42132, Stop: 41284, Start Num: 43

Candidate Starts for Dorothea_72:

(Start: 43 @42132 has 15 MA's), (Start: 44 @42123 has 3 MA's), (Start: 50 @42099 has 1 MA's), (72, 42036), (78, 42009), (82, 41970), (89, 41940), (99, 41916), (108, 41898), (110, 41895), (128, 41856), (135, 41823), (140, 41769), (153, 41682), (154, 41679), (179, 41559), (191, 41520), (211, 41427), (229, 41346),

Gene: Dorothy_44 Start: 34870, Stop: 35874, Start Num: 24

Candidate Starts for Dorothy_44:

(Start: 24 @34870 has 70 MA's), (56, 35059), (Start: 59 @35071 has 1 MA's), (75, 35137), (78, 35146), (82, 35182), (109, 35248), (118, 35260), (125, 35287), (130, 35311), (134, 35326), (136, 35347), (139, 35368), (140, 35380), (141, 35383), (151, 35467), (160, 35512), (161, 35518), (170, 35548), (174, 35575), (175, 35593), (180, 35614), (193, 35647), (208, 35707), (212, 35734), (220, 35773), (223, 35791), (228, 35812), (231, 35821), (239, 35857), (243, 35866),

Gene: DosHalletts_47 Start: 34853, Stop: 35650, Start Num: 58

Candidate Starts for DosHalletts_47:

(Start: 58 @34853 has 12 MA's), (70, 34895), (78, 34931), (Start: 79 @34934 has 1 MA's), (85, 34988), (129, 35090), (130, 35105), (140, 35174), (144, 35222), (171, 35339), (179, 35390), (204, 35486), (225, 35591), (227, 35597), (238, 35639), (240, 35645),

Gene: DotProduct_44 Start: 34531, Stop: 35535, Start Num: 24

Candidate Starts for DotProduct_44:

(Start: 24 @34531 has 70 MA's), (56, 34720), (Start: 59 @34732 has 1 MA's), (75, 34798), (78, 34807), (82, 34843), (109, 34909), (118, 34921), (125, 34948), (130, 34972), (134, 34987), (136, 35008), (139, 35029), (140, 35041), (141, 35044), (151, 35128), (160, 35173), (161, 35179), (170, 35209), (174, 35236), (175, 35254), (180, 35275), (193, 35308), (197, 35326), (208, 35368), (212, 35395), (220, 35434), (223, 35452), (228, 35473), (231, 35482), (239, 35518), (243, 35527),

Gene: Dynamo_34 Start: 28347, Stop: 29213, Start Num: 45

Candidate Starts for Dynamo_34:

(Start: 45 @28347 has 52 MA's), (68, 28428), (74, 28452), (77, 28461), (83, 28509), (129, 28617), (130, 28632), (143, 28743), (175, 28926), (193, 28980), (219, 29109), (228, 29151), (240, 29199),

Gene: Easley_43 Start: 32655, Stop: 33410, Start Num: 61

Candidate Starts for Easley_43:

(Start: 61 @32655 has 11 MA's), (70, 32685), (75, 32712), (78, 32721), (104, 32820), (125, 32865), (129, 32874), (130, 32889), (131, 32898), (156, 33060), (175, 33171), (178, 33174), (199, 33255),

Gene: Eish_48 Start: 35416, Stop: 36417, Start Num: 24

Candidate Starts for Eish_48:

(Start: 24 @35416 has 70 MA's), (Start: 47 @35584 has 1 MA's), (56, 35605), (Start: 59 @35617 has 1 MA's), (75, 35683), (78, 35692), (82, 35728), (109, 35794), (125, 35833), (126, 35836), (132, 35869), (134, 35872), (136, 35893), (139, 35914), (140, 35926), (141, 35929), (151, 36010), (160, 36055), (161, 36061), (170, 36091), (174, 36118), (175, 36136), (177, 36139), (180, 36157), (193, 36190), (197, 36208), (208, 36250), (220, 36316), (228, 36355), (239, 36400),

Gene: Emmaloid_48 Start: 36261, Stop: 37265, Start Num: 24

Candidate Starts for Emmaloid_48:

(Start: 24 @36261 has 70 MA's), (56, 36450), (Start: 59 @36462 has 1 MA's), (75, 36528), (78, 36537), (82, 36573), (109, 36639), (118, 36651), (125, 36678), (130, 36702), (134, 36717), (136, 36738), (139, 36759), (140, 36771), (141, 36774), (151, 36858), (160, 36903), (161, 36909), (170, 36939), (174,

36966), (175, 36984), (180, 37005), (193, 37038), (197, 37056), (208, 37098), (212, 37125), (220, 37164), (223, 37182), (228, 37203), (231, 37212), (239, 37248), (243, 37257),

Gene: Estave1_48 Start: 34820, Stop: 35824, Start Num: 24

Candidate Starts for Estave1_48:

(Start: 24 @34820 has 70 MA's), (Start: 47 @34988 has 1 MA's), (56, 35009), (Start: 59 @35021 has 1 MA's), (67, 35054), (72, 35069), (75, 35087), (78, 35096), (82, 35132), (98, 35180), (109, 35198), (118, 35210), (125, 35237), (130, 35261), (132, 35273), (134, 35276), (136, 35297), (139, 35318), (140, 35330), (141, 35333), (147, 35405), (151, 35417), (160, 35462), (161, 35468), (170, 35498), (174, 35525), (175, 35543), (177, 35546), (180, 35564), (193, 35597), (197, 35615), (208, 35657), (220, 35723), (223, 35741), (228, 35762), (239, 35807),

Gene: Etoile_34 Start: 27939, Stop: 28805, Start Num: 45

Candidate Starts for Etoile_34:

(Start: 45 @27939 has 52 MA's), (68, 28020), (74, 28044), (77, 28053), (83, 28101), (129, 28209), (130, 28224), (131, 28233), (143, 28335), (175, 28518), (193, 28572), (219, 28701), (228, 28743), (240, 28791),

Gene: Faith5x5_37 Start: 28702, Stop: 29454, Start Num: 61

Candidate Starts for Faith5x5_37:

(46, 28657), (Start: 61 @28702 has 11 MA's), (69, 28729), (83, 28816), (85, 28825), (125, 28915), (129, 28924), (130, 28939), (133, 28951), (147, 29074), (148, 29077), (174, 29197), (199, 29299),

Gene: Fastidio_49 Start: 34493, Stop: 35497, Start Num: 24

Candidate Starts for Fastidio_49:

(Start: 24 @34493 has 70 MA's), (56, 34682), (Start: 59 @34694 has 1 MA's), (75, 34760), (78, 34769), (82, 34805), (109, 34871), (118, 34883), (125, 34910), (130, 34934), (134, 34949), (136, 34970), (139, 34991), (140, 35003), (141, 35006), (151, 35090), (161, 35141), (163, 35147), (174, 35198), (175, 35216), (180, 35237), (193, 35270), (197, 35288), (208, 35330), (212, 35357), (223, 35414), (231, 35444), (239, 35480), (240, 35483),

Gene: FatCactus_68 Start: 42406, Stop: 41588, Start Num: 57

Candidate Starts for FatCactus_68:

(Start: 57 @42406 has 1 MA's), (Start: 66 @42364 has 2 MA's), (76, 42325), (82, 42283), (95, 42250), (124, 42178), (131, 42145), (140, 42085), (163, 41938), (189, 41836),

Gene: Fenry_43 Start: 34202, Stop: 34963, Start Num: 64

Candidate Starts for Fenry_43:

(25, 33998), (Start: 44 @34127 has 3 MA's), (Start: 64 @34202 has 17 MA's), (70, 34217), (87, 34316), (94, 34328), (118, 34370), (125, 34397), (140, 34490), (156, 34586), (174, 34676), (193, 34742), (217, 34868),

Gene: Filuzino_45 Start: 34250, Stop: 35254, Start Num: 24

Candidate Starts for Filuzino_45:

(Start: 24 @34250 has 70 MA's), (Start: 47 @34418 has 1 MA's), (56, 34439), (Start: 59 @34451 has 1 MA's), (67, 34484), (72, 34499), (75, 34517), (78, 34526), (82, 34562), (98, 34610), (109, 34628), (118, 34640), (125, 34667), (130, 34691), (132, 34703), (134, 34706), (136, 34727), (139, 34748), (140, 34760), (141, 34763), (151, 34847), (161, 34898), (174, 34955), (175, 34973), (180, 34994), (193, 35027), (197, 35045), (208, 35087), (212, 35114), (223, 35171), (231, 35201), (239, 35237), (240, 35240),

Gene: Firehouse51_47 Start: 36491, Stop: 37288, Start Num: 58

Candidate Starts for Firehouse51_47:

(Start: 58 @36491 has 12 MA's), (70, 36533), (78, 36569), (Start: 79 @36572 has 1 MA's), (85, 36626), (129, 36728), (130, 36743), (140, 36812), (144, 36860), (171, 36977), (179, 37028), (204, 37124), (225, 37229), (227, 37235), (238, 37277), (240, 37283),

Gene: FirstPlacePfu_34 Start: 27971, Stop: 28837, Start Num: 45

Candidate Starts for FirstPlacePfu_34:

(Start: 45 @27971 has 52 MA's), (68, 28052), (74, 28076), (77, 28085), (83, 28133), (129, 28241), (130, 28256), (143, 28367), (175, 28550), (193, 28604), (219, 28733), (228, 28775), (240, 28823),

Gene: Fishburne_34 Start: 27939, Stop: 28805, Start Num: 45

Candidate Starts for Fishburne_34:

(Start: 45 @27939 has 52 MA's), (68, 28020), (74, 28044), (77, 28053), (83, 28101), (129, 28209), (130, 28224), (143, 28335), (175, 28518), (193, 28572), (219, 28701), (228, 28743), (240, 28791),

Gene: Florinda_57 Start: 36157, Stop: 36951, Start Num: 58

Candidate Starts for Florinda_57:

(Start: 58 @36157 has 12 MA's), (70, 36199), (78, 36235), (Start: 79 @36238 has 1 MA's), (82, 36274), (107, 36334), (129, 36391), (130, 36406), (140, 36475), (144, 36523), (171, 36640), (179, 36691), (204, 36787), (225, 36892), (227, 36898), (238, 36940), (240, 36946),

Gene: Frankie_51 Start: 36473, Stop: 37477, Start Num: 24

Candidate Starts for Frankie_51:

(Start: 24 @36473 has 70 MA's), (Start: 47 @36641 has 1 MA's), (56, 36662), (Start: 59 @36674 has 1 MA's), (67, 36707), (72, 36722), (75, 36740), (78, 36749), (82, 36785), (98, 36833), (109, 36851), (118, 36863), (125, 36890), (130, 36914), (132, 36926), (134, 36929), (136, 36950), (139, 36971), (140, 36983), (141, 36986), (147, 37058), (151, 37070), (152, 37073), (160, 37115), (161, 37121), (170, 37151), (174, 37178), (180, 37217), (193, 37250), (197, 37268), (208, 37310), (212, 37337), (220, 37376), (223, 37394), (228, 37415), (231, 37424), (239, 37460), (243, 37469),

Gene: Fruitloop_46 Start: 36116, Stop: 37120, Start Num: 24

Candidate Starts for Fruitloop_46:

(Start: 24 @36116 has 70 MA's), (Start: 47 @36284 has 1 MA's), (56, 36305), (Start: 59 @36317 has 1 MA's), (67, 36350), (72, 36365), (75, 36383), (78, 36392), (82, 36428), (98, 36476), (109, 36494), (118, 36506), (125, 36533), (130, 36557), (132, 36569), (134, 36572), (136, 36593), (139, 36614), (140, 36626), (141, 36629), (147, 36701), (151, 36713), (161, 36764), (163, 36770), (174, 36821), (175, 36839), (180, 36860), (193, 36893), (197, 36911), (208, 36953), (212, 36980), (223, 37037), (231, 37067), (239, 37103), (240, 37106),

Gene: GUmbie_45 Start: 34760, Stop: 35764, Start Num: 24

Candidate Starts for GUmbie_45:

(Start: 24 @34760 has 70 MA's), (56, 34949), (Start: 59 @34961 has 1 MA's), (75, 35027), (78, 35036), (82, 35072), (109, 35138), (118, 35150), (125, 35177), (130, 35201), (134, 35216), (136, 35237), (139, 35258), (140, 35270), (141, 35273), (151, 35357), (160, 35402), (161, 35408), (170, 35438), (174, 35465), (175, 35483), (180, 35504), (193, 35537), (208, 35597), (212, 35624), (220, 35663), (223, 35681), (228, 35702), (231, 35711), (239, 35747), (243, 35756),

Gene: Gallia_8 Start: 3136, Stop: 3990, Start Num: 35

Candidate Starts for Gallia_8:

(35, 3136), (36, 3139), (Start: 58 @3184 has 12 MA's), (82, 3289), (83, 3298), (125, 3394), (131, 3427), (140, 3487), (167, 3655), (174, 3691), (185, 3733), (203, 3808), (215, 3868), (232, 3943),

Gene: GaloreK_34 Start: 27935, Stop: 28798, Start Num: 45

Candidate Starts for GaloreK_34:

(Start: 45 @27935 has 52 MA's), (68, 28016), (74, 28040), (77, 28049), (80, 28076), (83, 28097), (125, 28193), (129, 28202), (130, 28217), (131, 28226), (143, 28328), (175, 28511), (193, 28565), (219, 28694), (228, 28736), (240, 28784),

Gene: Gambino_49 Start: 35195, Stop: 35956, Start Num: 64

Candidate Starts for Gambino_49:

(Start: 64 @35195 has 17 MA's), (70, 35210), (88, 35312), (104, 35345), (125, 35390), (129, 35399), (130, 35414), (140, 35483), (156, 35579), (174, 35669), (217, 35861),

Gene: Gavriela_34 Start: 28196, Stop: 29059, Start Num: 45

Candidate Starts for Gavriela_34:

(Start: 45 @28196 has 52 MA's), (68, 28277), (74, 28301), (77, 28310), (83, 28358), (91, 28382), (129, 28463), (130, 28478), (143, 28589), (175, 28772), (193, 28826), (219, 28955), (228, 28997), (240, 29045),

Gene: GigiOuiOui_44 Start: 34673, Stop: 35677, Start Num: 24

Candidate Starts for GigiOuiOui_44:

(Start: 24 @34673 has 70 MA's), (56, 34862), (Start: 59 @34874 has 1 MA's), (75, 34940), (78, 34949), (82, 34985), (109, 35051), (118, 35063), (125, 35090), (130, 35114), (134, 35129), (136, 35150), (139, 35171), (140, 35183), (141, 35186), (151, 35270), (160, 35315), (161, 35321), (170, 35351), (174, 35378), (175, 35396), (180, 35417), (193, 35450), (208, 35510), (212, 35537), (220, 35576), (223, 35594), (228, 35615), (231, 35624), (239, 35660), (243, 35669),

Gene: Girafales_56 Start: 35966, Stop: 36760, Start Num: 58

Candidate Starts for Girafales_56:

(Start: 58 @35966 has 12 MA's), (70, 36008), (78, 36044), (Start: 79 @36047 has 1 MA's), (83, 36092), (129, 36200), (130, 36215), (131, 36224), (140, 36284), (144, 36332), (171, 36449), (179, 36500), (204, 36596), (225, 36701), (227, 36707), (238, 36749), (240, 36755),

Gene: Girr_48 Start: 35732, Stop: 36736, Start Num: 24

Candidate Starts for Girr_48:

(Start: 24 @35732 has 70 MA's), (56, 35921), (Start: 59 @35933 has 1 MA's), (75, 35999), (78, 36008), (82, 36044), (109, 36110), (118, 36122), (125, 36149), (130, 36173), (134, 36188), (136, 36209), (139, 36230), (140, 36242), (141, 36245), (151, 36329), (160, 36374), (161, 36380), (170, 36410), (174, 36437), (175, 36455), (180, 36476), (193, 36509), (208, 36569), (212, 36596), (220, 36635), (223, 36653), (228, 36674), (231, 36683), (239, 36719), (243, 36728),

Gene: Gladiator_70 Start: 41751, Stop: 40912, Start Num: 43

Candidate Starts for Gladiator_70:

(Start: 43 @41751 has 15 MA's), (Start: 44 @41742 has 3 MA's), (Start: 50 @41718 has 1 MA's), (78, 41628), (82, 41589), (83, 41580), (96, 41547), (110, 41517), (128, 41484), (140, 41397), (153, 41310), (154, 41307), (179, 41187), (191, 41148), (211, 41055), (229, 40974),

Gene: Glaske_34 Start: 28196, Stop: 29059, Start Num: 45

Candidate Starts for Glaske_34:

(Start: 45 @28196 has 52 MA's), (68, 28277), (74, 28301), (77, 28310), (83, 28358), (91, 28382), (129, 28463), (130, 28478), (143, 28589), (175, 28772), (193, 28826), (219, 28955), (228, 28997), (240, 29045),

Gene: GreaseLightnin_34 Start: 28179, Stop: 29045, Start Num: 45

Candidate Starts for GreaseLightnin_34:

(Start: 45 @28179 has 52 MA's), (74, 28284), (77, 28293), (83, 28341), (129, 28449), (130, 28464), (143, 28575), (175, 28758), (193, 28812), (219, 28941), (228, 28983), (240, 29031),

Gene: Grimmer_57 Start: 37247, Stop: 38248, Start Num: 24

Candidate Starts for Grimmer_57:

(Start: 24 @37247 has 70 MA's), (56, 37436), (Start: 59 @37448 has 1 MA's), (72, 37496), (75, 37514), (78, 37523), (82, 37559), (109, 37625), (118, 37637), (125, 37664), (130, 37688), (134, 37703), (136, 37724), (139, 37745), (140, 37757), (141, 37760), (151, 37841), (160, 37886), (161, 37892), (174, 37949), (175, 37967), (180, 37988), (193, 38021), (197, 38039), (208, 38081), (212, 38108), (220, 38147), (223, 38165), (228, 38186), (239, 38231), (240, 38234),

Gene: HC_34 Start: 27658, Stop: 28527, Start Num: 45

Candidate Starts for HC_34:

(Start: 45 @27658 has 52 MA's), (74, 27766), (77, 27775), (83, 27823), (129, 27931), (130, 27946), (143, 28057), (175, 28240), (193, 28294), (219, 28423), (228, 28465), (240, 28513),

Gene: HUHilltop_34 Start: 27972, Stop: 28835, Start Num: 45

Candidate Starts for HUHilltop_34:

(Start: 45 @27972 has 52 MA's), (68, 28053), (74, 28077), (77, 28086), (80, 28113), (83, 28134), (125, 28230), (129, 28239), (130, 28254), (143, 28365), (175, 28548), (193, 28602), (228, 28773), (240, 28821),

Gene: Hamulus_48 Start: 36115, Stop: 37119, Start Num: 24

Candidate Starts for Hamulus_48:

(Start: 24 @36115 has 70 MA's), (56, 36304), (Start: 59 @36316 has 1 MA's), (75, 36382), (78, 36391), (82, 36427), (109, 36493), (118, 36505), (125, 36532), (130, 36556), (134, 36571), (136, 36592), (139, 36613), (140, 36625), (141, 36628), (151, 36712), (160, 36757), (161, 36763), (170, 36793), (174, 36820), (175, 36838), (180, 36859), (193, 36892), (208, 36952), (212, 36979), (220, 37018), (223, 37036), (228, 37057), (231, 37066), (239, 37102), (243, 37111),

Gene: Harley_50 Start: 35468, Stop: 36472, Start Num: 24

Candidate Starts for Harley_50:

(Start: 24 @35468 has 70 MA's), (56, 35657), (Start: 59 @35669 has 1 MA's), (75, 35735), (78, 35744), (82, 35780), (109, 35846), (118, 35858), (125, 35885), (130, 35909), (134, 35924), (136, 35945), (139, 35966), (140, 35978), (141, 35981), (151, 36065), (160, 36110), (161, 36116), (170, 36146), (174, 36173), (175, 36191), (180, 36212), (193, 36245), (208, 36305), (220, 36371), (223, 36389), (228, 36410), (231, 36419), (239, 36455), (243, 36464),

Gene: InLimbo_43 Start: 30497, Stop: 31246, Start Num: 61

Candidate Starts for InLimbo_43:

(Start: 61 @30497 has 11 MA's), (69, 30524), (70, 30527), (Start: 79 @30566 has 1 MA's), (83, 30611), (106, 30662), (118, 30680), (130, 30731), (148, 30869), (159, 30920), (199, 31091),

Gene: IronMan_69 Start: 44419, Stop: 43604, Start Num: 44

Candidate Starts for IronMan_69:

(39, 44446), (Start: 44 @44419 has 3 MA's), (51, 44386), (78, 44302), (82, 44263), (84, 44251), (111, 44194), (142, 44041), (211, 43750),

Gene: Isiphiwo_70 Start: 41692, Stop: 40844, Start Num: 43

Candidate Starts for Isiphiwo_70:

(Start: 43 @41692 has 15 MA's), (Start: 44 @41683 has 3 MA's), (Start: 50 @41659 has 1 MA's), (78, 41569), (82, 41530), (89, 41500), (99, 41476), (108, 41458), (110, 41455), (128, 41416), (135, 41383), (140, 41329), (153, 41242), (154, 41239), (179, 41119), (191, 41080), (211, 40987), (229, 40906),

Gene: Island3_36 Start: 29775, Stop: 30644, Start Num: 45

Candidate Starts for Island3_36:

(Start: 45 @29775 has 52 MA's), (74, 29883), (77, 29892), (83, 29940), (129, 30048), (130, 30063), (143, 30174), (175, 30357), (193, 30411), (219, 30540), (228, 30582), (240, 30630),

Gene: Iwokeuplikedis_72 Start: 43407, Stop: 42592, Start Num: 55

Candidate Starts for Iwokeuplikedis_72:

(Start: 55 @43407 has 4 MA's), (73, 43341), (Start: 79 @43314 has 1 MA's), (82, 43278), (112, 43203), (135, 43134), (140, 43080), (153, 42993), (179, 42870), (194, 42825), (211, 42738), (229, 42657),

Gene: Jaan_70 Start: 44554, Stop: 43772, Start Num: 55

Candidate Starts for Jaan_70:

(Start: 55 @44554 has 4 MA's), (78, 44470), (82, 44431), (84, 44419), (111, 44362), (121, 44341), (142, 44209), (211, 43918),

Gene: Jalammah_48 Start: 35515, Stop: 36279, Start Num: 64

Candidate Starts for Jalammah_48:

(25, 35311), (Start: 44 @35440 has 3 MA's), (Start: 64 @35515 has 17 MA's), (83, 35614), (86, 35626), (120, 35704), (126, 35716), (130, 35737), (131, 35746), (140, 35806), (156, 35902), (174, 35992), (217, 36184),

Gene: Jant_52 Start: 37127, Stop: 38131, Start Num: 24

Candidate Starts for Jant_52:

(Start: 24 @37127 has 70 MA's), (Start: 47 @37295 has 1 MA's), (56, 37316), (Start: 59 @37328 has 1 MA's), (67, 37361), (72, 37376), (75, 37394), (78, 37403), (82, 37439), (98, 37487), (109, 37505), (118, 37517), (125, 37544), (130, 37568), (132, 37580), (134, 37583), (136, 37604), (139, 37625), (140, 37637), (141, 37640), (151, 37724), (160, 37769), (161, 37775), (174, 37832), (175, 37850), (180, 37871), (193, 37904), (197, 37922), (208, 37964), (212, 37991), (223, 38048), (231, 38078), (239, 38114), (240, 38117),

Gene: Jebeks_35 Start: 27924, Stop: 28790, Start Num: 45

Candidate Starts for Jebeks_35:

(Start: 45 @27924 has 52 MA's), (68, 28005), (74, 28029), (77, 28038), (80, 28065), (83, 28086), (129, 28194), (130, 28209), (143, 28320), (175, 28503), (193, 28557), (219, 28686), (228, 28728), (240, 28776),

Gene: Jennelsea_44 Start: 32861, Stop: 33640, Start Num: 58

Candidate Starts for Jennelsea_44:

(Start: 47 @32831 has 1 MA's), (Start: 58 @32861 has 12 MA's), (69, 32885), (70, 32888), (78, 32924), (Start: 79 @32927 has 1 MA's), (83, 32972), (129, 33080), (130, 33095), (140, 33164), (144, 33212), (171, 33329), (179, 33380), (204, 33476), (225, 33581), (227, 33587), (238, 33629), (240, 33635),

Gene: JewelBug_72 Start: 42414, Stop: 41578, Start Num: 43

Candidate Starts for JewelBug_72:

(Start: 43 @42414 has 15 MA's), (Start: 44 @42405 has 3 MA's), (Start: 50 @42381 has 1 MA's), (78, 42291), (82, 42252), (84, 42240), (137, 42090), (153, 41976), (154, 41973), (179, 41853), (191, 41814), (211, 41721), (229, 41640),

Gene: Job42_48 Start: 36721, Stop: 37725, Start Num: 24

Candidate Starts for Job42_48:

(Start: 24 @36721 has 70 MA's), (56, 36910), (Start: 59 @36922 has 1 MA's), (75, 36988), (78, 36997), (82, 37033), (109, 37099), (118, 37111), (125, 37138), (130, 37162), (134, 37177), (136, 37198), (139, 37219), (140, 37231), (141, 37234), (151, 37318), (160, 37363), (161, 37369), (170, 37399), (174, 37426), (175, 37444), (180, 37465), (193, 37498), (208, 37558), (212, 37585), (220, 37624), (223,

37642), (228, 37663), (231, 37672), (239, 37708), (243, 37717),

Gene: Jordennis_71 Start: 41658, Stop: 41059, Start Num: 119

Candidate Starts for Jordennis_71:

(Start: 119 @41658 has 2 MA's), (128, 41631), (135, 41598), (140, 41544), (153, 41457), (154, 41454), (179, 41334), (191, 41295), (211, 41202), (229, 41121),

Gene: Jung_33 Start: 27903, Stop: 28766, Start Num: 45

Candidate Starts for Jung_33:

(Start: 45 @27903 has 52 MA's), (68, 27984), (74, 28008), (77, 28017), (83, 28065), (91, 28089), (129, 28170), (130, 28185), (143, 28296), (175, 28479), (193, 28533), (219, 28662), (228, 28704), (240, 28752),

Gene: Juniormint_34 Start: 27975, Stop: 28841, Start Num: 45

Candidate Starts for Juniormint_34:

(Start: 45 @27975 has 52 MA's), (68, 28056), (74, 28080), (77, 28089), (80, 28116), (83, 28137), (129, 28245), (130, 28260), (143, 28371), (175, 28554), (193, 28608), (219, 28737), (228, 28779), (240, 28827),

Gene: KappaFarmDelta_46 Start: 33140, Stop: 33901, Start Num: 64

Candidate Starts for KappaFarmDelta_46:

(25, 32939), (Start: 44 @33065 has 3 MA's), (Start: 64 @33140 has 17 MA's), (70, 33155), (87, 33254), (94, 33266), (118, 33308), (125, 33335), (139, 33416), (140, 33428), (156, 33524), (174, 33614), (193, 33680), (217, 33806),

Gene: Karhdo_46 Start: 35555, Stop: 36559, Start Num: 24

Candidate Starts for Karhdo_46:

(Start: 24 @35555 has 70 MA's), (56, 35744), (Start: 59 @35756 has 1 MA's), (75, 35822), (78, 35831), (82, 35867), (109, 35933), (118, 35945), (125, 35972), (130, 35996), (134, 36011), (136, 36032), (139, 36053), (140, 36065), (141, 36068), (151, 36152), (160, 36197), (161, 36203), (170, 36233), (174, 36260), (175, 36278), (180, 36299), (193, 36332), (208, 36392), (212, 36419), (220, 36458), (223, 36476), (228, 36497), (231, 36506), (239, 36542), (243, 36551),

Gene: Kari_34 Start: 27936, Stop: 28802, Start Num: 45

Candidate Starts for Kari_34:

(Start: 45 @27936 has 52 MA's), (68, 28017), (74, 28041), (77, 28050), (83, 28098), (129, 28206), (130, 28221), (143, 28332), (175, 28515), (193, 28569), (219, 28698), (228, 28740), (240, 28788),

Gene: KilKor_34 Start: 28196, Stop: 29059, Start Num: 45

Candidate Starts for KilKor_34:

(Start: 45 @28196 has 52 MA's), (68, 28277), (74, 28301), (77, 28310), (83, 28358), (91, 28382), (129, 28463), (130, 28478), (143, 28589), (175, 28772), (193, 28826), (219, 28955), (228, 28997), (240, 29045),

Gene: Krakatau_45 Start: 35226, Stop: 36230, Start Num: 24

Candidate Starts for Krakatau_45:

(1, 34731), (2, 34782), (6, 34905), (7, 34911), (9, 34926), (12, 34980), (15, 35052), (16, 35061), (Start: 24 @35226 has 70 MA's), (56, 35415), (Start: 59 @35427 has 1 MA's), (75, 35493), (78, 35502), (82, 35538), (109, 35604), (118, 35616), (125, 35643), (130, 35667), (134, 35682), (136, 35703), (139, 35724), (140, 35736), (141, 35739), (151, 35823), (160, 35868), (161, 35874), (163, 35880), (170, 35904), (174, 35931), (175, 35949), (180, 35970), (193, 36003), (208, 36063), (212, 36090), (220, 36129), (223, 36147), (228, 36168), (231, 36177), (239, 36213), (243, 36222),

Gene: KristaRAM_47 Start: 36438, Stop: 37442, Start Num: 24

Candidate Starts for KristaRAM_47:

(Start: 24 @36438 has 70 MA's), (Start: 47 @36606 has 1 MA's), (56, 36627), (Start: 59 @36639 has 1 MA's), (67, 36672), (72, 36687), (75, 36705), (78, 36714), (82, 36750), (98, 36798), (109, 36816), (118, 36828), (125, 36855), (130, 36879), (132, 36891), (134, 36894), (136, 36915), (139, 36936), (140, 36948), (141, 36951), (151, 37035), (160, 37080), (161, 37086), (170, 37116), (174, 37143), (175, 37161), (180, 37182), (193, 37215), (197, 37233), (208, 37275), (212, 37302), (223, 37359), (231, 37389), (239, 37425), (240, 37428),

Gene: Ksquared_34 Start: 27953, Stop: 28819, Start Num: 45

Candidate Starts for Ksquared_34:

(Start: 45 @27953 has 52 MA's), (68, 28034), (74, 28058), (77, 28067), (80, 28094), (83, 28115), (129, 28223), (130, 28238), (143, 28349), (175, 28532), (193, 28586), (219, 28715), (228, 28757), (240, 28805),

Gene: Landor_70 Start: 44512, Stop: 43679, Start Num: 44

Candidate Starts for Landor_70:

(39, 44539), (Start: 44 @44512 has 3 MA's), (48, 44488), (78, 44404), (82, 44365), (140, 44164), (141, 44161), (179, 43957), (211, 43825),

Gene: Langerak_34 Start: 27955, Stop: 28818, Start Num: 45

Candidate Starts for Langerak_34:

(Start: 45 @27955 has 52 MA's), (68, 28036), (74, 28060), (77, 28069), (80, 28096), (83, 28117), (125, 28213), (129, 28222), (130, 28237), (131, 28246), (143, 28348), (175, 28531), (193, 28585), (219, 28714), (228, 28756), (240, 28804),

Gene: LastJedi_41 Start: 31571, Stop: 32380, Start Num: 47

Candidate Starts for LastJedi_41:

(Start: 47 @31571 has 1 MA's), (Start: 58 @31601 has 12 MA's), (69, 31625), (70, 31628), (78, 31664), (Start: 79 @31667 has 1 MA's), (83, 31712), (129, 31820), (130, 31835), (140, 31904), (144, 31952), (171, 32069), (179, 32120), (204, 32216), (225, 32321), (227, 32327), (238, 32369), (240, 32375),

Gene: Latretium_50 Start: 36344, Stop: 37345, Start Num: 24

Candidate Starts for Latretium_50:

(Start: 24 @36344 has 70 MA's), (Start: 47 @36512 has 1 MA's), (56, 36533), (Start: 59 @36545 has 1 MA's), (75, 36611), (78, 36620), (82, 36656), (109, 36722), (113, 36728), (118, 36734), (125, 36761), (132, 36797), (134, 36800), (136, 36821), (139, 36842), (140, 36854), (141, 36857), (151, 36938), (160, 36983), (161, 36989), (163, 36995), (170, 37019), (174, 37046), (175, 37064), (180, 37085), (193, 37118), (197, 37136), (208, 37178), (220, 37244), (223, 37262), (228, 37283), (239, 37328),

Gene: LilMoolah_46 Start: 35122, Stop: 36126, Start Num: 24

Candidate Starts for LilMoolah_46:

(17, 34966), (Start: 24 @35122 has 70 MA's), (Start: 59 @35323 has 1 MA's), (75, 35389), (78, 35398), (82, 35434), (109, 35500), (113, 35506), (118, 35512), (125, 35539), (132, 35575), (134, 35578), (136, 35599), (139, 35620), (140, 35632), (141, 35635), (151, 35719), (160, 35764), (161, 35770), (163, 35776), (170, 35800), (174, 35827), (175, 35845), (180, 35866), (193, 35899), (208, 35959), (212, 35986), (220, 36025), (223, 36043), (228, 36064), (239, 36109), (243, 36118),

Gene: LittleShirley_47 Start: 36153, Stop: 37157, Start Num: 24

Candidate Starts for LittleShirley_47:

(Start: 24 @36153 has 70 MA's), (Start: 47 @36321 has 1 MA's), (56, 36342), (Start: 59 @36354 has 1 MA's), (75, 36420), (78, 36429), (82, 36465), (109, 36531), (125, 36570), (126, 36573), (130, 36594), (134, 36609), (136, 36630), (139, 36651), (140, 36663), (141, 36666), (151, 36750), (160, 36795),

(161, 36801), (170, 36831), (174, 36858), (175, 36876), (180, 36897), (193, 36930), (197, 36948), (208, 36990), (212, 37017), (220, 37056), (223, 37074), (228, 37095), (231, 37104), (239, 37140), (243, 37149),

Gene: LordVader_44 Start: 30174, Stop: 30983, Start Num: 47

Candidate Starts for LordVader_44:

(Start: 47 @30174 has 1 MA's), (Start: 58 @30204 has 12 MA's), (69, 30228), (70, 30231), (78, 30267), (Start: 79 @30270 has 1 MA's), (83, 30315), (129, 30423), (130, 30438), (140, 30507), (144, 30555), (171, 30672), (179, 30723), (204, 30819), (225, 30924), (227, 30930), (238, 30972), (240, 30978),

Gene: MadMen_42 Start: 34172, Stop: 35179, Start Num: 24

Candidate Starts for MadMen_42:

(1, 33677), (2, 33728), (6, 33851), (7, 33857), (9, 33872), (12, 33926), (15, 33998), (16, 34007), (Start: 24 @34172 has 70 MA's), (56, 34364), (Start: 59 @34376 has 1 MA's), (75, 34442), (78, 34451), (82, 34487), (109, 34553), (118, 34565), (125, 34592), (130, 34616), (134, 34631), (136, 34652), (139, 34673), (140, 34685), (141, 34688), (151, 34772), (160, 34817), (161, 34823), (163, 34829), (170, 34853), (174, 34880), (175, 34898), (180, 34919), (193, 34952), (208, 35012), (212, 35039), (220, 35078), (223, 35096), (228, 35117), (231, 35126), (239, 35162), (243, 35171),

Gene: Madavieve_43 Start: 34739, Stop: 35503, Start Num: 61

Candidate Starts for Madavieve_43:

(Start: 61 @34739 has 11 MA's), (69, 34766), (70, 34769), (75, 34796), (78, 34805), (87, 34868), (94, 34880), (116, 34922), (125, 34949), (140, 35042), (145, 35096), (164, 35189), (171, 35210), (174, 35234), (175, 35252), (183, 35273), (185, 35276), (186, 35279), (195, 35303), (205, 35354), (207, 35357), (218, 35417), (226, 35453), (233, 35474),

Gene: Madiba_43 Start: 33464, Stop: 34468, Start Num: 24

Candidate Starts for Madiba_43:

(Start: 24 @33464 has 70 MA's), (56, 33653), (Start: 59 @33665 has 1 MA's), (75, 33731), (78, 33740), (82, 33776), (109, 33842), (118, 33854), (125, 33881), (130, 33905), (134, 33920), (136, 33941), (139, 33962), (140, 33974), (141, 33977), (151, 34061), (160, 34106), (161, 34112), (170, 34142), (174, 34169), (175, 34187), (180, 34208), (193, 34241), (208, 34301), (212, 34328), (220, 34367), (223, 34385), (228, 34406), (231, 34415), (239, 34451), (243, 34460),

Gene: Majeke_34 Start: 27977, Stop: 28843, Start Num: 45

Candidate Starts for Majeke_34:

(Start: 45 @27977 has 52 MA's), (68, 28058), (74, 28082), (77, 28091), (83, 28139), (129, 28247), (130, 28262), (143, 28373), (175, 28556), (193, 28610), (219, 28739), (228, 28781), (240, 28829),

Gene: Malachai_44 Start: 35305, Stop: 36069, Start Num: 64

Candidate Starts for Malachai_44:

(23, 35065), (29, 35119), (33, 35164), (Start: 44 @35230 has 3 MA's), (Start: 64 @35305 has 17 MA's), (70, 35320), (Start: 79 @35359 has 1 MA's), (86, 35416), (120, 35494), (126, 35506), (130, 35527), (140, 35596), (156, 35692), (174, 35782), (217, 35974),

Gene: Malithi_34 Start: 27862, Stop: 28728, Start Num: 45

Candidate Starts for Malithi_34:

(Start: 45 @27862 has 52 MA's), (68, 27943), (74, 27967), (77, 27976), (80, 28003), (83, 28024), (129, 28132), (130, 28147), (143, 28258), (175, 28441), (193, 28495), (228, 28666), (240, 28714),

Gene: Mangethe_34 Start: 27977, Stop: 28843, Start Num: 45

Candidate Starts for Mangethe_34:

(Start: 45 @27977 has 52 MA's), (68, 28058), (74, 28082), (77, 28091), (83, 28139), (129, 28247), (130, 28262), (143, 28373), (175, 28556), (193, 28610), (219, 28739), (228, 28781), (240, 28829),

Gene: Mantra_44 Start: 34639, Stop: 35643, Start Num: 24

Candidate Starts for Mantra_44:

(Start: 24 @34639 has 70 MA's), (56, 34828), (Start: 59 @34840 has 1 MA's), (75, 34906), (78, 34915), (82, 34951), (109, 35017), (118, 35029), (125, 35056), (130, 35080), (134, 35095), (136, 35116), (139, 35137), (140, 35149), (141, 35152), (151, 35236), (160, 35281), (161, 35287), (170, 35317), (174, 35344), (175, 35362), (180, 35383), (193, 35416), (208, 35476), (212, 35503), (220, 35542), (223, 35560), (228, 35581), (231, 35590), (239, 35626), (243, 35635),

Gene: Marker_48 Start: 35024, Stop: 36025, Start Num: 24

Candidate Starts for Marker_48:

(Start: 24 @35024 has 70 MA's), (Start: 47 @35192 has 1 MA's), (56, 35213), (Start: 59 @35225 has 1 MA's), (75, 35291), (78, 35300), (82, 35336), (109, 35402), (125, 35441), (126, 35444), (132, 35477), (134, 35480), (136, 35501), (139, 35522), (140, 35534), (141, 35537), (151, 35618), (160, 35663), (161, 35669), (170, 35699), (174, 35726), (175, 35744), (177, 35747), (180, 35765), (193, 35798), (197, 35816), (208, 35858), (212, 35885), (220, 35924), (223, 35942), (228, 35963), (231, 35972), (239, 36008), (243, 36017),

Gene: Megiddo_34 Start: 28196, Stop: 29059, Start Num: 45

Candidate Starts for Megiddo_34:

(Start: 45 @28196 has 52 MA's), (68, 28277), (74, 28301), (77, 28310), (83, 28358), (91, 28382), (129, 28463), (130, 28478), (143, 28589), (175, 28772), (193, 28826), (219, 28955), (228, 28997), (240, 29045),

Gene: Mellie_43 Start: 33024, Stop: 33788, Start Num: 64

Candidate Starts for Mellie_43:

(20, 32739), (29, 32838), (Start: 44 @32949 has 3 MA's), (Start: 64 @33024 has 17 MA's), (83, 33123), (129, 33231), (130, 33246), (140, 33315), (156, 33411), (174, 33501), (175, 33519), (217, 33693),

Gene: Min1_10 Start: 3743, Stop: 4495, Start Num: 70

Candidate Starts for Min1_10:

(54, 3686), (65, 3734), (70, 3743), (71, 3749), (75, 3773), (80, 3809), (102, 3881), (128, 3935), (155, 4118), (177, 4235), (208, 4346), (221, 4418), (234, 4466),

Gene: MissRona_47 Start: 35196, Stop: 35957, Start Num: 64

Candidate Starts for MissRona_47:

(Start: 64 @35196 has 17 MA's), (70, 35211), (88, 35313), (104, 35346), (125, 35391), (129, 35400), (130, 35415), (140, 35484), (156, 35580), (174, 35670), (217, 35862),

Gene: MisterCuddles_47 Start: 35732, Stop: 36736, Start Num: 24

Candidate Starts for MisterCuddles_47:

(Start: 24 @35732 has 70 MA's), (56, 35921), (Start: 59 @35933 has 1 MA's), (75, 35999), (78, 36008), (82, 36044), (109, 36110), (118, 36122), (125, 36149), (130, 36173), (134, 36188), (136, 36209), (139, 36230), (140, 36242), (141, 36245), (151, 36329), (160, 36374), (161, 36380), (170, 36410), (174, 36437), (175, 36455), (180, 36476), (193, 36509), (208, 36569), (212, 36596), (220, 36635), (223, 36653), (228, 36674), (231, 36683), (239, 36719), (243, 36728),

Gene: MortyNRick_52 Start: 37928, Stop: 38608, Start Num: 79

Candidate Starts for MortyNRick_52:

(Start: 61 @37859 has 11 MA's), (78, 37925), (Start: 79 @37928 has 1 MA's), (83, 37973), (106, 38024), (118, 38042), (130, 38093), (148, 38231), (166, 38309), (199, 38453), (222, 38546),

Gene: Murp_47 Start: 36766, Stop: 37527, Start Num: 64

Candidate Starts for Murp_47:

(Start: 44 @36691 has 3 MA's), (Start: 64 @36766 has 17 MA's), (70, 36781), (87, 36880), (94, 36892), (118, 36934), (125, 36961), (139, 37042), (140, 37054), (156, 37150), (174, 37240), (193, 37306), (217, 37432),

Gene: Mwanjiwa_53 Start: 36107, Stop: 37108, Start Num: 24

Candidate Starts for Mwanjiwa_53:

(Start: 24 @36107 has 70 MA's), (Start: 47 @36275 has 1 MA's), (56, 36296), (Start: 59 @36308 has 1 MA's), (75, 36374), (78, 36383), (82, 36419), (109, 36485), (113, 36491), (118, 36497), (125, 36524), (132, 36560), (134, 36563), (136, 36584), (139, 36605), (140, 36617), (141, 36620), (151, 36701), (160, 36746), (161, 36752), (170, 36782), (174, 36809), (175, 36827), (180, 36848), (193, 36881), (197, 36899), (208, 36941), (220, 37007), (223, 37025), (228, 37046), (239, 37091),

Gene: Nazo_38 Start: 30066, Stop: 30869, Start Num: 45

Candidate Starts for Nazo_38:

(Start: 45 @30066 has 52 MA's), (Start: 79 @30168 has 1 MA's), (82, 30204), (140, 30396), (151, 30492), (171, 30576), (182, 30642), (184, 30645), (190, 30669), (202, 30723), (211, 30762), (215, 30783), (216, 30786), (230, 30855),

Gene: Necropolis_34 Start: 27936, Stop: 28802, Start Num: 45

Candidate Starts for Necropolis_34:

(Start: 45 @27936 has 52 MA's), (68, 28017), (74, 28041), (77, 28050), (83, 28098), (129, 28206), (130, 28221), (143, 28332), (175, 28515), (193, 28569), (219, 28698), (228, 28740), (240, 28788),

Gene: Neeharika16_71 Start: 41586, Stop: 40738, Start Num: 43

Candidate Starts for Neeharika16_71:

(Start: 43 @41586 has 15 MA's), (Start: 44 @41577 has 3 MA's), (Start: 50 @41553 has 1 MA's), (78, 41463), (82, 41424), (89, 41394), (99, 41370), (108, 41352), (110, 41349), (128, 41310), (135, 41277), (140, 41223), (153, 41136), (154, 41133), (179, 41013), (191, 40974), (211, 40881), (229, 40800),

Gene: Newrala_72 Start: 42117, Stop: 41278, Start Num: 43

Candidate Starts for Newrala_72:

(Start: 43 @42117 has 15 MA's), (Start: 44 @42108 has 3 MA's), (Start: 50 @42084 has 1 MA's), (78, 41994), (82, 41955), (83, 41946), (96, 41913), (110, 41883), (128, 41850), (140, 41763), (153, 41676), (154, 41673), (179, 41553), (191, 41514), (211, 41421), (229, 41340),

Gene: Nivrat_45 Start: 34995, Stop: 35999, Start Num: 24

Candidate Starts for Nivrat_45:

(17, 34839), (Start: 24 @34995 has 70 MA's), (Start: 59 @35196 has 1 MA's), (75, 35262), (78, 35271), (82, 35307), (109, 35373), (113, 35379), (118, 35385), (125, 35412), (132, 35448), (134, 35451), (136, 35472), (139, 35493), (140, 35505), (141, 35508), (151, 35592), (160, 35637), (161, 35643), (163, 35649), (170, 35673), (174, 35700), (175, 35718), (180, 35739), (193, 35772), (208, 35832), (212, 35859), (220, 35898), (223, 35916), (228, 35937), (239, 35982), (243, 35991),

Gene: Odin_74 Start: 43407, Stop: 42565, Start Num: 53

Candidate Starts for Odin_74:

(Start: 53 @43407 has 3 MA's), (82, 43275), (93, 43236), (99, 43221), (112, 43203), (122, 43167), (128, 43161), (135, 43128), (139, 43086), (153, 42987), (154, 42984), (162, 42927), (176, 42852), (194, 42792), (196, 42783), (237, 42588),

Gene: Ogopogo_48 Start: 34646, Stop: 35650, Start Num: 24

Candidate Starts for Ogotogo_48:

(Start: 24 @34646 has 70 MA's), (Start: 47 @34814 has 1 MA's), (56, 34835), (Start: 59 @34847 has 1 MA's), (75, 34913), (78, 34922), (82, 34958), (109, 35024), (125, 35063), (126, 35066), (130, 35087), (134, 35102), (136, 35123), (139, 35144), (140, 35156), (141, 35159), (151, 35243), (161, 35294), (163, 35300), (174, 35351), (175, 35369), (180, 35390), (193, 35423), (197, 35441), (208, 35483), (212, 35510), (223, 35567), (231, 35597), (239, 35633), (240, 35636),

Gene: Okabe_43 Start: 30988, Stop: 31992, Start Num: 24

Candidate Starts for Okabe_43:

(Start: 24 @30988 has 70 MA's), (Start: 47 @31156 has 1 MA's), (56, 31177), (Start: 59 @31189 has 1 MA's), (67, 31222), (72, 31237), (75, 31255), (78, 31264), (82, 31300), (98, 31348), (109, 31366), (118, 31378), (125, 31405), (130, 31429), (132, 31441), (134, 31444), (136, 31465), (139, 31486), (140, 31498), (141, 31501), (147, 31573), (151, 31585), (161, 31636), (174, 31693), (175, 31711), (180, 31732), (193, 31765), (197, 31783), (208, 31825), (220, 31891), (223, 31909), (228, 31930), (239, 31975), (243, 31984),

Gene: Oregano_48 Start: 33939, Stop: 34688, Start Num: 61

Candidate Starts for Oregano_48:

(31, 33786), (46, 33894), (Start: 61 @33939 has 11 MA's), (70, 33969), (75, 33996), (78, 34005), (118, 34122), (125, 34149), (130, 34173), (135, 34188), (138, 34218), (147, 34308), (148, 34311), (199, 34533),

Gene: P1201_08 Start: 2597, Stop: 3520, Start Num: 35

Candidate Starts for P1201_08:

(35, 2597), (36, 2600), (Start: 44 @2642 has 3 MA's), (Start: 58 @2690 has 12 MA's), (78, 2765), (82, 2804), (84, 2816), (115, 2882), (125, 2924), (131, 2957), (140, 3017), (167, 3185), (185, 3263), (215, 3398), (232, 3473), (239, 3509), (240, 3512),

Gene: PMC_42 Start: 34542, Stop: 35546, Start Num: 24

Candidate Starts for PMC_42:

(Start: 24 @34542 has 70 MA's), (56, 34731), (Start: 59 @34743 has 1 MA's), (75, 34809), (78, 34818), (82, 34854), (109, 34920), (118, 34932), (125, 34959), (130, 34983), (134, 34998), (136, 35019), (139, 35040), (140, 35052), (141, 35055), (151, 35139), (160, 35184), (161, 35190), (170, 35220), (174, 35247), (175, 35265), (180, 35286), (193, 35319), (208, 35379), (220, 35445), (223, 35463), (228, 35484), (231, 35493), (239, 35529), (243, 35538),

Gene: PeanutPie_34 Start: 27935, Stop: 28798, Start Num: 45

Candidate Starts for PeanutPie_34:

(Start: 45 @27935 has 52 MA's), (68, 28016), (74, 28040), (77, 28049), (83, 28097), (125, 28193), (129, 28202), (130, 28217), (143, 28328), (175, 28511), (193, 28565), (219, 28694), (228, 28736), (240, 28784),

Gene: Pepperoni_38 Start: 29759, Stop: 30508, Start Num: 61

Candidate Starts for Pepperoni_38:

(Start: 61 @29759 has 11 MA's), (69, 29786), (70, 29789), (Start: 79 @29828 has 1 MA's), (83, 29873), (106, 29924), (118, 29942), (130, 29993), (148, 30131), (159, 30182), (199, 30353),

Gene: Ph8s_77 Start: 43456, Stop: 42623, Start Num: 53

Candidate Starts for Ph8s_77:

(Start: 44 @43483 has 3 MA's), (Start: 53 @43456 has 3 MA's), (Start: 66 @43405 has 2 MA's), (81, 43330), (82, 43324), (97, 43285), (130, 43195), (140, 43126), (187, 42886), (189, 42877), (213, 42772), (244, 42646), (245, 42643), (246, 42631),

Gene: Phaded_67 Start: 44471, Stop: 43656, Start Num: 44

Candidate Starts for Phaded_67:

(39, 44498), (Start: 44 @44471 has 3 MA's), (51, 44438), (78, 44354), (82, 44315), (84, 44303), (111, 44246), (121, 44225), (142, 44093), (211, 43802),

Gene: Phalconet_46 Start: 34873, Stop: 35877, Start Num: 24

Candidate Starts for Phalconet_46:

(Start: 24 @34873 has 70 MA's), (Start: 47 @35041 has 1 MA's), (56, 35062), (Start: 59 @35074 has 1 MA's), (67, 35107), (72, 35122), (75, 35140), (78, 35149), (82, 35185), (98, 35233), (109, 35251), (118, 35263), (125, 35290), (130, 35314), (132, 35326), (134, 35329), (136, 35350), (139, 35371), (140, 35383), (141, 35386), (147, 35458), (151, 35470), (161, 35521), (174, 35578), (175, 35596), (180, 35617), (193, 35650), (197, 35668), (208, 35710), (220, 35776), (223, 35794), (228, 35815), (239, 35860), (243, 35869),

Gene: Phalm_34 Start: 28196, Stop: 29059, Start Num: 45

Candidate Starts for Phalm_34:

(Start: 45 @28196 has 52 MA's), (68, 28277), (74, 28301), (77, 28310), (83, 28358), (91, 28382), (129, 28463), (130, 28478), (143, 28589), (175, 28772), (193, 28826), (219, 28955), (228, 28997), (240, 29045),

Gene: Phasih_45 Start: 35085, Stop: 36089, Start Num: 24

Candidate Starts for Phasih_45:

(17, 34929), (Start: 24 @35085 has 70 MA's), (Start: 59 @35286 has 1 MA's), (75, 35352), (78, 35361), (82, 35397), (109, 35463), (118, 35475), (125, 35502), (130, 35526), (134, 35541), (136, 35562), (139, 35583), (140, 35595), (141, 35598), (151, 35682), (160, 35727), (161, 35733), (170, 35763), (174, 35790), (175, 35808), (180, 35829), (193, 35862), (208, 35922), (220, 35988), (223, 36006), (228, 36027), (231, 36036), (239, 36072), (243, 36081),

Gene: Phegasus_34 Start: 27944, Stop: 28810, Start Num: 45

Candidate Starts for Phegasus_34:

(Start: 45 @27944 has 52 MA's), (68, 28025), (74, 28049), (77, 28058), (83, 28106), (129, 28214), (130, 28229), (143, 28340), (175, 28523), (193, 28577), (219, 28706), (228, 28748), (240, 28796),

Gene: PhesterPhotato_49 Start: 35828, Stop: 36832, Start Num: 24

Candidate Starts for PhesterPhotato_49:

(Start: 24 @35828 has 70 MA's), (Start: 47 @35996 has 1 MA's), (56, 36017), (Start: 59 @36029 has 1 MA's), (67, 36062), (72, 36077), (75, 36095), (78, 36104), (82, 36140), (98, 36188), (109, 36206), (118, 36218), (125, 36245), (130, 36269), (132, 36281), (134, 36284), (136, 36305), (139, 36326), (140, 36338), (141, 36341), (147, 36413), (151, 36425), (161, 36476), (174, 36533), (175, 36551), (180, 36572), (193, 36605), (197, 36623), (208, 36665), (220, 36731), (223, 36749), (228, 36770), (239, 36815), (243, 36824),

Gene: Phineas_34 Start: 28307, Stop: 29173, Start Num: 45

Candidate Starts for Phineas_34:

(Start: 45 @28307 has 52 MA's), (68, 28388), (74, 28412), (77, 28421), (83, 28469), (129, 28577), (130, 28592), (143, 28703), (175, 28886), (193, 28940), (219, 29069), (228, 29111), (240, 29159),

Gene: Phistory_58 Start: 36964, Stop: 37761, Start Num: 60

Candidate Starts for Phistory_58:

(Start: 60 @36964 has 1 MA's), (70, 36991), (83, 37075), (94, 37111), (100, 37132), (103, 37138), (123, 37192), (130, 37219), (140, 37288), (146, 37357), (156, 37390), (210, 37633), (217, 37675), (229, 37720),

Gene: PhorbesPhlower_43 Start: 29950, Stop: 30699, Start Num: 61

Candidate Starts for PhorbesPhlower_43:

(Start: 61 @29950 has 11 MA's), (69, 29977), (70, 29980), (Start: 79 @30019 has 1 MA's), (83, 30064), (106, 30115), (118, 30133), (130, 30184), (148, 30322), (159, 30373), (199, 30544),

Gene: PhriskyACE_44 Start: 34290, Stop: 35057, Start Num: 61

Candidate Starts for PhriskyACE_44:

(Start: 61 @34290 has 11 MA's), (69, 34317), (70, 34320), (75, 34347), (83, 34404), (88, 34422), (129, 34512), (130, 34527), (133, 34539), (145, 34650), (171, 34764), (174, 34788), (175, 34806), (183, 34827), (185, 34830), (186, 34833), (195, 34857), (205, 34908), (207, 34911),

Gene: Pippy_45 Start: 33164, Stop: 33943, Start Num: 58

Candidate Starts for Pippy_45:

(Start: 47 @33134 has 1 MA's), (Start: 58 @33164 has 12 MA's), (69, 33188), (70, 33191), (78, 33227), (Start: 79 @33230 has 1 MA's), (83, 33275), (129, 33383), (130, 33398), (140, 33467), (144, 33515), (171, 33632), (179, 33683), (204, 33779), (225, 33884), (227, 33890), (238, 33932), (240, 33938),

Gene: Pmask_71 Start: 42122, Stop: 41274, Start Num: 43

Candidate Starts for Pmask_71:

(Start: 43 @42122 has 15 MA's), (Start: 44 @42113 has 3 MA's), (Start: 50 @42089 has 1 MA's), (78, 41999), (82, 41960), (89, 41930), (99, 41906), (108, 41888), (110, 41885), (128, 41846), (135, 41813), (140, 41759), (153, 41672), (154, 41669), (179, 41549), (191, 41510), (211, 41417), (229, 41336),

Gene: Poenanya_47 Start: 36071, Stop: 37075, Start Num: 24

Candidate Starts for Poenanya_47:

(Start: 24 @36071 has 70 MA's), (56, 36260), (Start: 59 @36272 has 1 MA's), (75, 36338), (78, 36347), (82, 36383), (109, 36449), (118, 36461), (125, 36488), (130, 36512), (134, 36527), (136, 36548), (139, 36569), (140, 36581), (141, 36584), (151, 36668), (160, 36713), (161, 36719), (170, 36749), (174, 36776), (175, 36794), (180, 36815), (193, 36848), (208, 36908), (212, 36935), (220, 36974), (223, 36992), (228, 37013), (231, 37022), (239, 37058), (243, 37067),

Gene: Polkaroo_34 Start: 27953, Stop: 28816, Start Num: 45

Candidate Starts for Polkaroo_34:

(Start: 45 @27953 has 52 MA's), (68, 28034), (74, 28058), (77, 28067), (83, 28115), (91, 28139), (129, 28220), (130, 28235), (143, 28346), (175, 28529), (193, 28583), (219, 28712), (228, 28754), (240, 28802),

Gene: Pollywog_46 Start: 35249, Stop: 36253, Start Num: 24

Candidate Starts for Pollywog_46:

(Start: 24 @35249 has 70 MA's), (56, 35438), (Start: 59 @35450 has 1 MA's), (75, 35516), (78, 35525), (82, 35561), (109, 35627), (118, 35639), (125, 35666), (130, 35690), (134, 35705), (136, 35726), (139, 35747), (140, 35759), (141, 35762), (151, 35846), (160, 35891), (161, 35897), (170, 35927), (174, 35954), (175, 35972), (180, 35993), (193, 36026), (208, 36086), (220, 36152), (223, 36170), (228, 36191), (231, 36200), (239, 36236), (243, 36245),

Gene: Polyphemus_74 Start: 42500, Stop: 41664, Start Num: 43

Candidate Starts for Polyphemus_74:

(Start: 43 @42500 has 15 MA's), (Start: 44 @42491 has 3 MA's), (Start: 50 @42467 has 1 MA's), (78, 42377), (82, 42338), (84, 42326), (137, 42176), (153, 42062), (154, 42059), (179, 41939), (191, 41900), (211, 41807), (229, 41726),

Gene: PopTart_43 Start: 34554, Stop: 35558, Start Num: 24

Candidate Starts for PopTart_43:

(Start: 24 @34554 has 70 MA's), (Start: 47 @34722 has 1 MA's), (56, 34743), (Start: 59 @34755 has 1 MA's), (67, 34788), (72, 34803), (75, 34821), (78, 34830), (82, 34866), (98, 34914), (109, 34932), (118, 34944), (125, 34971), (130, 34995), (132, 35007), (134, 35010), (136, 35031), (139, 35052), (140, 35064), (141, 35067), (147, 35139), (151, 35151), (160, 35196), (161, 35202), (170, 35232), (174, 35259), (175, 35277), (177, 35280), (180, 35298), (193, 35331), (197, 35349), (208, 35391), (220, 35457), (223, 35475), (228, 35496), (239, 35541),

Gene: Priamo_74 Start: 41728, Stop: 41129, Start Num: 119

Candidate Starts for Priamo_74:

(Start: 119 @41728 has 2 MA's), (128, 41701), (135, 41668), (140, 41614), (153, 41527), (154, 41524), (179, 41404), (191, 41365), (211, 41272), (229, 41191),

Gene: Pukovnik_68 Start: 44139, Stop: 43324, Start Num: 43

Candidate Starts for Pukovnik_68:

(Start: 43 @44139 has 15 MA's), (Start: 44 @44130 has 3 MA's), (49, 44106), (72, 44049), (73, 44046), (76, 44025), (78, 44022), (82, 43983), (83, 43974), (92, 43947), (95, 43944), (127, 43878), (129, 43875), (152, 43725), (172, 43641), (174, 43626), (179, 43599), (211, 43467),

Gene: Purky_41 Start: 30689, Stop: 31480, Start Num: 45

Candidate Starts for Purky_41:

(Start: 45 @30689 has 52 MA's), (Start: 79 @30788 has 1 MA's), (82, 30824), (125, 30923), (140, 31016), (171, 31196), (175, 31238), (182, 31262), (184, 31265), (190, 31289), (200, 31340), (202, 31343), (211, 31382), (215, 31403), (224, 31454),

Gene: Pygmy_36 Start: 29778, Stop: 30644, Start Num: 45

Candidate Starts for Pygmy_36:

(Start: 45 @29778 has 52 MA's), (68, 29859), (74, 29883), (77, 29892), (80, 29919), (83, 29940), (129, 30048), (130, 30063), (143, 30174), (175, 30357), (193, 30411), (228, 30582), (240, 30630),

Gene: QueenHazel_32 Start: 27811, Stop: 28680, Start Num: 45

Candidate Starts for QueenHazel_32:

(Start: 45 @27811 has 52 MA's), (74, 27919), (77, 27928), (83, 27976), (129, 28084), (130, 28099), (143, 28210), (175, 28393), (193, 28447), (219, 28576), (228, 28618), (240, 28666),

Gene: Quico_55 Start: 35977, Stop: 36771, Start Num: 58

Candidate Starts for Quico_55:

(Start: 58 @35977 has 12 MA's), (70, 36019), (78, 36055), (Start: 79 @36058 has 1 MA's), (82, 36094), (107, 36154), (129, 36211), (130, 36226), (140, 36295), (144, 36343), (171, 36460), (179, 36511), (204, 36607), (225, 36712), (227, 36718), (238, 36760), (240, 36766),

Gene: RedBird_44 Start: 34882, Stop: 35886, Start Num: 24

Candidate Starts for RedBird_44:

(Start: 24 @34882 has 70 MA's), (56, 35071), (Start: 59 @35083 has 1 MA's), (75, 35149), (78, 35158), (82, 35194), (109, 35260), (118, 35272), (125, 35299), (130, 35323), (134, 35338), (136, 35359), (139, 35380), (140, 35392), (141, 35395), (151, 35479), (160, 35524), (161, 35530), (170, 35560), (174, 35587), (175, 35605), (180, 35626), (193, 35659), (208, 35719), (212, 35746), (220, 35785), (223, 35803), (228, 35824), (231, 35833), (239, 35869), (243, 35878),

Gene: Rockne_45 Start: 34542, Stop: 35546, Start Num: 24

Candidate Starts for Rockne_45:

(Start: 24 @34542 has 70 MA's), (56, 34731), (Start: 59 @34743 has 1 MA's), (75, 34809), (78, 34818), (82, 34854), (109, 34920), (118, 34932), (125, 34959), (130, 34983), (134, 34998), (136, 35019), (139, 35040), (140, 35052), (141, 35055), (151, 35139), (160, 35184), (161, 35190), (170, 35220), (174,

35247), (175, 35265), (180, 35286), (193, 35319), (208, 35379), (220, 35445), (223, 35463), (228, 35484), (231, 35493), (239, 35529), (243, 35538),

Gene: RockyHorror_48 Start: 34943, Stop: 35947, Start Num: 24

Candidate Starts for RockyHorror_48:

(17, 34787), (Start: 24 @34943 has 70 MA's), (Start: 59 @35144 has 1 MA's), (75, 35210), (78, 35219), (82, 35255), (109, 35321), (118, 35333), (125, 35360), (130, 35384), (134, 35399), (136, 35420), (139, 35441), (140, 35453), (141, 35456), (151, 35540), (160, 35585), (161, 35591), (170, 35621), (174, 35648), (175, 35666), (180, 35687), (193, 35720), (208, 35780), (220, 35846), (223, 35864), (228, 35885), (231, 35894), (239, 35930), (243, 35939),

Gene: Ruby_46 Start: 35733, Stop: 36737, Start Num: 24

Candidate Starts for Ruby_46:

(Start: 24 @35733 has 70 MA's), (56, 35922), (Start: 59 @35934 has 1 MA's), (75, 36000), (78, 36009), (82, 36045), (109, 36111), (118, 36123), (125, 36150), (130, 36174), (134, 36189), (136, 36210), (139, 36231), (140, 36243), (141, 36246), (151, 36330), (160, 36375), (161, 36381), (170, 36411), (174, 36438), (175, 36456), (180, 36477), (193, 36510), (208, 36570), (212, 36597), (220, 36636), (223, 36654), (228, 36675), (231, 36684), (239, 36720), (243, 36729),

Gene: Samba_44 Start: 35414, Stop: 36175, Start Num: 64

Candidate Starts for Samba_44:

(29, 35228), (Start: 44 @35339 has 3 MA's), (Start: 64 @35414 has 17 MA's), (70, 35429), (80, 35492), (104, 35564), (125, 35609), (129, 35618), (130, 35633), (140, 35702), (156, 35798), (174, 35888), (217, 36080),

Gene: SassyB_43 Start: 34554, Stop: 35558, Start Num: 24

Candidate Starts for SassyB_43:

(Start: 24 @34554 has 70 MA's), (Start: 47 @34722 has 1 MA's), (56, 34743), (Start: 59 @34755 has 1 MA's), (67, 34788), (72, 34803), (75, 34821), (78, 34830), (82, 34866), (98, 34914), (109, 34932), (118, 34944), (125, 34971), (130, 34995), (132, 35007), (134, 35010), (136, 35031), (139, 35052), (140, 35064), (141, 35067), (147, 35139), (151, 35151), (160, 35196), (161, 35202), (170, 35232), (174, 35259), (175, 35277), (177, 35280), (180, 35298), (193, 35331), (197, 35349), (208, 35391), (220, 35457), (223, 35475), (228, 35496), (239, 35541),

Gene: Seagreen_48 Start: 35285, Stop: 36286, Start Num: 24

Candidate Starts for Seagreen_48:

(Start: 24 @35285 has 70 MA's), (Start: 47 @35453 has 1 MA's), (56, 35474), (Start: 59 @35486 has 1 MA's), (67, 35519), (75, 35552), (78, 35561), (82, 35597), (109, 35663), (125, 35702), (126, 35705), (132, 35738), (134, 35741), (136, 35762), (139, 35783), (140, 35795), (141, 35798), (151, 35879), (160, 35924), (161, 35930), (170, 35960), (174, 35987), (175, 36005), (177, 36008), (180, 36026), (193, 36059), (197, 36077), (208, 36119), (220, 36185), (223, 36203), (228, 36224), (239, 36269),

Gene: Shipwreck_36 Start: 29753, Stop: 30619, Start Num: 45

Candidate Starts for Shipwreck_36:

(Start: 45 @29753 has 52 MA's), (68, 29834), (74, 29858), (77, 29867), (80, 29894), (83, 29915), (129, 30023), (130, 30038), (143, 30149), (175, 30332), (193, 30386), (228, 30557), (240, 30605),

Gene: ShroomBoi_47 Start: 35208, Stop: 36212, Start Num: 24

Candidate Starts for ShroomBoi_47:

(Start: 24 @35208 has 70 MA's), (Start: 47 @35376 has 1 MA's), (56, 35397), (Start: 59 @35409 has 1 MA's), (67, 35442), (72, 35457), (75, 35475), (78, 35484), (82, 35520), (98, 35568), (109, 35586), (118, 35598), (125, 35625), (130, 35649), (132, 35661), (134, 35664), (136, 35685), (139, 35706), (140, 35718), (141, 35721), (151, 35805), (160, 35850), (161, 35856), (170, 35886), (174, 35913), (175,

35931), (180, 35952), (193, 35985), (208, 36045), (223, 36129), (228, 36150), (231, 36159), (239, 36195), (243, 36204),

Gene: SiSi_47 Start: 35103, Stop: 36107, Start Num: 24

Candidate Starts for SiSi_47:

(Start: 24 @35103 has 70 MA's), (56, 35292), (Start: 59 @35304 has 1 MA's), (75, 35370), (78, 35379), (82, 35415), (109, 35481), (118, 35493), (125, 35520), (130, 35544), (134, 35559), (136, 35580), (139, 35601), (140, 35613), (141, 35616), (151, 35700), (160, 35745), (161, 35751), (170, 35781), (174, 35808), (175, 35826), (180, 35847), (193, 35880), (208, 35940), (212, 35967), (220, 36006), (223, 36024), (228, 36045), (231, 36054), (239, 36090), (243, 36099),

Gene: SimranZ1_47 Start: 34553, Stop: 35554, Start Num: 24

Candidate Starts for SimranZ1_47:

(Start: 24 @34553 has 70 MA's), (56, 34742), (Start: 59 @34754 has 1 MA's), (75, 34820), (78, 34829), (82, 34865), (109, 34931), (118, 34943), (125, 34970), (130, 34994), (134, 35009), (136, 35030), (139, 35051), (140, 35063), (141, 35066), (151, 35147), (160, 35192), (161, 35198), (163, 35204), (170, 35228), (174, 35255), (180, 35294), (193, 35327), (197, 35345), (208, 35387), (212, 35414), (220, 35453), (223, 35471), (228, 35492), (231, 35501), (239, 35537), (243, 35546),

Gene: Slim_48 Start: 36252, Stop: 37256, Start Num: 24

Candidate Starts for Slim_48:

(Start: 24 @36252 has 70 MA's), (56, 36441), (Start: 59 @36453 has 1 MA's), (75, 36519), (78, 36528), (82, 36564), (109, 36630), (118, 36642), (125, 36669), (130, 36693), (134, 36708), (136, 36729), (139, 36750), (140, 36762), (141, 36765), (151, 36849), (160, 36894), (161, 36900), (170, 36930), (174, 36957), (175, 36975), (180, 36996), (193, 37029), (197, 37047), (208, 37089), (212, 37116), (220, 37155), (223, 37173), (228, 37194), (231, 37203), (239, 37239), (243, 37248),

Gene: Soilmate_51 Start: 38490, Stop: 39251, Start Num: 64

Candidate Starts for Soilmate_51:

(Start: 44 @38415 has 3 MA's), (Start: 64 @38490 has 17 MA's), (70, 38505), (78, 38541), (87, 38604), (94, 38616), (118, 38658), (125, 38685), (140, 38778), (156, 38874), (174, 38964), (217, 39156),

Gene: Sonah_34 Start: 27925, Stop: 28791, Start Num: 45

Candidate Starts for Sonah_34:

(Start: 45 @27925 has 52 MA's), (68, 28006), (74, 28030), (77, 28039), (80, 28066), (83, 28087), (129, 28195), (130, 28210), (143, 28321), (175, 28504), (193, 28558), (219, 28687), (228, 28729), (240, 28777),

Gene: Squirty_40 Start: 32337, Stop: 33116, Start Num: 58

Candidate Starts for Squirty_40:

(Start: 47 @32307 has 1 MA's), (Start: 58 @32337 has 12 MA's), (69, 32361), (70, 32364), (78, 32400), (Start: 79 @32403 has 1 MA's), (83, 32448), (129, 32556), (130, 32571), (140, 32640), (144, 32688), (171, 32805), (179, 32856), (204, 32952), (225, 33057), (227, 33063), (238, 33105), (240, 33111),

Gene: Stap_46 Start: 34844, Stop: 35848, Start Num: 24

Candidate Starts for Stap_46:

(Start: 24 @34844 has 70 MA's), (56, 35033), (Start: 59 @35045 has 1 MA's), (75, 35111), (78, 35120), (82, 35156), (109, 35222), (118, 35234), (125, 35261), (130, 35285), (134, 35300), (136, 35321), (139, 35342), (140, 35354), (141, 35357), (151, 35441), (160, 35486), (161, 35492), (170, 35522), (174, 35549), (175, 35567), (180, 35588), (193, 35621), (208, 35681), (212, 35708), (220, 35747), (223, 35765), (228, 35786), (231, 35795), (239, 35831), (243, 35840),

Gene: Starcevich_47 Start: 35737, Stop: 36741, Start Num: 24

Candidate Starts for Starcevich_47:

(Start: 24 @35737 has 70 MA's), (56, 35926), (Start: 59 @35938 has 1 MA's), (75, 36004), (78, 36013), (82, 36049), (109, 36115), (118, 36127), (125, 36154), (130, 36178), (134, 36193), (136, 36214), (139, 36235), (140, 36247), (141, 36250), (151, 36334), (160, 36379), (161, 36385), (170, 36415), (174, 36442), (175, 36460), (180, 36481), (193, 36514), (208, 36574), (212, 36601), (220, 36640), (223, 36658), (228, 36679), (231, 36688), (239, 36724), (243, 36733),

Gene: StevieRay_34 Start: 27895, Stop: 28758, Start Num: 45

Candidate Starts for StevieRay_34:

(Start: 45 @27895 has 52 MA's), (74, 28000), (77, 28009), (83, 28057), (91, 28081), (129, 28162), (130, 28177), (143, 28288), (175, 28471), (193, 28525), (219, 28654), (228, 28696), (240, 28744),

Gene: StressBall_34 Start: 28196, Stop: 29059, Start Num: 45

Candidate Starts for StressBall_34:

(Start: 45 @28196 has 52 MA's), (68, 28277), (74, 28301), (77, 28310), (83, 28358), (91, 28382), (129, 28463), (130, 28478), (143, 28589), (175, 28772), (193, 28826), (219, 28955), (228, 28997), (240, 29045),

Gene: SuperAwesome_72 Start: 42164, Stop: 41316, Start Num: 43

Candidate Starts for SuperAwesome_72:

(Start: 43 @42164 has 15 MA's), (Start: 44 @42155 has 3 MA's), (Start: 50 @42131 has 1 MA's), (78, 42041), (82, 42002), (89, 41972), (99, 41948), (108, 41930), (110, 41927), (128, 41888), (135, 41855), (140, 41801), (153, 41714), (154, 41711), (179, 41591), (191, 41552), (211, 41459), (229, 41378),

Gene: SuperCallie99_69 Start: 42006, Stop: 41158, Start Num: 43

Candidate Starts for SuperCallie99_69:

(Start: 43 @42006 has 15 MA's), (Start: 44 @41997 has 3 MA's), (Start: 50 @41973 has 1 MA's), (78, 41883), (82, 41844), (89, 41814), (99, 41790), (108, 41772), (110, 41769), (128, 41730), (135, 41697), (140, 41643), (153, 41556), (154, 41553), (179, 41433), (191, 41394), (211, 41301), (229, 41220),

Gene: SuperGrey_48 Start: 36177, Stop: 37181, Start Num: 24

Candidate Starts for SuperGrey_48:

(Start: 24 @36177 has 70 MA's), (Start: 47 @36345 has 1 MA's), (56, 36366), (Start: 59 @36378 has 1 MA's), (67, 36411), (72, 36426), (75, 36444), (78, 36453), (82, 36489), (98, 36537), (109, 36555), (118, 36567), (125, 36594), (130, 36618), (132, 36630), (134, 36633), (136, 36654), (139, 36675), (140, 36687), (141, 36690), (147, 36762), (151, 36774), (161, 36825), (163, 36831), (174, 36882), (175, 36900), (180, 36921), (193, 36954), (197, 36972), (208, 37014), (212, 37041), (223, 37098), (231, 37128), (239, 37164), (240, 37167),

Gene: Superchunk_75 Start: 43021, Stop: 42170, Start Num: 53

Candidate Starts for Superchunk_75:

(Start: 44 @43054 has 3 MA's), (Start: 53 @43021 has 3 MA's), (Start: 66 @42970 has 2 MA's), (76, 42931), (82, 42889), (140, 42673), (174, 42493), (187, 42433), (189, 42424), (213, 42319),

Gene: Techage_34 Start: 27962, Stop: 28828, Start Num: 45

Candidate Starts for Techage_34:

(Start: 45 @27962 has 52 MA's), (68, 28043), (74, 28067), (77, 28076), (83, 28124), (129, 28232), (130, 28247), (131, 28256), (143, 28358), (175, 28541), (193, 28595), (219, 28724), (228, 28766), (240, 28814),

Gene: Thespis_34 Start: 27932, Stop: 28798, Start Num: 45

Candidate Starts for Thespis_34:

(Start: 45 @27932 has 52 MA's), (68, 28013), (74, 28037), (77, 28046), (80, 28073), (83, 28094), (129, 28202), (130, 28217), (143, 28328), (175, 28511), (193, 28565), (219, 28694), (228, 28736), (240, 28784),

Gene: Topiatin_52 Start: 36612, Stop: 37616, Start Num: 24

Candidate Starts for Topiatin_52:

(Start: 24 @36612 has 70 MA's), (56, 36801), (Start: 59 @36813 has 1 MA's), (75, 36879), (78, 36888), (82, 36924), (109, 36990), (118, 37002), (125, 37029), (130, 37053), (134, 37068), (136, 37089), (139, 37110), (140, 37122), (141, 37125), (151, 37209), (160, 37254), (161, 37260), (170, 37290), (174, 37317), (175, 37335), (180, 37356), (193, 37389), (208, 37449), (220, 37515), (223, 37533), (228, 37554), (231, 37563), (239, 37599), (243, 37608),

Gene: Totinger_47 Start: 34879, Stop: 35883, Start Num: 24

Candidate Starts for Totinger_47:

(Start: 24 @34879 has 70 MA's), (56, 35068), (Start: 59 @35080 has 1 MA's), (75, 35146), (78, 35155), (82, 35191), (109, 35257), (118, 35269), (125, 35296), (130, 35320), (134, 35335), (136, 35356), (139, 35377), (140, 35389), (141, 35392), (151, 35476), (160, 35521), (161, 35527), (170, 35557), (174, 35584), (175, 35602), (180, 35623), (193, 35656), (197, 35674), (208, 35716), (212, 35743), (220, 35782), (223, 35800), (228, 35821), (231, 35830), (239, 35866), (243, 35875),

Gene: Tristan_68 Start: 44342, Stop: 43494, Start Num: 43

Candidate Starts for Tristan_68:

(37, 44366), (41, 44351), (Start: 43 @44342 has 15 MA's), (Start: 44 @44333 has 3 MA's), (51, 44300), (73, 44240), (78, 44216), (82, 44177), (87, 44153), (109, 44099), (127, 44066), (140, 43979), (179, 43772), (211, 43640),

Gene: Trixie_70 Start: 43815, Stop: 43045, Start Num: 50

Candidate Starts for Trixie_70:

(42, 43854), (Start: 50 @43815 has 1 MA's), (75, 43773), (84, 43713), (140, 43527), (211, 43188),

Gene: Tweety_47 Start: 35615, Stop: 36619, Start Num: 24

Candidate Starts for Tweety_47:

(Start: 24 @35615 has 70 MA's), (56, 35804), (Start: 59 @35816 has 1 MA's), (75, 35882), (78, 35891), (82, 35927), (109, 35993), (118, 36005), (125, 36032), (130, 36056), (134, 36071), (136, 36092), (139, 36113), (140, 36125), (141, 36128), (151, 36212), (160, 36257), (161, 36263), (170, 36293), (174, 36320), (175, 36338), (180, 36359), (193, 36392), (208, 36452), (212, 36479), (220, 36518), (223, 36536), (228, 36557), (231, 36566), (239, 36602), (243, 36611),

Gene: Utz_39 Start: 34104, Stop: 34865, Start Num: 64

Candidate Starts for Utz_39:

(29, 33918), (Start: 44 @34029 has 3 MA's), (Start: 64 @34104 has 17 MA's), (70, 34119), (80, 34182), (104, 34254), (125, 34299), (129, 34308), (130, 34323), (140, 34392), (156, 34488), (174, 34578), (217, 34770),

Gene: Venti_34 Start: 27939, Stop: 28805, Start Num: 45

Candidate Starts for Venti_34:

(Start: 45 @27939 has 52 MA's), (68, 28020), (74, 28044), (77, 28053), (83, 28101), (129, 28209), (130, 28224), (143, 28335), (175, 28518), (193, 28572), (219, 28701), (228, 28743), (240, 28791),

Gene: Veteran_45 Start: 34747, Stop: 35751, Start Num: 24

Candidate Starts for Veteran_45:

(Start: 24 @34747 has 70 MA's), (56, 34936), (Start: 59 @34948 has 1 MA's), (75, 35014), (78, 35023), (82, 35059), (109, 35125), (118, 35137), (125, 35164), (130, 35188), (134, 35203), (136, 35224), (139,

35245), (140, 35257), (141, 35260), (151, 35344), (160, 35389), (161, 35395), (170, 35425), (174, 35452), (175, 35470), (180, 35491), (193, 35524), (208, 35584), (212, 35611), (220, 35650), (223, 35668), (228, 35689), (231, 35698), (239, 35734), (243, 35743),

Gene: Vidya_34 Start: 27972, Stop: 28838, Start Num: 45

Candidate Starts for Vidya_34:

(Start: 45 @27972 has 52 MA's), (68, 28053), (74, 28077), (77, 28086), (83, 28134), (129, 28242), (130, 28257), (143, 28368), (175, 28551), (193, 28605), (219, 28734), (228, 28776), (240, 28824),

Gene: Vivum_50 Start: 35865, Stop: 36869, Start Num: 24

Candidate Starts for Vivum_50:

(Start: 24 @35865 has 70 MA's), (56, 36054), (Start: 59 @36066 has 1 MA's), (75, 36132), (78, 36141), (82, 36177), (109, 36243), (118, 36255), (125, 36282), (130, 36306), (134, 36321), (136, 36342), (139, 36363), (140, 36375), (141, 36378), (151, 36462), (160, 36507), (161, 36513), (170, 36543), (174, 36570), (175, 36588), (180, 36609), (193, 36642), (208, 36702), (212, 36729), (220, 36768), (223, 36786), (228, 36807), (231, 36816), (239, 36852), (243, 36861),

Gene: Wee_50 Start: 36114, Stop: 37118, Start Num: 24

Candidate Starts for Wee_50:

(Start: 24 @36114 has 70 MA's), (56, 36303), (Start: 59 @36315 has 1 MA's), (75, 36381), (78, 36390), (82, 36426), (109, 36492), (118, 36504), (125, 36531), (130, 36555), (134, 36570), (136, 36591), (139, 36612), (140, 36624), (141, 36627), (151, 36711), (160, 36756), (161, 36762), (170, 36792), (174, 36819), (175, 36837), (180, 36858), (193, 36891), (208, 36951), (212, 36978), (220, 37017), (223, 37035), (228, 37056), (231, 37065), (239, 37101), (243, 37110),

Gene: Willsammy_33 Start: 27679, Stop: 28542, Start Num: 45

Candidate Starts for Willsammy_33:

(Start: 45 @27679 has 52 MA's), (68, 27760), (74, 27784), (77, 27793), (83, 27841), (91, 27865), (129, 27946), (130, 27961), (143, 28072), (175, 28255), (193, 28309), (219, 28438), (228, 28480), (240, 28528),

Gene: WinkNick_49 Start: 34309, Stop: 35058, Start Num: 61

Candidate Starts for WinkNick_49:

(3, 33670), (4, 33724), (5, 33757), (8, 33796), (10, 33817), (11, 33850), (13, 33862), (18, 33985), (19, 34006), (30, 34153), (Start: 61 @34309 has 11 MA's), (70, 34339), (75, 34366), (78, 34375), (118, 34492), (125, 34519), (130, 34543), (135, 34558), (138, 34588), (147, 34678), (148, 34681), (199, 34903),

Gene: Wisp_43 Start: 34155, Stop: 34916, Start Num: 64

Candidate Starts for Wisp_43:

(23, 33915), (29, 33969), (Start: 44 @34080 has 3 MA's), (Start: 64 @34155 has 17 MA's), (70, 34170), (87, 34269), (94, 34281), (118, 34323), (125, 34350), (140, 34443), (156, 34539), (174, 34629), (217, 34821), (229, 34866),

Gene: Wocket_45 Start: 33305, Stop: 34066, Start Num: 64

Candidate Starts for Wocket_45:

(25, 33104), (Start: 44 @33230 has 3 MA's), (Start: 64 @33305 has 17 MA's), (70, 33320), (87, 33419), (94, 33431), (118, 33473), (125, 33500), (139, 33581), (140, 33593), (156, 33689), (174, 33779), (193, 33845), (217, 33971), (229, 34016),

Gene: Wrigley_52 Start: 36935, Stop: 37699, Start Num: 61

Candidate Starts for Wrigley_52:

(Start: 61 @36935 has 11 MA's), (69, 36962), (70, 36965), (78, 37001), (87, 37064), (94, 37076), (116, 37118), (125, 37145), (140, 37238), (145, 37292), (171, 37406), (174, 37430), (175, 37448), (183, 37469), (185, 37472), (186, 37475), (195, 37499), (205, 37550), (207, 37553), (218, 37613),

Gene: XianYue_67 Start: 43032, Stop: 42220, Start Num: 55

Candidate Starts for XianYue_67:

(28, 43182), (32, 43155), (Start: 43 @43077 has 15 MA's), (Start: 44 @43068 has 3 MA's), (Start: 55 @43032 has 4 MA's), (73, 42972), (75, 42957), (80, 42921), (82, 42909), (93, 42870), (105, 42843), (126, 42795), (135, 42759), (140, 42705), (174, 42522), (179, 42495), (194, 42450), (211, 42363),

Gene: Xula_31 Start: 27335, Stop: 28204, Start Num: 45

Candidate Starts for Xula_31:

(Start: 45 @27335 has 52 MA's), (74, 27443), (77, 27452), (83, 27500), (129, 27608), (130, 27623), (143, 27734), (175, 27917), (193, 27971), (219, 28100), (228, 28142), (240, 28190),

Gene: Yoshi_60 Start: 36844, Stop: 38034, Start Num: 24

Candidate Starts for Yoshi_60:

(Start: 24 @36844 has 70 MA's), (56, 37033), (Start: 59 @37045 has 1 MA's), (67, 37078), (72, 37093), (75, 37111), (78, 37120), (82, 37156), (98, 37204), (109, 37222), (118, 37234), (125, 37261), (130, 37285), (132, 37297), (134, 37300), (136, 37321), (139, 37342), (140, 37354), (141, 37357), (147, 37426), (151, 37438), (160, 37483), (161, 37489), (163, 37495), (170, 37519), (174, 37546), (175, 37564), (180, 37585), (193, 37618), (197, 37636), (208, 37678), (212, 37705), (220, 37744), (223, 37762), (228, 37783), (231, 37792), (236, 37819), (247, 37876), (248, 38017),

Gene: YungMoney_53 Start: 42952, Stop: 43722, Start Num: 62

Candidate Starts for YungMoney_53:

(Start: 62 @42952 has 1 MA's), (Start: 64 @42964 has 17 MA's), (70, 42976), (83, 43057), (120, 43147), (126, 43159), (130, 43180), (131, 43189), (140, 43249), (148, 43321), (158, 43342), (165, 43369), (192, 43465), (201, 43516), (209, 43537), (212, 43564), (215, 43579), (242, 43699),

Gene: Zerg_46 Start: 35052, Stop: 36056, Start Num: 24

Candidate Starts for Zerg_46:

(17, 34896), (Start: 24 @35052 has 70 MA's), (Start: 59 @35253 has 1 MA's), (75, 35319), (78, 35328), (82, 35364), (109, 35430), (118, 35442), (125, 35469), (130, 35493), (134, 35508), (136, 35529), (139, 35550), (140, 35562), (141, 35565), (151, 35649), (160, 35694), (161, 35700), (170, 35730), (174, 35757), (175, 35775), (180, 35796), (193, 35829), (208, 35889), (220, 35955), (223, 35973), (228, 35994), (231, 36003), (239, 36039), (243, 36048),

Gene: ZiggyZoo_46 Start: 35375, Stop: 36136, Start Num: 64

Candidate Starts for ZiggyZoo_46:

(20, 35090), (29, 35189), (Start: 64 @35375 has 17 MA's), (70, 35390), (87, 35489), (94, 35501), (118, 35543), (125, 35570), (140, 35663), (156, 35759), (174, 35849), (217, 36041),

Gene: Zilizabeth_34 Start: 27971, Stop: 28837, Start Num: 45

Candidate Starts for Zilizabeth_34:

(Start: 45 @27971 has 52 MA's), (68, 28052), (74, 28076), (77, 28085), (83, 28133), (129, 28241), (130, 28256), (143, 28367), (175, 28550), (193, 28604), (219, 28733), (228, 28775), (240, 28823),

Gene: Zizzle_51 Start: 36006, Stop: 36785, Start Num: 58

Candidate Starts for Zizzle_51:

(Start: 47 @35976 has 1 MA's), (Start: 58 @36006 has 12 MA's), (69, 36030), (70, 36033), (78, 36069), (Start: 79 @36072 has 1 MA's), (83, 36117), (129, 36225), (130, 36240), (140, 36309), (144, 36357), (171, 36474), (179, 36525), (204, 36621), (225, 36726), (227, 36732), (238, 36774), (240, 36780),

