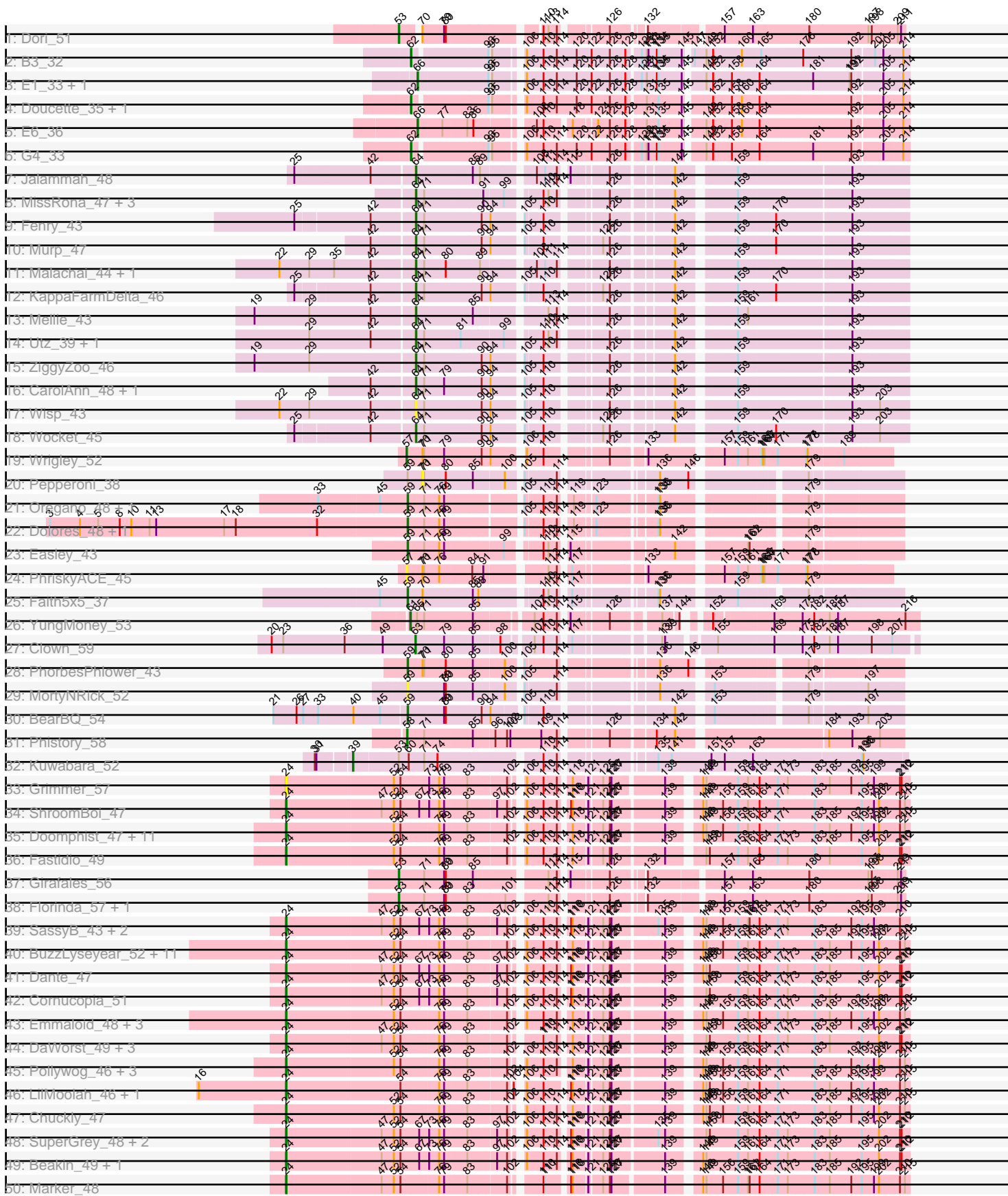
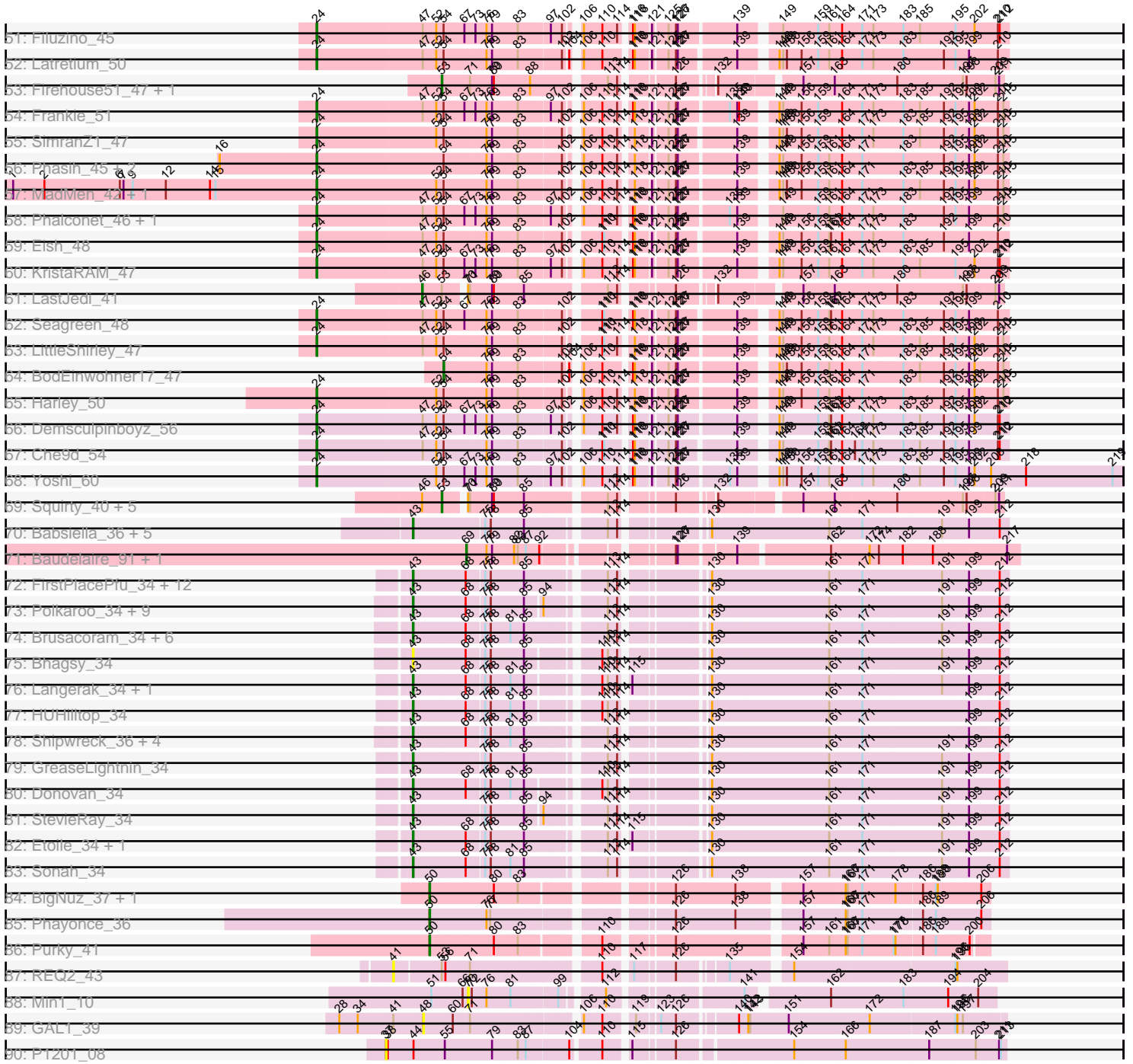


Pham 215873



Pham 215873



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 215873 Report

This analysis was run 02/22/25 on database version 588.

Pham number 215873 has 188 members, 21 are drafts.

Phages represented in each track:

- Track 1 : Dori_51
- Track 2 : B3_32
- Track 3 : E1_33, Anatole_33
- Track 4 : Doucette_35, B22_33
- Track 5 : E6_36
- Track 6 : G4_33
- Track 7 : Jalammah_48
- Track 8 : MissRona_47, Blueberry_46, Gambino_49, Azula_47
- Track 9 : Fenry_43
- Track 10 : Murp_47
- Track 11 : Malachai_44, Begonia_44
- Track 12 : KappaFarmDelta_46
- Track 13 : Mellie_43
- Track 14 : Utz_39, Samba_44
- Track 15 : ZiggyZoo_46
- Track 16 : CarolAnn_48, Blino_49
- Track 17 : Wisp_43
- Track 18 : Wocket_45
- Track 19 : Wrigley_52
- Track 20 : Pepperoni_38
- Track 21 : Oregano_48, Annalisa_45
- Track 22 : Dolores_48, WinkNick_49
- Track 23 : Easley_43
- Track 24 : PhriskyACE_45
- Track 25 : Faith5x5_37
- Track 26 : YungMoney_53
- Track 27 : Clown_59
- Track 28 : PhorbesPhlower_43
- Track 29 : MortyNRick_52
- Track 30 : BearBQ_54
- Track 31 : Phistory_58
- Track 32 : Kuwabara_52
- Track 33 : Grimmer_57
- Track 34 : ShroomBoi_47
- Track 35 : 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 36 : Fastidio_49

- Track 37 : Girafales_56
- Track 38 : Florinda_57, Quico_55
- Track 39 : SassyB_43, Estave1_48, PopTart_43
- Track 40 : BuzzLyseyear_52, Starceвич_47, Karhdo_46, Tweety_47, Veteran_45, GUMbie_45, Mantra_44, GigiOuiOui_44, Wee_50, SiSi_47, Vivum_52, Hamulus_48
- Track 41 : Dante_47
- Track 42 : Cornucopia_51
- Track 43 : Emmaloid_48, DotProduct_44, Totinger_47, Slim_48
- Track 44 : DaWorst_49, OgoPogo_48, DillTech15_46, CheesePuff_56
- Track 45 : Pollywog_46, PMC_42, Boomer_50, Rockne_45
- Track 46 : LilMoolah_46, Nivrat_45
- Track 47 : Chuckly_47
- Track 48 : SuperGrey_48, Fruitloop_46, Brushbloom_55
- Track 49 : Beakin_49, Jant_52
- Track 50 : Marker_48
- Track 51 : Filuzino_45
- Track 52 : Latretium_50
- Track 53 : Firehouse51_47, DosHalletts_47
- Track 54 : Frankie_51
- Track 55 : SimranZ1_47
- Track 56 : Phasih_45, Zerg_46, RockyHorror_48
- Track 57 : MadMen_42, Krakatau_45
- Track 58 : Phalconet_46, PhesterPhotato_49
- Track 59 : Eish_48
- Track 60 : KristaRAM_47
- Track 61 : LastJedi_41
- Track 62 : Seagreen_48
- Track 63 : LittleShirley_47
- Track 64 : BodEinwohner17_47
- Track 65 : Harley_50
- Track 66 : Demsculpinboyz_56
- Track 67 : Che9d_54
- Track 68 : Yoshi_60
- Track 69 : Squirty_40, Donkeykong_46, Zizzle_51, Brocalys_43, Pippy_45, Clifton_42
- Track 70 : Babsiella_36, Brujita_36, HC_34, Island3_36, QueenHazel_32, Xula_31
- Track 71 : Baudelaire_91, Aegeus_91
- Track 72 : FirstPlacePfu_34, Fishburne_34, Bartholomew_33, Venti_34, Dynamo_34, Mangethe_34, Phineas_34, Majeke_34, Vidya_34, Necropolis_34, Kari_34, Zilizebeth_34, Phegasus_34
- Track 73 : Polkaroo_34, KilKor_34, Gavriela_34, Willsammy_33, Phalm_34, Jung_33, Megiddo_34, CactusJack_34, StressBall_34, Glaske_34
- Track 74 : Brusacoram_34, Atcoo_34, Bunnies_34, Juniormint_34, Jebeks_35, Ksquared_34, Thespis_34
- Track 75 : Bhagsy_34
- Track 76 : Langerak_34, Arib1_34
- Track 77 : HUHilltop_34
- Track 78 : Shipwreck_36, Pygmy_36, Camster_34, Bogie_36, Malithi_34
- Track 79 : GreaseLightnin_34
- Track 80 : Donovan_34
- Track 81 : StevieRay_34
- Track 82 : Etoile_34, Techage_34
- Track 83 : Sonah_34

- Track 84 : BigNuz_37, Nazo_38
- Track 85 : Phayonce_36
- Track 86 : Purky_41
- Track 87 : REQ2_43
- Track 88 : Min1_10
- Track 89 : GAL1_39
- Track 90 : 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 65 of the 167 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Beakin_49, Blexus_45, BlueCrab_45, Boomer_50, Brushbloom_55, BuzzLyseyear_52, Che9d_54, CheesePuff_56, Chuckly_47, Cornucopia_51, DaWorst_49, Dante_47, Demsculpinboyz_56, DillTech15_46, Doomphist_47, Dorothy_44, DotProduct_44, Eish_48, Emmaloid_48, Estave1_48, Fastidio_49, Filuzino_45, Frankie_51, Fruitloop_46, GUmble_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, Nivrat_45, OgoPogo_48, 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, Totinger_47, Tweety_47, Veteran_45, Vivum_52, 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:

- Aegeus_91, Anatole_33, Annalisa_45, Arib1_34, Atcoo_34, Azula_47, B22_33, B3_32, Babsiella_36, Bartholomew_33, Baudelaire_91, BearBQ_54, Begonia_44, Bhagsy_34, BigNuz_37, Blino_49, Blueberry_46, BodEinwohner17_47, Bogie_36, Brocalys_43, Brujita_36, Brusacoram_34, Bunnies_34, CactusJack_34, Camster_34, CarolAnn_48, Clifton_42, Clown_59, Dolores_48, Donkeykong_46, Donovan_34, Dori_51, DosHalletts_47, Doucette_35, Dynamo_34, E1_33, E6_36, Easley_43, Etoile_34, Faith5x5_37, Fenry_43, Firehouse51_47, FirstPlacePfu_34, Fishburne_34, Florinda_57, G4_33, GAL1_39, Gambino_49, Gavriela_34, Girafales_56, Glaske_34, GreaseLightnin_34, HC_34, HUHilltop_34, Island3_36, Jalammah_48, Jebeks_35, Jung_33, Juniormint_34, KappaFarmDelta_46, Kari_34, KilKor_34, Ksquared_34, Kuwabara_52, Langerak_34, LastJedi_41, Majeke_34, Malachai_44, Malithi_34, Mangethe_34, Megiddo_34, Mellie_43, Min1_10, MissRona_47, MortyNRick_52, Murp_47, Nazo_38, Necropolis_34, Oregano_48, P1201_08, Pepperoni_38, Phalm_34, Phayonce_36, Phegasus_34, Phineas_34, Phistory_58, PhorbesPhlower_43, PhriskyACE_45, Pippy_45, Polkaroo_34, Purky_41, Pygmy_36, QueenHazel_32, Quico_55, REQ2_43, Samba_44, Shipwreck_36, Sonah_34, Squirty_40, StevieRay_34, StressBall_34, Techage_34, Thespis_34, Utz_39, Venti_34, Vidya_34, Willsammy_33, WinkNick_49, Wisp_43, Wocket_45, Wrigley_52,

Xula_31, YungMoney_53, ZiggyZoo_46, Zilizabeth_34, Zizzle_51,

Summary by start number:

Start 24:

- Found in 72 of 188 (38.3%) of genes in pham
- Manual Annotations of this start: 65 of 167
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Beakin_49 (F1), Blexus_45 (F1), BlueCrab_45 (F1), Boomer_50 (F1), Brushbloom_55 (F1), BuzzLyseyear_52 (F1), Che9d_54 (F2), Cheesepuff_56 (F1), Chuckly_47 (F1), Cornucopia_51 (F1), DaWorst_49 (F1), Dante_47 (F1), Demsculpinboyz_56 (F2), DillTech15_46 (F1), Doomphist_47 (F1), 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), GUmbe_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), Nivrat_45 (F1), Ogopogo_48 (F1), PMC_42 (F1), Phalconet_46 (F1), Phasih_45 (F1), PhesterPhotato_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), Totinger_47 (F1), Tweety_47 (F1), Veteran_45 (F1), Vivum_52 (F1), Wee_50 (F1), Yoshi_60 (F2), Zerg_46 (F1),

Start 37:

- Found in 1 of 188 (0.5%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: P1201_08 (singleton),

Start 39:

- Found in 1 of 188 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 167
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kuwabara_52 (DN4),

Start 41:

- Found in 2 of 188 (1.1%) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: REQ2_43 (singleton),

Start 43:

- Found in 51 of 188 (27.1%) of genes in pham
- Manual Annotations of this start: 45 of 167
- 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), Bogie_36 (P1), Brujita_36 (I1), Brusacorram_34 (P1), Bunnies_34 (P1), CactusJack_34 (P1), Camster_34 (P1), Donovan_34 (P1), Dynamo_34 (P1), Etoile_34 (P1), FirstPlacePfu_34 (P1),

Fishburne_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), Necropolis_34 (P1), Phalm_34 (P1), Phegasus_34 (P1), Phineas_34 (P1), Polkaroo_34 (P1), 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 46:

- Found in 7 of 188 (3.7%) of genes in pham
- Manual Annotations of this start: 1 of 167
- Called 14.3% of time when present
- Phage (with cluster) where this start called: LastJedi_41 (F1),

Start 48:

- Found in 1 of 188 (0.5%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GAL1_39 (singleton),

Start 50:

- Found in 4 of 188 (2.1%) of genes in pham
- Manual Annotations of this start: 4 of 167
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BigNuz_37 (P4), Nazo_38 (P4), Phayonce_36 (P5), Purky_41 (P6),

Start 53:

- Found in 15 of 188 (8.0%) of genes in pham
- Manual Annotations of this start: 12 of 167
- Called 80.0% 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), Pippy_45 (F1), Quico_55 (F1), Squirty_40 (F3), Zizzle_51 (F1),

Start 54:

- Found in 73 of 188 (38.8%) of genes in pham
- Manual Annotations of this start: 1 of 167
- Called 1.4% of time when present
- Phage (with cluster) where this start called: BodEinwohner17_47 (F1),

Start 57:

- Found in 2 of 188 (1.1%) of genes in pham
- Manual Annotations of this start: 1 of 167
- Called 100.0% of time when present
- Phage (with cluster) where this start called: PhriskyACE_45 (CZ4), Wrigley_52 (CY),

Start 58:

- Found in 1 of 188 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 167

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

Start 59:

- Found in 10 of 188 (5.3%) of genes in pham
- Manual Annotations of this start: 8 of 167
- Called 90.0% 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), MortyNRick_52 (DN), Oregano_48 (CZ4), PhorbesPhlower_43 (DH), WinkNick_49 (CZ4),

Start 61:

- Found in 1 of 188 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 167
- Called 100.0% of time when present
- Phage (with cluster) where this start called: YungMoney_53 (DC1),

Start 62:

- Found in 4 of 188 (2.1%) of genes in pham
- Manual Annotations of this start: 4 of 167
- Called 100.0% of time when present
- Phage (with cluster) where this start called: B22_33 (BW), B3_32 (BV), Doucette_35 (BW), G4_33 (BW),

Start 63:

- Found in 1 of 188 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 167
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Clown_59 (DC2),

Start 64:

- Found in 18 of 188 (9.6%) of genes in pham
- Manual Annotations of this start: 17 of 167
- Called 100.0% 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), Utz_39 (CV), Wisp_43 (CV), Wocket_45 (CV), ZiggyZoo_46 (CV),

Start 66:

- Found in 4 of 188 (2.1%) of genes in pham
- Manual Annotations of this start: 3 of 167
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Anatole_33 (BV), E1_33 (BV), E6_36 (BW),

Start 69:

- Found in 2 of 188 (1.1%) of genes in pham
- Manual Annotations of this start: 2 of 167
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aegeus_91 (L5), Baudelaire_91 (L5),

Start 70:

- Found in 14 of 188 (7.4%) of genes in pham
- No Manual Annotations of this start.
- Called 14.3% of time when present
- Phage (with cluster) where this start called: Min1_10 (singleton), Pepperoni_38 (CZ),

Summary by clusters:

There are 24 clusters represented in this pham: DN, singleton, DH, CZ6, CZ4, BV, BW, I1, DN4, DN1, P1, P6, AD, P4, P5, CZ, CY, L5, DC2, CV, DC1, F1, F2, F3,

Info for manual annotations of cluster AD:

- Start number 53 was manually annotated 1 time for cluster AD.

Info for manual annotations of cluster BV:

- Start number 62 was manually annotated 1 time for cluster BV.
- Start number 66 was manually annotated 2 times for cluster BV.

Info for manual annotations of cluster BW:

- Start number 62 was manually annotated 3 times for cluster BW.
- Start number 66 was manually annotated 1 time for cluster BW.

Info for manual annotations of cluster CV:

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

Info for manual annotations of cluster CY:

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

Info for manual annotations of cluster CZ4:

- Start number 59 was manually annotated 5 times for cluster CZ4.

Info for manual annotations of cluster CZ6:

- Start number 59 was manually annotated 1 time for cluster CZ6.

Info for manual annotations of cluster DC1:

- Start number 61 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 59 was manually annotated 1 time for cluster DH.

Info for manual annotations of cluster DN:

- Start number 59 was manually annotated 1 time for cluster DN.

Info for manual annotations of cluster DN1:

- Start number 58 was manually annotated 1 time for cluster DN1.

Info for manual annotations of cluster DN4:

- Start number 39 was manually annotated 1 time for cluster DN4.

Info for manual annotations of cluster F1:

- Start number 24 was manually annotated 62 times for cluster F1.
- Start number 46 was manually annotated 1 time for cluster F1.
- Start number 53 was manually annotated 10 times for cluster F1.
- Start number 54 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 53 was manually annotated 1 time for cluster F3.

Info for manual annotations of cluster I1:

- Start number 43 was manually annotated 6 times for cluster I1.

Info for manual annotations of cluster L5:

- Start number 69 was manually annotated 2 times for cluster L5.

Info for manual annotations of cluster P1:

- Start number 43 was manually annotated 39 times for cluster P1.

Info for manual annotations of cluster P4:

- Start number 50 was manually annotated 2 times for cluster P4.

Info for manual annotations of cluster P5:

- Start number 50 was manually annotated 1 time for cluster P5.

Info for manual annotations of cluster P6:

- Start number 50 was manually annotated 1 time for cluster P6.

Gene Information:

Gene: Aegeus_91 Start: 56094, Stop: 56897, Start Num: 69

Candidate Starts for Aegeus_91:

(Start: 69 @56094 has 2 MA's), (76, 56127), (79, 56136), (82, 56169), (83, 56175), (87, 56187), (92, 56208), (126, 56373), (127, 56376), (139, 56457), (162, 56595), (172, 56655), (174, 56670), (182, 56709), (188, 56757), (217, 56877),

Gene: Anatole_33 Start: 24569, Stop: 25372, Start Num: 66

Candidate Starts for Anatole_33:

(Start: 66 @24569 has 3 MA's), (93, 24692), (95, 24695), (106, 24734), (110, 24761), (114, 24785), (120, 24821), (122, 24848), (126, 24881), (128, 24908), (129, 24929), (131, 24938), (134, 24956), (135, 24959), (145, 25001), (149, 25031), (152, 25043), (158, 25076), (164, 25121), (181, 25211), (191, 25277), (192, 25280), (205, 25328), (214, 25361),

Gene: Annalisa_45 Start: 33306, Stop: 34055, Start Num: 59

Candidate Starts for Annalisa_45:

(33, 33153), (45, 33261), (Start: 59 @33306 has 8 MA's), (71, 33336), (76, 33363), (79, 33372), (105, 33489), (110, 33516), (114, 33540), (119, 33555), (123, 33585), (135, 33675), (136, 33678), (179, 33900),

Gene: Arib1_34 Start: 27945, Stop: 28808, Start Num: 43

Candidate Starts for Arib1_34:

(Start: 43 @27945 has 45 MA's), (68, 28026), (75, 28050), (78, 28059), (81, 28086), (85, 28107), (110, 28203), (113, 28212), (114, 28227), (115, 28236), (130, 28338), (161, 28521), (171, 28575), (191, 28704), (199, 28746), (212, 28794),

Gene: Atcoo_34 Start: 28426, Stop: 29292, Start Num: 43

Candidate Starts for Atcoo_34:

(Start: 43 @28426 has 45 MA's), (68, 28507), (75, 28531), (78, 28540), (81, 28567), (85, 28588), (113, 28696), (114, 28711), (130, 28822), (161, 29005), (171, 29059), (191, 29188), (199, 29230), (212, 29278),

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

Candidate Starts for Azula_47:

(Start: 64 @35195 has 17 MA's), (71, 35210), (91, 35312), (99, 35345), (110, 35390), (113, 35399), (114, 35414), (126, 35483), (142, 35579), (159, 35669), (193, 35861),

Gene: B22_33 Start: 23699, Stop: 24502, Start Num: 62

Candidate Starts for B22_33:

(Start: 62 @23699 has 4 MA's), (93, 23822), (95, 23825), (106, 23864), (110, 23891), (114, 23915), (120, 23951), (122, 23978), (126, 24011), (128, 24038), (131, 24068), (135, 24089), (145, 24131), (152, 24173), (158, 24206), (160, 24224), (164, 24251), (192, 24410), (205, 24458), (214, 24491),

Gene: B3_32 Start: 23829, Stop: 24632, Start Num: 62

Candidate Starts for B3_32:

(Start: 62 @23829 has 4 MA's), (93, 23952), (95, 23955), (106, 23994), (110, 24021), (114, 24045), (120, 24081), (122, 24108), (126, 24141), (128, 24168), (129, 24189), (131, 24198), (133, 24201), (134, 24216), (135, 24219), (145, 24261), (147, 24270), (149, 24291), (152, 24303), (160, 24354), (165, 24384), (176, 24453), (192, 24540), (201, 24573), (205, 24588), (214, 24621),

Gene: Babsiella_36 Start: 28877, Stop: 29746, Start Num: 43

Candidate Starts for Babsiella_36:

(Start: 43 @28877 has 45 MA's), (75, 28985), (78, 28994), (85, 29042), (113, 29150), (114, 29165), (130, 29276), (161, 29459), (171, 29513), (191, 29642), (199, 29684), (212, 29732),

Gene: Bartholomew_33 Start: 27939, Stop: 28805, Start Num: 43

Candidate Starts for Bartholomew_33:

(Start: 43 @27939 has 45 MA's), (68, 28020), (75, 28044), (78, 28053), (85, 28101), (113, 28209), (114, 28224), (130, 28335), (161, 28518), (171, 28572), (191, 28701), (199, 28743), (212, 28791),

Gene: Baudelaire_91 Start: 56094, Stop: 56897, Start Num: 69

Candidate Starts for Baudelaire_91:

(Start: 69 @56094 has 2 MA's), (76, 56127), (79, 56136), (82, 56169), (83, 56175), (87, 56187), (92, 56208), (126, 56373), (127, 56376), (139, 56457), (162, 56595), (172, 56655), (174, 56670), (182, 56709), (188, 56757), (217, 56877),

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

Candidate Starts for Beakin_49:

(Start: 24 @35134 has 65 MA's), (47, 35302), (52, 35323), (Start: 54 @35335 has 1 MA's), (67, 35368), (73, 35383), (76, 35401), (79, 35410), (83, 35446), (97, 35494), (102, 35512), (106, 35524), (110, 35551), (114, 35575), (116, 35587), (118, 35590), (121, 35611), (125, 35632), (126, 35644), (127, 35647), (139, 35731), (148, 35776), (149, 35782), (159, 35839), (161, 35857), (164, 35878), (171, 35911), (173, 35929), (183, 35971), (185, 35998), (195, 36055), (202, 36085), (210, 36121), (212,

36124),

Gene: BearBQ_54 Start: 38297, Stop: 39052, Start Num: 59

Candidate Starts for BearBQ_54:

(21, 38063), (26, 38105), (27, 38117), (33, 38144), (40, 38207), (45, 38255), (Start: 59 @38297 has 8 MA's), (79, 38363), (80, 38366), (90, 38426), (94, 38438), (105, 38480), (110, 38507), (142, 38702), (153, 38753), (179, 38897), (197, 38990),

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

Candidate Starts for Begonia_44:

(22, 35065), (29, 35119), (35, 35164), (42, 35230), (Start: 64 @35305 has 17 MA's), (71, 35320), (80, 35359), (89, 35416), (108, 35494), (111, 35506), (114, 35527), (126, 35596), (142, 35692), (159, 35782), (193, 35974),

Gene: Bhagsy_34 Start: 27935, Stop: 28798, Start Num: 43

Candidate Starts for Bhagsy_34:

(Start: 43 @27935 has 45 MA's), (68, 28016), (75, 28040), (78, 28049), (85, 28097), (110, 28193), (113, 28202), (114, 28217), (130, 28328), (161, 28511), (171, 28565), (191, 28694), (199, 28736), (212, 28784),

Gene: BigNuz_37 Start: 30064, Stop: 30867, Start Num: 50

Candidate Starts for BigNuz_37:

(Start: 50 @30064 has 4 MA's), (80, 30166), (83, 30202), (126, 30394), (138, 30490), (157, 30574), (166, 30640), (167, 30643), (171, 30667), (178, 30721), (186, 30760), (189, 30781), (190, 30784), (206, 30853),

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

Candidate Starts for Blexus_45:

(Start: 24 @35131 has 65 MA's), (52, 35320), (Start: 54 @35332 has 1 MA's), (76, 35398), (79, 35407), (83, 35443), (102, 35509), (106, 35521), (110, 35548), (114, 35572), (118, 35587), (121, 35608), (125, 35629), (126, 35641), (127, 35644), (139, 35728), (148, 35773), (149, 35779), (156, 35809), (159, 35836), (161, 35854), (164, 35875), (171, 35908), (183, 35968), (185, 35995), (192, 36034), (195, 36052), (199, 36073), (202, 36082), (210, 36118), (215, 36127),

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

Candidate Starts for Blino_49:

(42, 38416), (Start: 64 @38491 has 17 MA's), (71, 38506), (79, 38542), (90, 38605), (94, 38617), (105, 38659), (110, 38686), (126, 38779), (142, 38875), (159, 38965), (193, 39157),

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

Candidate Starts for BlueCrab_45:

(Start: 24 @34857 has 65 MA's), (52, 35046), (Start: 54 @35058 has 1 MA's), (76, 35124), (79, 35133), (83, 35169), (102, 35235), (106, 35247), (110, 35274), (114, 35298), (118, 35313), (121, 35334), (125, 35355), (126, 35367), (127, 35370), (139, 35454), (148, 35499), (149, 35505), (156, 35535), (159, 35562), (161, 35580), (164, 35601), (171, 35634), (183, 35694), (185, 35721), (192, 35760), (195, 35778), (199, 35799), (202, 35808), (210, 35844), (215, 35853),

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

Candidate Starts for Blueberry_46:

(Start: 64 @35195 has 17 MA's), (71, 35210), (91, 35312), (99, 35345), (110, 35390), (113, 35399), (114, 35414), (126, 35483), (142, 35579), (159, 35669), (193, 35861),

Gene: BodEinwohner17_47 Start: 35274, Stop: 36077, Start Num: 54

Candidate Starts for BodEinwohner17_47:

(Start: 54 @35274 has 1 MA's), (76, 35340), (79, 35349), (83, 35385), (102, 35451), (104, 35457), (106, 35463), (110, 35490), (116, 35526), (118, 35529), (121, 35550), (125, 35571), (126, 35583), (127, 35586), (139, 35670), (148, 35715), (149, 35721), (150, 35727), (156, 35751), (159, 35778), (161, 35796), (164, 35817), (171, 35850), (183, 35910), (185, 35937), (192, 35976), (195, 35994), (199, 36015), (202, 36024), (210, 36060), (215, 36069),

Gene: Bogie_36 Start: 29722, Stop: 30588, Start Num: 43

Candidate Starts for Bogie_36:

(Start: 43 @29722 has 45 MA's), (68, 29803), (75, 29827), (78, 29836), (81, 29863), (85, 29884), (113, 29992), (114, 30007), (130, 30118), (161, 30301), (171, 30355), (199, 30526), (212, 30574),

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

Candidate Starts for Boomer_50:

(Start: 24 @36306 has 65 MA's), (52, 36495), (Start: 54 @36507 has 1 MA's), (76, 36573), (79, 36582), (83, 36618), (102, 36684), (106, 36696), (110, 36723), (114, 36747), (118, 36762), (121, 36783), (125, 36804), (126, 36816), (127, 36819), (139, 36903), (148, 36948), (149, 36954), (156, 36984), (159, 37011), (161, 37029), (164, 37050), (171, 37083), (183, 37143), (192, 37209), (195, 37227), (199, 37248), (202, 37257), (210, 37293), (215, 37302),

Gene: Brocalys_43 Start: 31207, Stop: 31986, Start Num: 53

Candidate Starts for Brocalys_43:

(Start: 46 @31177 has 1 MA's), (Start: 53 @31207 has 12 MA's), (70, 31231), (71, 31234), (79, 31270), (80, 31273), (85, 31318), (113, 31426), (114, 31441), (126, 31510), (132, 31558), (157, 31675), (163, 31726), (180, 31822), (197, 31927), (198, 31933), (209, 31975), (211, 31981),

Gene: Brujita_36 Start: 29775, Stop: 30644, Start Num: 43

Candidate Starts for Brujita_36:

(Start: 43 @29775 has 45 MA's), (75, 29883), (78, 29892), (85, 29940), (113, 30048), (114, 30063), (130, 30174), (161, 30357), (171, 30411), (191, 30540), (199, 30582), (212, 30630),

Gene: Brusacoram_34 Start: 27932, Stop: 28798, Start Num: 43

Candidate Starts for Brusacoram_34:

(Start: 43 @27932 has 45 MA's), (68, 28013), (75, 28037), (78, 28046), (81, 28073), (85, 28094), (113, 28202), (114, 28217), (130, 28328), (161, 28511), (171, 28565), (191, 28694), (199, 28736), (212, 28784),

Gene: Brushbloom_55 Start: 35774, Stop: 36778, Start Num: 24

Candidate Starts for Brushbloom_55:

(Start: 24 @35774 has 65 MA's), (47, 35942), (52, 35963), (Start: 54 @35975 has 1 MA's), (67, 36008), (73, 36023), (76, 36041), (79, 36050), (83, 36086), (97, 36134), (102, 36152), (106, 36164), (110, 36191), (114, 36215), (116, 36227), (118, 36230), (121, 36251), (125, 36272), (126, 36284), (127, 36287), (135, 36359), (139, 36371), (149, 36422), (150, 36428), (159, 36479), (161, 36497), (164, 36518), (171, 36551), (173, 36569), (183, 36611), (185, 36638), (195, 36695), (202, 36725), (210, 36761), (212, 36764),

Gene: Bunnies_34 Start: 27953, Stop: 28819, Start Num: 43

Candidate Starts for Bunnies_34:

(Start: 43 @27953 has 45 MA's), (68, 28034), (75, 28058), (78, 28067), (81, 28094), (85, 28115), (113, 28223), (114, 28238), (130, 28349), (161, 28532), (171, 28586), (191, 28715), (199, 28757), (212, 28805),

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

Candidate Starts for BuzzLyseyear_52:

(Start: 24 @36683 has 65 MA's), (52, 36872), (Start: 54 @36884 has 1 MA's), (76, 36950), (79, 36959), (83, 36995), (102, 37061), (106, 37073), (110, 37100), (114, 37124), (118, 37139), (121, 37160), (125, 37181), (126, 37193), (127, 37196), (139, 37280), (148, 37325), (149, 37331), (156, 37361), (159, 37388), (161, 37406), (164, 37427), (171, 37460), (183, 37520), (185, 37547), (192, 37586), (195, 37604), (199, 37625), (202, 37634), (210, 37670), (215, 37679),

Gene: CactusJack_34 Start: 28196, Stop: 29059, Start Num: 43

Candidate Starts for CactusJack_34:

(Start: 43 @28196 has 45 MA's), (68, 28277), (75, 28301), (78, 28310), (85, 28358), (94, 28382), (113, 28463), (114, 28478), (130, 28589), (161, 28772), (171, 28826), (191, 28955), (199, 28997), (212, 29045),

Gene: Camster_34 Start: 27969, Stop: 28835, Start Num: 43

Candidate Starts for Camster_34:

(Start: 43 @27969 has 45 MA's), (68, 28050), (75, 28074), (78, 28083), (81, 28110), (85, 28131), (113, 28239), (114, 28254), (130, 28365), (161, 28548), (171, 28602), (199, 28773), (212, 28821),

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

Candidate Starts for CarolAnn_48:

(42, 38415), (Start: 64 @38490 has 17 MA's), (71, 38505), (79, 38541), (90, 38604), (94, 38616), (105, 38658), (110, 38685), (126, 38778), (142, 38874), (159, 38964), (193, 39156),

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

Candidate Starts for Che9d_54:

(Start: 24 @34668 has 65 MA's), (47, 34836), (52, 34857), (Start: 54 @34869 has 1 MA's), (76, 34935), (79, 34944), (83, 34980), (102, 35046), (110, 35085), (111, 35088), (116, 35121), (118, 35124), (121, 35145), (125, 35166), (126, 35178), (127, 35181), (139, 35262), (148, 35307), (149, 35313), (159, 35370), (161, 35388), (162, 35391), (164, 35409), (168, 35430), (171, 35442), (173, 35460), (183, 35502), (185, 35529), (192, 35568), (195, 35586), (199, 35607), (210, 35652), (212, 35655),

Gene: Cheesepuff_56 Start: 37297, Stop: 38301, Start Num: 24

Candidate Starts for Cheesepuff_56:

(Start: 24 @37297 has 65 MA's), (47, 37465), (52, 37486), (Start: 54 @37498 has 1 MA's), (76, 37564), (79, 37573), (83, 37609), (102, 37675), (110, 37714), (111, 37717), (114, 37738), (118, 37753), (121, 37774), (125, 37795), (126, 37807), (127, 37810), (139, 37894), (149, 37945), (150, 37951), (159, 38002), (161, 38020), (164, 38041), (171, 38074), (173, 38092), (183, 38134), (185, 38161), (195, 38218), (202, 38248), (210, 38284), (212, 38287),

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

Candidate Starts for Chuckly_47:

(Start: 24 @35101 has 65 MA's), (52, 35293), (Start: 54 @35305 has 1 MA's), (76, 35371), (79, 35380), (83, 35416), (102, 35482), (106, 35494), (110, 35521), (114, 35545), (118, 35560), (121, 35581), (125, 35602), (126, 35614), (127, 35617), (139, 35701), (148, 35746), (149, 35752), (150, 35758), (156, 35782), (159, 35809), (161, 35827), (164, 35848), (171, 35881), (183, 35941), (185, 35968), (192, 36007), (195, 36025), (199, 36046), (202, 36055), (210, 36091), (215, 36100),

Gene: Clifton_42 Start: 31558, Stop: 32337, Start Num: 53

Candidate Starts for Clifton_42:

(Start: 46 @31528 has 1 MA's), (Start: 53 @31558 has 12 MA's), (70, 31582), (71, 31585), (79, 31621), (80, 31624), (85, 31669), (113, 31777), (114, 31792), (126, 31861), (132, 31909), (157, 32026), (163, 32077), (180, 32173), (197, 32278), (198, 32284), (209, 32326), (211, 32332),

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

Candidate Starts for Clown_59:

(20, 43209), (23, 43230), (36, 43341), (49, 43410), (Start: 63 @43467 has 1 MA's), (79, 43518), (85, 43566), (98, 43611), (107, 43656), (110, 43668), (114, 43689), (117, 43701), (137, 43833), (139, 43836), (155, 43908), (169, 44004), (175, 44055), (182, 44076), (185, 44103), (187, 44118), (198, 44178), (207, 44214),

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

Candidate Starts for Cornucopia_51:

(Start: 24 @36403 has 65 MA's), (47, 36571), (52, 36592), (Start: 54 @36604 has 1 MA's), (67, 36637), (73, 36652), (76, 36670), (79, 36679), (83, 36715), (97, 36763), (102, 36781), (106, 36793), (110, 36820), (114, 36844), (116, 36856), (118, 36859), (121, 36880), (125, 36901), (126, 36913), (127, 36916), (139, 37000), (149, 37051), (150, 37057), (159, 37108), (161, 37126), (164, 37147), (171, 37180), (173, 37198), (183, 37240), (185, 37267), (195, 37324), (202, 37354), (210, 37390), (212, 37393),

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

Candidate Starts for DaWorst_49:

(Start: 24 @35931 has 65 MA's), (47, 36099), (52, 36120), (Start: 54 @36132 has 1 MA's), (76, 36198), (79, 36207), (83, 36243), (102, 36309), (110, 36348), (111, 36351), (114, 36372), (118, 36387), (121, 36408), (125, 36429), (126, 36441), (127, 36444), (139, 36528), (149, 36579), (150, 36585), (159, 36636), (161, 36654), (164, 36675), (171, 36708), (173, 36726), (183, 36768), (185, 36795), (195, 36852), (202, 36882), (210, 36918), (212, 36921),

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

Candidate Starts for Dante_47:

(Start: 24 @34836 has 65 MA's), (47, 35004), (52, 35025), (Start: 54 @35037 has 1 MA's), (67, 35070), (73, 35085), (76, 35103), (79, 35112), (83, 35148), (97, 35196), (102, 35214), (106, 35226), (110, 35253), (114, 35277), (116, 35289), (118, 35292), (121, 35313), (125, 35334), (126, 35346), (127, 35349), (139, 35433), (148, 35478), (149, 35484), (150, 35490), (159, 35541), (161, 35559), (164, 35580), (171, 35613), (173, 35631), (183, 35673), (185, 35700), (195, 35757), (202, 35787), (210, 35823), (212, 35826),

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

Candidate Starts for Demsculpinboyz_56:

(Start: 24 @34780 has 65 MA's), (47, 34948), (52, 34969), (Start: 54 @34981 has 1 MA's), (67, 35014), (73, 35029), (76, 35047), (79, 35056), (83, 35092), (97, 35140), (102, 35158), (106, 35170), (110, 35197), (114, 35221), (116, 35233), (118, 35236), (121, 35257), (125, 35278), (126, 35290), (127, 35293), (139, 35374), (148, 35419), (149, 35425), (159, 35482), (161, 35500), (162, 35503), (164, 35521), (171, 35554), (173, 35572), (183, 35614), (185, 35641), (192, 35680), (195, 35698), (199, 35719), (202, 35728), (210, 35764), (212, 35767),

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

Candidate Starts for DillTech15_46:

(Start: 24 @34346 has 65 MA's), (47, 34514), (52, 34535), (Start: 54 @34547 has 1 MA's), (76, 34613), (79, 34622), (83, 34658), (102, 34724), (110, 34763), (111, 34766), (114, 34787), (118, 34802), (121, 34823), (125, 34844), (126, 34856), (127, 34859), (139, 34943), (149, 34994), (150, 35000), (159, 35051), (161, 35069), (164, 35090), (171, 35123), (173, 35141), (183, 35183), (185, 35210), (195, 35267), (202, 35297), (210, 35333), (212, 35336),

Gene: Dolores_48 Start: 34386, Stop: 35135, Start Num: 59

Candidate Starts for Dolores_48:

(3, 33747), (4, 33801), (5, 33834), (8, 33873), (10, 33894), (11, 33927), (13, 33939), (17, 34062), (18, 34083), (32, 34230), (Start: 59 @34386 has 8 MA's), (71, 34416), (76, 34443), (79, 34452), (105, 34569), (110, 34596), (114, 34620), (119, 34635), (123, 34665), (135, 34755), (136, 34758), (179, 34980),

Gene: Donkeykong_46 Start: 35576, Stop: 36355, Start Num: 53

Candidate Starts for Donkeykong_46:

(Start: 46 @35546 has 1 MA's), (Start: 53 @35576 has 12 MA's), (70, 35600), (71, 35603), (79, 35639), (80, 35642), (85, 35687), (113, 35795), (114, 35810), (126, 35879), (132, 35927), (157, 36044), (163, 36095), (180, 36191), (197, 36296), (198, 36302), (209, 36344), (211, 36350),

Gene: Donovan_34 Start: 27961, Stop: 28824, Start Num: 43

Candidate Starts for Donovan_34:

(Start: 43 @27961 has 45 MA's), (68, 28042), (75, 28066), (78, 28075), (81, 28102), (85, 28123), (110, 28219), (113, 28228), (114, 28243), (130, 28354), (161, 28537), (171, 28591), (191, 28720), (199, 28762), (212, 28810),

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

Candidate Starts for Doomphist_47:

(Start: 24 @36071 has 65 MA's), (52, 36260), (Start: 54 @36272 has 1 MA's), (76, 36338), (79, 36347), (83, 36383), (102, 36449), (106, 36461), (110, 36488), (114, 36512), (118, 36527), (121, 36548), (125, 36569), (126, 36581), (127, 36584), (139, 36668), (148, 36713), (149, 36719), (156, 36749), (159, 36776), (161, 36794), (164, 36815), (171, 36848), (183, 36908), (185, 36935), (192, 36974), (195, 36992), (199, 37013), (202, 37022), (210, 37058), (215, 37067),

Gene: Dori_51 Start: 44920, Stop: 45693, Start Num: 53

Candidate Starts for Dori_51:

(Start: 53 @44920 has 12 MA's), (70, 44941), (79, 44980), (80, 44983), (110, 45124), (113, 45133), (114, 45148), (126, 45217), (132, 45265), (157, 45382), (163, 45433), (180, 45529), (197, 45634), (198, 45640), (209, 45682), (211, 45688),

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

Candidate Starts for Dorothy_44:

(Start: 24 @34870 has 65 MA's), (52, 35059), (Start: 54 @35071 has 1 MA's), (76, 35137), (79, 35146), (83, 35182), (102, 35248), (106, 35260), (110, 35287), (114, 35311), (118, 35326), (121, 35347), (125, 35368), (126, 35380), (127, 35383), (139, 35467), (148, 35512), (149, 35518), (156, 35548), (159, 35575), (161, 35593), (164, 35614), (171, 35647), (183, 35707), (185, 35734), (192, 35773), (195, 35791), (199, 35812), (202, 35821), (210, 35857), (215, 35866),

Gene: DosHalletts_47 Start: 34853, Stop: 35650, Start Num: 53

Candidate Starts for DosHalletts_47:

(Start: 53 @34853 has 12 MA's), (71, 34895), (79, 34931), (80, 34934), (88, 34988), (113, 35090), (114, 35105), (126, 35174), (132, 35222), (157, 35339), (163, 35390), (180, 35486), (197, 35591), (198, 35597), (209, 35639), (211, 35645),

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

Candidate Starts for DotProduct_44:

(Start: 24 @34531 has 65 MA's), (52, 34720), (Start: 54 @34732 has 1 MA's), (76, 34798), (79, 34807), (83, 34843), (102, 34909), (106, 34921), (110, 34948), (114, 34972), (118, 34987), (121, 35008), (125, 35029), (126, 35041), (127, 35044), (139, 35128), (148, 35173), (149, 35179), (156, 35209), (159, 35236), (161, 35254), (164, 35275), (171, 35308), (173, 35326), (183, 35368), (185, 35395), (192, 35434), (195, 35452), (199, 35473), (202, 35482), (210, 35518), (215, 35527),

Gene: Doucette_35 Start: 25113, Stop: 25916, Start Num: 62

Candidate Starts for Doucette_35:

(Start: 62 @25113 has 4 MA's), (93, 25236), (95, 25239), (106, 25278), (110, 25305), (114, 25329), (120, 25365), (122, 25392), (126, 25425), (128, 25452), (131, 25482), (135, 25503), (145, 25545), (152, 25587), (158, 25620), (160, 25638), (164, 25665), (192, 25824), (205, 25872), (214, 25905),

Gene: Dynamo_34 Start: 28347, Stop: 29213, Start Num: 43

Candidate Starts for Dynamo_34:

(Start: 43 @28347 has 45 MA's), (68, 28428), (75, 28452), (78, 28461), (85, 28509), (113, 28617), (114, 28632), (130, 28743), (161, 28926), (171, 28980), (191, 29109), (199, 29151), (212, 29199),

Gene: E1_33 Start: 24569, Stop: 25372, Start Num: 66

Candidate Starts for E1_33:

(Start: 66 @24569 has 3 MA's), (93, 24692), (95, 24695), (106, 24734), (110, 24761), (114, 24785), (120, 24821), (122, 24848), (126, 24881), (128, 24908), (129, 24929), (131, 24938), (134, 24956), (135, 24959), (145, 25001), (149, 25031), (152, 25043), (158, 25076), (164, 25121), (181, 25211), (191, 25277), (192, 25280), (205, 25328), (214, 25361),

Gene: E6_36 Start: 26500, Stop: 27273, Start Num: 66

Candidate Starts for E6_36:

(Start: 66 @26500 has 3 MA's), (77, 26542), (83, 26584), (86, 26593), (108, 26680), (110, 26689), (118, 26728), (124, 26761), (126, 26782), (128, 26809), (131, 26839), (135, 26860), (145, 26902), (149, 26932), (152, 26944), (158, 26977), (160, 26995), (164, 27022), (192, 27181), (205, 27229), (214, 27262),

Gene: Easley_43 Start: 32655, Stop: 33410, Start Num: 59

Candidate Starts for Easley_43:

(Start: 59 @32655 has 8 MA's), (71, 32685), (76, 32712), (79, 32721), (99, 32820), (110, 32865), (113, 32874), (114, 32889), (115, 32898), (142, 33060), (161, 33171), (162, 33174), (179, 33255),

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

Candidate Starts for Eish_48:

(Start: 24 @35416 has 65 MA's), (47, 35584), (52, 35605), (Start: 54 @35617 has 1 MA's), (76, 35683), (79, 35692), (83, 35728), (102, 35794), (110, 35833), (111, 35836), (116, 35869), (118, 35872), (121, 35893), (125, 35914), (126, 35926), (127, 35929), (139, 36010), (148, 36055), (149, 36061), (156, 36091), (159, 36118), (161, 36136), (162, 36139), (164, 36157), (171, 36190), (173, 36208), (183, 36250), (192, 36316), (199, 36355), (210, 36400),

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

Candidate Starts for Emmaloid_48:

(Start: 24 @36261 has 65 MA's), (52, 36450), (Start: 54 @36462 has 1 MA's), (76, 36528), (79, 36537), (83, 36573), (102, 36639), (106, 36651), (110, 36678), (114, 36702), (118, 36717), (121, 36738), (125, 36759), (126, 36771), (127, 36774), (139, 36858), (148, 36903), (149, 36909), (156, 36939), (159, 36966), (161, 36984), (164, 37005), (171, 37038), (173, 37056), (183, 37098), (185, 37125), (192, 37164), (195, 37182), (199, 37203), (202, 37212), (210, 37248), (215, 37257),

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

Candidate Starts for Estave1_48:

(Start: 24 @34820 has 65 MA's), (47, 34988), (52, 35009), (Start: 54 @35021 has 1 MA's), (67, 35054), (73, 35069), (76, 35087), (79, 35096), (83, 35132), (97, 35180), (102, 35198), (106, 35210), (110, 35237), (114, 35261), (116, 35273), (118, 35276), (121, 35297), (125, 35318), (126, 35330), (127, 35333), (135, 35405), (139, 35417), (148, 35462), (149, 35468), (156, 35498), (159, 35525), (161, 35543), (162, 35546), (164, 35564), (171, 35597), (173, 35615), (183, 35657), (192, 35723), (195,

35741), (199, 35762), (210, 35807),

Gene: Etoile_34 Start: 27939, Stop: 28805, Start Num: 43

Candidate Starts for Etoile_34:

(Start: 43 @27939 has 45 MA's), (68, 28020), (75, 28044), (78, 28053), (85, 28101), (113, 28209), (114, 28224), (115, 28233), (130, 28335), (161, 28518), (171, 28572), (191, 28701), (199, 28743), (212, 28791),

Gene: Faith5x5_37 Start: 28702, Stop: 29454, Start Num: 59

Candidate Starts for Faith5x5_37:

(45, 28657), (Start: 59 @28702 has 8 MA's), (70, 28729), (85, 28816), (88, 28825), (110, 28915), (113, 28924), (114, 28939), (117, 28951), (135, 29074), (136, 29077), (159, 29197), (179, 29299),

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

Candidate Starts for Fastidio_49:

(Start: 24 @34493 has 65 MA's), (52, 34682), (Start: 54 @34694 has 1 MA's), (76, 34760), (79, 34769), (83, 34805), (102, 34871), (106, 34883), (110, 34910), (114, 34934), (118, 34949), (121, 34970), (125, 34991), (126, 35003), (127, 35006), (139, 35090), (149, 35141), (150, 35147), (159, 35198), (161, 35216), (164, 35237), (171, 35270), (173, 35288), (183, 35330), (185, 35357), (195, 35414), (202, 35444), (210, 35480), (212, 35483),

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

Candidate Starts for Fenry_43:

(25, 33998), (42, 34127), (Start: 64 @34202 has 17 MA's), (71, 34217), (90, 34316), (94, 34328), (105, 34370), (110, 34397), (126, 34490), (142, 34586), (159, 34676), (170, 34742), (193, 34868),

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

Candidate Starts for Filuzino_45:

(Start: 24 @34250 has 65 MA's), (47, 34418), (52, 34439), (Start: 54 @34451 has 1 MA's), (67, 34484), (73, 34499), (76, 34517), (79, 34526), (83, 34562), (97, 34610), (102, 34628), (106, 34640), (110, 34667), (114, 34691), (116, 34703), (118, 34706), (121, 34727), (125, 34748), (126, 34760), (127, 34763), (139, 34847), (149, 34898), (159, 34955), (161, 34973), (164, 34994), (171, 35027), (173, 35045), (183, 35087), (185, 35114), (195, 35171), (202, 35201), (210, 35237), (212, 35240),

Gene: Firehouse51_47 Start: 36491, Stop: 37288, Start Num: 53

Candidate Starts for Firehouse51_47:

(Start: 53 @36491 has 12 MA's), (71, 36533), (79, 36569), (80, 36572), (88, 36626), (113, 36728), (114, 36743), (126, 36812), (132, 36860), (157, 36977), (163, 37028), (180, 37124), (197, 37229), (198, 37235), (209, 37277), (211, 37283),

Gene: FirstPlacePfu_34 Start: 27971, Stop: 28837, Start Num: 43

Candidate Starts for FirstPlacePfu_34:

(Start: 43 @27971 has 45 MA's), (68, 28052), (75, 28076), (78, 28085), (85, 28133), (113, 28241), (114, 28256), (130, 28367), (161, 28550), (171, 28604), (191, 28733), (199, 28775), (212, 28823),

Gene: Fishburne_34 Start: 27939, Stop: 28805, Start Num: 43

Candidate Starts for Fishburne_34:

(Start: 43 @27939 has 45 MA's), (68, 28020), (75, 28044), (78, 28053), (85, 28101), (113, 28209), (114, 28224), (130, 28335), (161, 28518), (171, 28572), (191, 28701), (199, 28743), (212, 28791),

Gene: Florinda_57 Start: 36157, Stop: 36951, Start Num: 53

Candidate Starts for Florinda_57:

(Start: 53 @36157 has 12 MA's), (71, 36199), (79, 36235), (80, 36238), (83, 36274), (101, 36334), (113, 36391), (114, 36406), (126, 36475), (132, 36523), (157, 36640), (163, 36691), (180, 36787), (197, 36892), (198, 36898), (209, 36940), (211, 36946),

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

Candidate Starts for Frankie_51:

(Start: 24 @36473 has 65 MA's), (47, 36641), (52, 36662), (Start: 54 @36674 has 1 MA's), (67, 36707), (73, 36722), (76, 36740), (79, 36749), (83, 36785), (97, 36833), (102, 36851), (106, 36863), (110, 36890), (114, 36914), (116, 36926), (118, 36929), (121, 36950), (125, 36971), (126, 36983), (127, 36986), (135, 37058), (139, 37070), (140, 37073), (148, 37115), (149, 37121), (156, 37151), (159, 37178), (164, 37217), (171, 37250), (173, 37268), (183, 37310), (185, 37337), (192, 37376), (195, 37394), (199, 37415), (202, 37424), (210, 37460), (215, 37469),

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

Candidate Starts for Fruitloop_46:

(Start: 24 @36116 has 65 MA's), (47, 36284), (52, 36305), (Start: 54 @36317 has 1 MA's), (67, 36350), (73, 36365), (76, 36383), (79, 36392), (83, 36428), (97, 36476), (102, 36494), (106, 36506), (110, 36533), (114, 36557), (116, 36569), (118, 36572), (121, 36593), (125, 36614), (126, 36626), (127, 36629), (135, 36701), (139, 36713), (149, 36764), (150, 36770), (159, 36821), (161, 36839), (164, 36860), (171, 36893), (173, 36911), (183, 36953), (185, 36980), (195, 37037), (202, 37067), (210, 37103), (212, 37106),

Gene: G4_33 Start: 24732, Stop: 25535, Start Num: 62

Candidate Starts for G4_33:

(Start: 62 @24732 has 4 MA's), (93, 24855), (95, 24858), (106, 24897), (110, 24924), (114, 24948), (120, 24984), (122, 25011), (126, 25044), (128, 25071), (129, 25092), (131, 25101), (133, 25104), (134, 25119), (135, 25122), (145, 25164), (149, 25194), (152, 25206), (158, 25239), (164, 25284), (181, 25374), (192, 25443), (205, 25491), (214, 25524),

Gene: GAL1_39 Start: 32334, Stop: 33173, Start Num: 48

Candidate Starts for GAL1_39:

(28, 32199), (34, 32229), (41, 32286), (48, 32334), (60, 32376), (71, 32403), (106, 32556), (110, 32583), (119, 32622), (123, 32652), (126, 32676), (140, 32757), (142, 32772), (143, 32775), (151, 32838), (172, 32961), (195, 33096), (196, 33099), (197, 33108),

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

Candidate Starts for GUmbie_45:

(Start: 24 @34760 has 65 MA's), (52, 34949), (Start: 54 @34961 has 1 MA's), (76, 35027), (79, 35036), (83, 35072), (102, 35138), (106, 35150), (110, 35177), (114, 35201), (118, 35216), (121, 35237), (125, 35258), (126, 35270), (127, 35273), (139, 35357), (148, 35402), (149, 35408), (156, 35438), (159, 35465), (161, 35483), (164, 35504), (171, 35537), (183, 35597), (185, 35624), (192, 35663), (195, 35681), (199, 35702), (202, 35711), (210, 35747), (215, 35756),

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

Candidate Starts for Gambino_49:

(Start: 64 @35195 has 17 MA's), (71, 35210), (91, 35312), (99, 35345), (110, 35390), (113, 35399), (114, 35414), (126, 35483), (142, 35579), (159, 35669), (193, 35861),

Gene: Gavriela_34 Start: 28196, Stop: 29059, Start Num: 43

Candidate Starts for Gavriela_34:

(Start: 43 @28196 has 45 MA's), (68, 28277), (75, 28301), (78, 28310), (85, 28358), (94, 28382), (113, 28463), (114, 28478), (130, 28589), (161, 28772), (171, 28826), (191, 28955), (199, 28997), (212, 29045),

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

Candidate Starts for GigiOuiOui_44:

(Start: 24 @34673 has 65 MA's), (52, 34862), (Start: 54 @34874 has 1 MA's), (76, 34940), (79, 34949), (83, 34985), (102, 35051), (106, 35063), (110, 35090), (114, 35114), (118, 35129), (121, 35150), (125, 35171), (126, 35183), (127, 35186), (139, 35270), (148, 35315), (149, 35321), (156, 35351), (159, 35378), (161, 35396), (164, 35417), (171, 35450), (183, 35510), (185, 35537), (192, 35576), (195, 35594), (199, 35615), (202, 35624), (210, 35660), (215, 35669),

Gene: Girafales_56 Start: 35966, Stop: 36760, Start Num: 53

Candidate Starts for Girafales_56:

(Start: 53 @35966 has 12 MA's), (71, 36008), (79, 36044), (80, 36047), (85, 36092), (113, 36200), (114, 36215), (115, 36224), (126, 36284), (132, 36332), (157, 36449), (163, 36500), (180, 36596), (197, 36701), (198, 36707), (209, 36749), (211, 36755),

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

Candidate Starts for Girr_48:

(Start: 24 @35732 has 65 MA's), (52, 35921), (Start: 54 @35933 has 1 MA's), (76, 35999), (79, 36008), (83, 36044), (102, 36110), (106, 36122), (110, 36149), (114, 36173), (118, 36188), (121, 36209), (125, 36230), (126, 36242), (127, 36245), (139, 36329), (148, 36374), (149, 36380), (156, 36410), (159, 36437), (161, 36455), (164, 36476), (171, 36509), (183, 36569), (185, 36596), (192, 36635), (195, 36653), (199, 36674), (202, 36683), (210, 36719), (215, 36728),

Gene: Glaske_34 Start: 28196, Stop: 29059, Start Num: 43

Candidate Starts for Glaske_34:

(Start: 43 @28196 has 45 MA's), (68, 28277), (75, 28301), (78, 28310), (85, 28358), (94, 28382), (113, 28463), (114, 28478), (130, 28589), (161, 28772), (171, 28826), (191, 28955), (199, 28997), (212, 29045),

Gene: GreaseLightnin_34 Start: 28179, Stop: 29045, Start Num: 43

Candidate Starts for GreaseLightnin_34:

(Start: 43 @28179 has 45 MA's), (75, 28284), (78, 28293), (85, 28341), (113, 28449), (114, 28464), (130, 28575), (161, 28758), (171, 28812), (191, 28941), (199, 28983), (212, 29031),

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

Candidate Starts for Grimmer_57:

(Start: 24 @37247 has 65 MA's), (52, 37436), (Start: 54 @37448 has 1 MA's), (73, 37496), (76, 37514), (79, 37523), (83, 37559), (102, 37625), (106, 37637), (110, 37664), (114, 37688), (118, 37703), (121, 37724), (125, 37745), (126, 37757), (127, 37760), (139, 37841), (148, 37886), (149, 37892), (159, 37949), (161, 37967), (164, 37988), (171, 38021), (173, 38039), (183, 38081), (185, 38108), (192, 38147), (195, 38165), (199, 38186), (210, 38231), (212, 38234),

Gene: HC_34 Start: 27658, Stop: 28527, Start Num: 43

Candidate Starts for HC_34:

(Start: 43 @27658 has 45 MA's), (75, 27766), (78, 27775), (85, 27823), (113, 27931), (114, 27946), (130, 28057), (161, 28240), (171, 28294), (191, 28423), (199, 28465), (212, 28513),

Gene: HUHilltop_34 Start: 27972, Stop: 28835, Start Num: 43

Candidate Starts for HUHilltop_34:

(Start: 43 @27972 has 45 MA's), (68, 28053), (75, 28077), (78, 28086), (81, 28113), (85, 28134), (110, 28230), (113, 28239), (114, 28254), (130, 28365), (161, 28548), (171, 28602), (199, 28773), (212, 28821),

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

Candidate Starts for Hamulus_48:

(Start: 24 @36115 has 65 MA's), (52, 36304), (Start: 54 @36316 has 1 MA's), (76, 36382), (79, 36391), (83, 36427), (102, 36493), (106, 36505), (110, 36532), (114, 36556), (118, 36571), (121, 36592), (125, 36613), (126, 36625), (127, 36628), (139, 36712), (148, 36757), (149, 36763), (156, 36793), (159, 36820), (161, 36838), (164, 36859), (171, 36892), (183, 36952), (185, 36979), (192, 37018), (195, 37036), (199, 37057), (202, 37066), (210, 37102), (215, 37111),

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

Candidate Starts for Harley_50:

(Start: 24 @35468 has 65 MA's), (52, 35657), (Start: 54 @35669 has 1 MA's), (76, 35735), (79, 35744), (83, 35780), (102, 35846), (106, 35858), (110, 35885), (114, 35909), (118, 35924), (121, 35945), (125, 35966), (126, 35978), (127, 35981), (139, 36065), (148, 36110), (149, 36116), (156, 36146), (159, 36173), (161, 36191), (164, 36212), (171, 36245), (183, 36305), (192, 36371), (195, 36389), (199, 36410), (202, 36419), (210, 36455), (215, 36464),

Gene: Island3_36 Start: 29775, Stop: 30644, Start Num: 43

Candidate Starts for Island3_36:

(Start: 43 @29775 has 45 MA's), (75, 29883), (78, 29892), (85, 29940), (113, 30048), (114, 30063), (130, 30174), (161, 30357), (171, 30411), (191, 30540), (199, 30582), (212, 30630),

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

Candidate Starts for Jalammah_48:

(25, 35311), (42, 35440), (Start: 64 @35515 has 17 MA's), (85, 35614), (89, 35626), (108, 35704), (111, 35716), (114, 35737), (115, 35746), (126, 35806), (142, 35902), (159, 35992), (193, 36184),

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

Candidate Starts for Jant_52:

(Start: 24 @37127 has 65 MA's), (47, 37295), (52, 37316), (Start: 54 @37328 has 1 MA's), (67, 37361), (73, 37376), (76, 37394), (79, 37403), (83, 37439), (97, 37487), (102, 37505), (106, 37517), (110, 37544), (114, 37568), (116, 37580), (118, 37583), (121, 37604), (125, 37625), (126, 37637), (127, 37640), (139, 37724), (148, 37769), (149, 37775), (159, 37832), (161, 37850), (164, 37871), (171, 37904), (173, 37922), (183, 37964), (185, 37991), (195, 38048), (202, 38078), (210, 38114), (212, 38117),

Gene: Jebeks_35 Start: 27924, Stop: 28790, Start Num: 43

Candidate Starts for Jebeks_35:

(Start: 43 @27924 has 45 MA's), (68, 28005), (75, 28029), (78, 28038), (81, 28065), (85, 28086), (113, 28194), (114, 28209), (130, 28320), (161, 28503), (171, 28557), (191, 28686), (199, 28728), (212, 28776),

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

Candidate Starts for Job42_48:

(Start: 24 @36721 has 65 MA's), (52, 36910), (Start: 54 @36922 has 1 MA's), (76, 36988), (79, 36997), (83, 37033), (102, 37099), (106, 37111), (110, 37138), (114, 37162), (118, 37177), (121, 37198), (125, 37219), (126, 37231), (127, 37234), (139, 37318), (148, 37363), (149, 37369), (156, 37399), (159, 37426), (161, 37444), (164, 37465), (171, 37498), (183, 37558), (185, 37585), (192, 37624), (195, 37642), (199, 37663), (202, 37672), (210, 37708), (215, 37717),

Gene: Jung_33 Start: 27903, Stop: 28766, Start Num: 43

Candidate Starts for Jung_33:

(Start: 43 @27903 has 45 MA's), (68, 27984), (75, 28008), (78, 28017), (85, 28065), (94, 28089), (113, 28170), (114, 28185), (130, 28296), (161, 28479), (171, 28533), (191, 28662), (199, 28704), (212,

28752),

Gene: Juniormint_34 Start: 27975, Stop: 28841, Start Num: 43

Candidate Starts for Juniormint_34:

(Start: 43 @27975 has 45 MA's), (68, 28056), (75, 28080), (78, 28089), (81, 28116), (85, 28137), (113, 28245), (114, 28260), (130, 28371), (161, 28554), (171, 28608), (191, 28737), (199, 28779), (212, 28827),

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

Candidate Starts for KappaFarmDelta_46:

(25, 32939), (42, 33065), (Start: 64 @33140 has 17 MA's), (71, 33155), (90, 33254), (94, 33266), (105, 33308), (110, 33335), (125, 33416), (126, 33428), (142, 33524), (159, 33614), (170, 33680), (193, 33806),

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

Candidate Starts for Karhdo_46:

(Start: 24 @35555 has 65 MA's), (52, 35744), (Start: 54 @35756 has 1 MA's), (76, 35822), (79, 35831), (83, 35867), (102, 35933), (106, 35945), (110, 35972), (114, 35996), (118, 36011), (121, 36032), (125, 36053), (126, 36065), (127, 36068), (139, 36152), (148, 36197), (149, 36203), (156, 36233), (159, 36260), (161, 36278), (164, 36299), (171, 36332), (183, 36392), (185, 36419), (192, 36458), (195, 36476), (199, 36497), (202, 36506), (210, 36542), (215, 36551),

Gene: Kari_34 Start: 27936, Stop: 28802, Start Num: 43

Candidate Starts for Kari_34:

(Start: 43 @27936 has 45 MA's), (68, 28017), (75, 28041), (78, 28050), (85, 28098), (113, 28206), (114, 28221), (130, 28332), (161, 28515), (171, 28569), (191, 28698), (199, 28740), (212, 28788),

Gene: KilKor_34 Start: 28196, Stop: 29059, Start Num: 43

Candidate Starts for KilKor_34:

(Start: 43 @28196 has 45 MA's), (68, 28277), (75, 28301), (78, 28310), (85, 28358), (94, 28382), (113, 28463), (114, 28478), (130, 28589), (161, 28772), (171, 28826), (191, 28955), (199, 28997), (212, 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), (14, 35052), (15, 35061), (Start: 24 @35226 has 65 MA's), (52, 35415), (Start: 54 @35427 has 1 MA's), (76, 35493), (79, 35502), (83, 35538), (102, 35604), (106, 35616), (110, 35643), (114, 35667), (118, 35682), (121, 35703), (125, 35724), (126, 35736), (127, 35739), (139, 35823), (148, 35868), (149, 35874), (150, 35880), (156, 35904), (159, 35931), (161, 35949), (164, 35970), (171, 36003), (183, 36063), (185, 36090), (192, 36129), (195, 36147), (199, 36168), (202, 36177), (210, 36213), (215, 36222),

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

Candidate Starts for KristaRAM_47:

(Start: 24 @36438 has 65 MA's), (47, 36606), (52, 36627), (Start: 54 @36639 has 1 MA's), (67, 36672), (73, 36687), (76, 36705), (79, 36714), (83, 36750), (97, 36798), (102, 36816), (106, 36828), (110, 36855), (114, 36879), (116, 36891), (118, 36894), (121, 36915), (125, 36936), (126, 36948), (127, 36951), (139, 37035), (148, 37080), (149, 37086), (156, 37116), (159, 37143), (161, 37161), (164, 37182), (171, 37215), (173, 37233), (183, 37275), (185, 37302), (195, 37359), (202, 37389), (210, 37425), (212, 37428),

Gene: Ksquared_34 Start: 27953, Stop: 28819, Start Num: 43

Candidate Starts for Ksquared_34:

(Start: 43 @27953 has 45 MA's), (68, 28034), (75, 28058), (78, 28067), (81, 28094), (85, 28115), (113, 28223), (114, 28238), (130, 28349), (161, 28532), (171, 28586), (191, 28715), (199, 28757), (212, 28805),

Gene: Kuwabara_52 Start: 36557, Stop: 37444, Start Num: 39

Candidate Starts for Kuwabara_52:

(30, 36500), (31, 36503), (Start: 39 @36557 has 1 MA's), (Start: 53 @36629 has 12 MA's), (60, 36644), (71, 36671), (74, 36695), (110, 36854), (114, 36878), (135, 37013), (141, 37037), (151, 37109), (157, 37130), (163, 37181), (195, 37367), (196, 37370),

Gene: Langerak_34 Start: 27955, Stop: 28818, Start Num: 43

Candidate Starts for Langerak_34:

(Start: 43 @27955 has 45 MA's), (68, 28036), (75, 28060), (78, 28069), (81, 28096), (85, 28117), (110, 28213), (113, 28222), (114, 28237), (115, 28246), (130, 28348), (161, 28531), (171, 28585), (191, 28714), (199, 28756), (212, 28804),

Gene: LastJedi_41 Start: 31571, Stop: 32380, Start Num: 46

Candidate Starts for LastJedi_41:

(Start: 46 @31571 has 1 MA's), (Start: 53 @31601 has 12 MA's), (70, 31625), (71, 31628), (79, 31664), (80, 31667), (85, 31712), (113, 31820), (114, 31835), (126, 31904), (132, 31952), (157, 32069), (163, 32120), (180, 32216), (197, 32321), (198, 32327), (209, 32369), (211, 32375),

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

Candidate Starts for Latretium_50:

(Start: 24 @36344 has 65 MA's), (47, 36512), (52, 36533), (Start: 54 @36545 has 1 MA's), (76, 36611), (79, 36620), (83, 36656), (102, 36722), (104, 36728), (106, 36734), (110, 36761), (116, 36797), (118, 36800), (121, 36821), (125, 36842), (126, 36854), (127, 36857), (139, 36938), (148, 36983), (149, 36989), (150, 36995), (156, 37019), (159, 37046), (161, 37064), (164, 37085), (171, 37118), (173, 37136), (183, 37178), (192, 37244), (195, 37262), (199, 37283), (210, 37328),

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

Candidate Starts for LilMoolah_46:

(16, 34966), (Start: 24 @35122 has 65 MA's), (Start: 54 @35323 has 1 MA's), (76, 35389), (79, 35398), (83, 35434), (102, 35500), (104, 35506), (106, 35512), (110, 35539), (116, 35575), (118, 35578), (121, 35599), (125, 35620), (126, 35632), (127, 35635), (139, 35719), (148, 35764), (149, 35770), (150, 35776), (156, 35800), (159, 35827), (161, 35845), (164, 35866), (171, 35899), (183, 35959), (185, 35986), (192, 36025), (195, 36043), (199, 36064), (210, 36109), (215, 36118),

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

Candidate Starts for LittleShirley_47:

(Start: 24 @36153 has 65 MA's), (47, 36321), (52, 36342), (Start: 54 @36354 has 1 MA's), (76, 36420), (79, 36429), (83, 36465), (102, 36531), (110, 36570), (111, 36573), (114, 36594), (118, 36609), (121, 36630), (125, 36651), (126, 36663), (127, 36666), (139, 36750), (148, 36795), (149, 36801), (156, 36831), (159, 36858), (161, 36876), (164, 36897), (171, 36930), (173, 36948), (183, 36990), (185, 37017), (192, 37056), (195, 37074), (199, 37095), (202, 37104), (210, 37140), (215, 37149),

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), (14, 33998), (15, 34007), (Start: 24 @34172 has 65 MA's), (52, 34364), (Start: 54 @34376 has 1 MA's), (76, 34442), (79, 34451), (83, 34487), (102, 34553), (106, 34565), (110, 34592), (114, 34616), (118, 34631), (121, 34652), (125, 34673), (126, 34685), (127, 34688), (139, 34772), (148, 34817), (149, 34823), (150, 34829), (156, 34853), (159, 34880), (161, 34898), (164, 34919), (171, 34952), (183, 35012), (185, 35039), (192,

35078), (195, 35096), (199, 35117), (202, 35126), (210, 35162), (215, 35171),

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

Candidate Starts for Madiba_43:

(Start: 24 @33464 has 65 MA's), (52, 33653), (Start: 54 @33665 has 1 MA's), (76, 33731), (79, 33740), (83, 33776), (102, 33842), (106, 33854), (110, 33881), (114, 33905), (118, 33920), (121, 33941), (125, 33962), (126, 33974), (127, 33977), (139, 34061), (148, 34106), (149, 34112), (156, 34142), (159, 34169), (161, 34187), (164, 34208), (171, 34241), (183, 34301), (185, 34328), (192, 34367), (195, 34385), (199, 34406), (202, 34415), (210, 34451), (215, 34460),

Gene: Majeke_34 Start: 27977, Stop: 28843, Start Num: 43

Candidate Starts for Majeke_34:

(Start: 43 @27977 has 45 MA's), (68, 28058), (75, 28082), (78, 28091), (85, 28139), (113, 28247), (114, 28262), (130, 28373), (161, 28556), (171, 28610), (191, 28739), (199, 28781), (212, 28829),

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

Candidate Starts for Malachai_44:

(22, 35065), (29, 35119), (35, 35164), (42, 35230), (Start: 64 @35305 has 17 MA's), (71, 35320), (80, 35359), (89, 35416), (108, 35494), (111, 35506), (114, 35527), (126, 35596), (142, 35692), (159, 35782), (193, 35974),

Gene: Malithi_34 Start: 27862, Stop: 28728, Start Num: 43

Candidate Starts for Malithi_34:

(Start: 43 @27862 has 45 MA's), (68, 27943), (75, 27967), (78, 27976), (81, 28003), (85, 28024), (113, 28132), (114, 28147), (130, 28258), (161, 28441), (171, 28495), (199, 28666), (212, 28714),

Gene: Mangethe_34 Start: 27977, Stop: 28843, Start Num: 43

Candidate Starts for Mangethe_34:

(Start: 43 @27977 has 45 MA's), (68, 28058), (75, 28082), (78, 28091), (85, 28139), (113, 28247), (114, 28262), (130, 28373), (161, 28556), (171, 28610), (191, 28739), (199, 28781), (212, 28829),

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

Candidate Starts for Mantra_44:

(Start: 24 @34639 has 65 MA's), (52, 34828), (Start: 54 @34840 has 1 MA's), (76, 34906), (79, 34915), (83, 34951), (102, 35017), (106, 35029), (110, 35056), (114, 35080), (118, 35095), (121, 35116), (125, 35137), (126, 35149), (127, 35152), (139, 35236), (148, 35281), (149, 35287), (156, 35317), (159, 35344), (161, 35362), (164, 35383), (171, 35416), (183, 35476), (185, 35503), (192, 35542), (195, 35560), (199, 35581), (202, 35590), (210, 35626), (215, 35635),

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

Candidate Starts for Marker_48:

(Start: 24 @35024 has 65 MA's), (47, 35192), (52, 35213), (Start: 54 @35225 has 1 MA's), (76, 35291), (79, 35300), (83, 35336), (102, 35402), (110, 35441), (111, 35444), (116, 35477), (118, 35480), (121, 35501), (125, 35522), (126, 35534), (127, 35537), (139, 35618), (148, 35663), (149, 35669), (156, 35699), (159, 35726), (161, 35744), (162, 35747), (164, 35765), (171, 35798), (173, 35816), (183, 35858), (185, 35885), (192, 35924), (195, 35942), (199, 35963), (202, 35972), (210, 36008), (215, 36017),

Gene: Megiddo_34 Start: 28196, Stop: 29059, Start Num: 43

Candidate Starts for Megiddo_34:

(Start: 43 @28196 has 45 MA's), (68, 28277), (75, 28301), (78, 28310), (85, 28358), (94, 28382), (113, 28463), (114, 28478), (130, 28589), (161, 28772), (171, 28826), (191, 28955), (199, 28997), (212, 29045),

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

Candidate Starts for Mellie_43:

(19, 32739), (29, 32838), (42, 32949), (Start: 64 @33024 has 17 MA's), (85, 33123), (113, 33231), (114, 33246), (126, 33315), (142, 33411), (159, 33501), (161, 33519), (193, 33693),

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

Candidate Starts for Min1_10:

(51, 3686), (Start: 66 @3734 has 3 MA's), (70, 3743), (72, 3749), (76, 3773), (81, 3809), (99, 3881), (112, 3935), (141, 4118), (162, 4235), (183, 4346), (194, 4418), (204, 4466),

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

Candidate Starts for MissRona_47:

(Start: 64 @35196 has 17 MA's), (71, 35211), (91, 35313), (99, 35346), (110, 35391), (113, 35400), (114, 35415), (126, 35484), (142, 35580), (159, 35670), (193, 35862),

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

Candidate Starts for MisterCuddles_47:

(Start: 24 @35732 has 65 MA's), (52, 35921), (Start: 54 @35933 has 1 MA's), (76, 35999), (79, 36008), (83, 36044), (102, 36110), (106, 36122), (110, 36149), (114, 36173), (118, 36188), (121, 36209), (125, 36230), (126, 36242), (127, 36245), (139, 36329), (148, 36374), (149, 36380), (156, 36410), (159, 36437), (161, 36455), (164, 36476), (171, 36509), (183, 36569), (185, 36596), (192, 36635), (195, 36653), (199, 36674), (202, 36683), (210, 36719), (215, 36728),

Gene: MortyNRick_52 Start: 37859, Stop: 38608, Start Num: 59

Candidate Starts for MortyNRick_52:

(Start: 59 @37859 has 8 MA's), (79, 37925), (80, 37928), (85, 37973), (100, 38024), (105, 38042), (114, 38093), (136, 38231), (153, 38309), (179, 38453), (197, 38546),

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

Candidate Starts for Murp_47:

(42, 36691), (Start: 64 @36766 has 17 MA's), (71, 36781), (90, 36880), (94, 36892), (105, 36934), (110, 36961), (125, 37042), (126, 37054), (142, 37150), (159, 37240), (170, 37306), (193, 37432),

Gene: Nazo_38 Start: 30066, Stop: 30869, Start Num: 50

Candidate Starts for Nazo_38:

(Start: 50 @30066 has 4 MA's), (80, 30168), (83, 30204), (126, 30396), (138, 30492), (157, 30576), (166, 30642), (167, 30645), (171, 30669), (178, 30723), (186, 30762), (189, 30783), (190, 30786), (206, 30855),

Gene: Necropolis_34 Start: 27936, Stop: 28802, Start Num: 43

Candidate Starts for Necropolis_34:

(Start: 43 @27936 has 45 MA's), (68, 28017), (75, 28041), (78, 28050), (85, 28098), (113, 28206), (114, 28221), (130, 28332), (161, 28515), (171, 28569), (191, 28698), (199, 28740), (212, 28788),

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

Candidate Starts for Nivrat_45:

(16, 34839), (Start: 24 @34995 has 65 MA's), (Start: 54 @35196 has 1 MA's), (76, 35262), (79, 35271), (83, 35307), (102, 35373), (104, 35379), (106, 35385), (110, 35412), (116, 35448), (118, 35451), (121, 35472), (125, 35493), (126, 35505), (127, 35508), (139, 35592), (148, 35637), (149, 35643), (150, 35649), (156, 35673), (159, 35700), (161, 35718), (164, 35739), (171, 35772), (183, 35832), (185, 35859), (192, 35898), (195, 35916), (199, 35937), (210, 35982), (215, 35991),

Gene: Ogotogo_48 Start: 34646, Stop: 35650, Start Num: 24

Candidate Starts for Ogotogo_48:

(Start: 24 @34646 has 65 MA's), (47, 34814), (52, 34835), (Start: 54 @34847 has 1 MA's), (76, 34913), (79, 34922), (83, 34958), (102, 35024), (110, 35063), (111, 35066), (114, 35087), (118, 35102), (121, 35123), (125, 35144), (126, 35156), (127, 35159), (139, 35243), (149, 35294), (150, 35300), (159, 35351), (161, 35369), (164, 35390), (171, 35423), (173, 35441), (183, 35483), (185, 35510), (195, 35567), (202, 35597), (210, 35633), (212, 35636),

Gene: Oregano_48 Start: 33939, Stop: 34688, Start Num: 59

Candidate Starts for Oregano_48:

(33, 33786), (45, 33894), (Start: 59 @33939 has 8 MA's), (71, 33969), (76, 33996), (79, 34005), (105, 34122), (110, 34149), (114, 34173), (119, 34188), (123, 34218), (135, 34308), (136, 34311), (179, 34533),

Gene: P1201_08 Start: 2597, Stop: 3520, Start Num: 37

Candidate Starts for P1201_08:

(37, 2597), (38, 2600), (44, 2642), (55, 2690), (79, 2765), (83, 2804), (87, 2816), (104, 2882), (110, 2924), (115, 2957), (126, 3017), (154, 3185), (166, 3263), (187, 3398), (203, 3473), (211, 3509), (213, 3512),

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

Candidate Starts for PMC_42:

(Start: 24 @34542 has 65 MA's), (52, 34731), (Start: 54 @34743 has 1 MA's), (76, 34809), (79, 34818), (83, 34854), (102, 34920), (106, 34932), (110, 34959), (114, 34983), (118, 34998), (121, 35019), (125, 35040), (126, 35052), (127, 35055), (139, 35139), (148, 35184), (149, 35190), (156, 35220), (159, 35247), (161, 35265), (164, 35286), (171, 35319), (183, 35379), (192, 35445), (195, 35463), (199, 35484), (202, 35493), (210, 35529), (215, 35538),

Gene: Pepperoni_38 Start: 29786, Stop: 30508, Start Num: 70

Candidate Starts for Pepperoni_38:

(Start: 59 @29759 has 8 MA's), (70, 29786), (71, 29789), (80, 29828), (85, 29873), (100, 29924), (105, 29942), (114, 29993), (136, 30131), (146, 30182), (179, 30353),

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

Candidate Starts for Phalconet_46:

(Start: 24 @34873 has 65 MA's), (47, 35041), (52, 35062), (Start: 54 @35074 has 1 MA's), (67, 35107), (73, 35122), (76, 35140), (79, 35149), (83, 35185), (97, 35233), (102, 35251), (106, 35263), (110, 35290), (114, 35314), (116, 35326), (118, 35329), (121, 35350), (125, 35371), (126, 35383), (127, 35386), (135, 35458), (139, 35470), (149, 35521), (159, 35578), (161, 35596), (164, 35617), (171, 35650), (173, 35668), (183, 35710), (192, 35776), (195, 35794), (199, 35815), (210, 35860), (215, 35869),

Gene: Phalm_34 Start: 28196, Stop: 29059, Start Num: 43

Candidate Starts for Phalm_34:

(Start: 43 @28196 has 45 MA's), (68, 28277), (75, 28301), (78, 28310), (85, 28358), (94, 28382), (113, 28463), (114, 28478), (130, 28589), (161, 28772), (171, 28826), (191, 28955), (199, 28997), (212, 29045),

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

Candidate Starts for Phasih_45:

(16, 34929), (Start: 24 @35085 has 65 MA's), (Start: 54 @35286 has 1 MA's), (76, 35352), (79, 35361), (83, 35397), (102, 35463), (106, 35475), (110, 35502), (114, 35526), (118, 35541), (121, 35562), (125, 35583), (126, 35595), (127, 35598), (139, 35682), (148, 35727), (149, 35733), (156, 35763), (159,

35790), (161, 35808), (164, 35829), (171, 35862), (183, 35922), (192, 35988), (195, 36006), (199, 36027), (202, 36036), (210, 36072), (215, 36081),

Gene: Phayonce_36 Start: 29962, Stop: 30771, Start Num: 50

Candidate Starts for Phayonce_36:

(Start: 50 @29962 has 4 MA's), (76, 30052), (77, 30058), (126, 30298), (138, 30394), (157, 30478), (166, 30544), (167, 30547), (171, 30571), (186, 30664), (189, 30685), (206, 30757),

Gene: Phegasus_34 Start: 27944, Stop: 28810, Start Num: 43

Candidate Starts for Phegasus_34:

(Start: 43 @27944 has 45 MA's), (68, 28025), (75, 28049), (78, 28058), (85, 28106), (113, 28214), (114, 28229), (130, 28340), (161, 28523), (171, 28577), (191, 28706), (199, 28748), (212, 28796),

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

Candidate Starts for PhesterPhotato_49:

(Start: 24 @35828 has 65 MA's), (47, 35996), (52, 36017), (Start: 54 @36029 has 1 MA's), (67, 36062), (73, 36077), (76, 36095), (79, 36104), (83, 36140), (97, 36188), (102, 36206), (106, 36218), (110, 36245), (114, 36269), (116, 36281), (118, 36284), (121, 36305), (125, 36326), (126, 36338), (127, 36341), (135, 36413), (139, 36425), (149, 36476), (159, 36533), (161, 36551), (164, 36572), (171, 36605), (173, 36623), (183, 36665), (192, 36731), (195, 36749), (199, 36770), (210, 36815), (215, 36824),

Gene: Phineas_34 Start: 28307, Stop: 29173, Start Num: 43

Candidate Starts for Phineas_34:

(Start: 43 @28307 has 45 MA's), (68, 28388), (75, 28412), (78, 28421), (85, 28469), (113, 28577), (114, 28592), (130, 28703), (161, 28886), (171, 28940), (191, 29069), (199, 29111), (212, 29159),

Gene: Phistory_58 Start: 36964, Stop: 37761, Start Num: 58

Candidate Starts for Phistory_58:

(Start: 58 @36964 has 1 MA's), (71, 36991), (85, 37075), (96, 37111), (102, 37132), (103, 37138), (109, 37192), (114, 37219), (126, 37288), (134, 37357), (142, 37390), (184, 37633), (193, 37675), (203, 37720),

Gene: PhorbesPhlower_43 Start: 29950, Stop: 30699, Start Num: 59

Candidate Starts for PhorbesPhlower_43:

(Start: 59 @29950 has 8 MA's), (70, 29977), (71, 29980), (80, 30019), (85, 30064), (100, 30115), (105, 30133), (114, 30184), (136, 30322), (146, 30373), (179, 30544),

Gene: PhriskyACE_45 Start: 34290, Stop: 35057, Start Num: 57

Candidate Starts for PhriskyACE_45:

(Start: 57 @34290 has 1 MA's), (70, 34317), (71, 34320), (76, 34347), (84, 34404), (91, 34422), (113, 34512), (114, 34527), (117, 34539), (133, 34650), (157, 34764), (159, 34788), (161, 34806), (165, 34827), (166, 34830), (167, 34833), (171, 34857), (177, 34908), (178, 34911),

Gene: Pippy_45 Start: 33164, Stop: 33943, Start Num: 53

Candidate Starts for Pippy_45:

(Start: 46 @33134 has 1 MA's), (Start: 53 @33164 has 12 MA's), (70, 33188), (71, 33191), (79, 33227), (80, 33230), (85, 33275), (113, 33383), (114, 33398), (126, 33467), (132, 33515), (157, 33632), (163, 33683), (180, 33779), (197, 33884), (198, 33890), (209, 33932), (211, 33938),

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

Candidate Starts for Poenanya_47:

(Start: 24 @36071 has 65 MA's), (52, 36260), (Start: 54 @36272 has 1 MA's), (76, 36338), (79, 36347), (83, 36383), (102, 36449), (106, 36461), (110, 36488), (114, 36512), (118, 36527), (121, 36548), (125, 36569), (126, 36581), (127, 36584), (139, 36668), (148, 36713), (149, 36719), (156, 36749), (159, 36776), (161, 36794), (164, 36815), (171, 36848), (183, 36908), (185, 36935), (192, 36974), (195, 36992), (199, 37013), (202, 37022), (210, 37058), (215, 37067),

Gene: Polkaroo_34 Start: 27953, Stop: 28816, Start Num: 43

Candidate Starts for Polkaroo_34:

(Start: 43 @27953 has 45 MA's), (68, 28034), (75, 28058), (78, 28067), (85, 28115), (94, 28139), (113, 28220), (114, 28235), (130, 28346), (161, 28529), (171, 28583), (191, 28712), (199, 28754), (212, 28802),

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

Candidate Starts for Pollywog_46:

(Start: 24 @35249 has 65 MA's), (52, 35438), (Start: 54 @35450 has 1 MA's), (76, 35516), (79, 35525), (83, 35561), (102, 35627), (106, 35639), (110, 35666), (114, 35690), (118, 35705), (121, 35726), (125, 35747), (126, 35759), (127, 35762), (139, 35846), (148, 35891), (149, 35897), (156, 35927), (159, 35954), (161, 35972), (164, 35993), (171, 36026), (183, 36086), (192, 36152), (195, 36170), (199, 36191), (202, 36200), (210, 36236), (215, 36245),

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

Candidate Starts for PopTart_43:

(Start: 24 @34554 has 65 MA's), (47, 34722), (52, 34743), (Start: 54 @34755 has 1 MA's), (67, 34788), (73, 34803), (76, 34821), (79, 34830), (83, 34866), (97, 34914), (102, 34932), (106, 34944), (110, 34971), (114, 34995), (116, 35007), (118, 35010), (121, 35031), (125, 35052), (126, 35064), (127, 35067), (135, 35139), (139, 35151), (148, 35196), (149, 35202), (156, 35232), (159, 35259), (161, 35277), (162, 35280), (164, 35298), (171, 35331), (173, 35349), (183, 35391), (192, 35457), (195, 35475), (199, 35496), (210, 35541),

Gene: Purky_41 Start: 30689, Stop: 31480, Start Num: 50

Candidate Starts for Purky_41:

(Start: 50 @30689 has 4 MA's), (80, 30788), (83, 30824), (110, 30923), (126, 31016), (157, 31196), (161, 31238), (166, 31262), (167, 31265), (171, 31289), (177, 31340), (178, 31343), (186, 31382), (189, 31403), (200, 31454),

Gene: Pygmy_36 Start: 29778, Stop: 30644, Start Num: 43

Candidate Starts for Pygmy_36:

(Start: 43 @29778 has 45 MA's), (68, 29859), (75, 29883), (78, 29892), (81, 29919), (85, 29940), (113, 30048), (114, 30063), (130, 30174), (161, 30357), (171, 30411), (199, 30582), (212, 30630),

Gene: QueenHazel_32 Start: 27811, Stop: 28680, Start Num: 43

Candidate Starts for QueenHazel_32:

(Start: 43 @27811 has 45 MA's), (75, 27919), (78, 27928), (85, 27976), (113, 28084), (114, 28099), (130, 28210), (161, 28393), (171, 28447), (191, 28576), (199, 28618), (212, 28666),

Gene: Quico_55 Start: 35977, Stop: 36771, Start Num: 53

Candidate Starts for Quico_55:

(Start: 53 @35977 has 12 MA's), (71, 36019), (79, 36055), (80, 36058), (83, 36094), (101, 36154), (113, 36211), (114, 36226), (126, 36295), (132, 36343), (157, 36460), (163, 36511), (180, 36607), (197, 36712), (198, 36718), (209, 36760), (211, 36766),

Gene: REQ2_43 Start: 33255, Stop: 34112, Start Num: 41

Candidate Starts for REQ2_43:

(41, 33255), (Start: 53 @33318 has 12 MA's), (56, 33324), (71, 33360), (110, 33540), (117, 33576), (126, 33633), (135, 33699), (154, 33783), (195, 34029), (196, 34032),

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

Candidate Starts for RedBird_44:

(Start: 24 @34882 has 65 MA's), (52, 35071), (Start: 54 @35083 has 1 MA's), (76, 35149), (79, 35158), (83, 35194), (102, 35260), (106, 35272), (110, 35299), (114, 35323), (118, 35338), (121, 35359), (125, 35380), (126, 35392), (127, 35395), (139, 35479), (148, 35524), (149, 35530), (156, 35560), (159, 35587), (161, 35605), (164, 35626), (171, 35659), (183, 35719), (185, 35746), (192, 35785), (195, 35803), (199, 35824), (202, 35833), (210, 35869), (215, 35878),

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

Candidate Starts for Rockne_45:

(Start: 24 @34542 has 65 MA's), (52, 34731), (Start: 54 @34743 has 1 MA's), (76, 34809), (79, 34818), (83, 34854), (102, 34920), (106, 34932), (110, 34959), (114, 34983), (118, 34998), (121, 35019), (125, 35040), (126, 35052), (127, 35055), (139, 35139), (148, 35184), (149, 35190), (156, 35220), (159, 35247), (161, 35265), (164, 35286), (171, 35319), (183, 35379), (192, 35445), (195, 35463), (199, 35484), (202, 35493), (210, 35529), (215, 35538),

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

Candidate Starts for RockyHorror_48:

(16, 34787), (Start: 24 @34943 has 65 MA's), (Start: 54 @35144 has 1 MA's), (76, 35210), (79, 35219), (83, 35255), (102, 35321), (106, 35333), (110, 35360), (114, 35384), (118, 35399), (121, 35420), (125, 35441), (126, 35453), (127, 35456), (139, 35540), (148, 35585), (149, 35591), (156, 35621), (159, 35648), (161, 35666), (164, 35687), (171, 35720), (183, 35780), (192, 35846), (195, 35864), (199, 35885), (202, 35894), (210, 35930), (215, 35939),

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

Candidate Starts for Ruby_46:

(Start: 24 @35733 has 65 MA's), (52, 35922), (Start: 54 @35934 has 1 MA's), (76, 36000), (79, 36009), (83, 36045), (102, 36111), (106, 36123), (110, 36150), (114, 36174), (118, 36189), (121, 36210), (125, 36231), (126, 36243), (127, 36246), (139, 36330), (148, 36375), (149, 36381), (156, 36411), (159, 36438), (161, 36456), (164, 36477), (171, 36510), (183, 36570), (185, 36597), (192, 36636), (195, 36654), (199, 36675), (202, 36684), (210, 36720), (215, 36729),

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

Candidate Starts for Samba_44:

(29, 35228), (42, 35339), (Start: 64 @35414 has 17 MA's), (71, 35429), (81, 35492), (99, 35564), (110, 35609), (113, 35618), (114, 35633), (126, 35702), (142, 35798), (159, 35888), (193, 36080),

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

Candidate Starts for SassyB_43:

(Start: 24 @34554 has 65 MA's), (47, 34722), (52, 34743), (Start: 54 @34755 has 1 MA's), (67, 34788), (73, 34803), (76, 34821), (79, 34830), (83, 34866), (97, 34914), (102, 34932), (106, 34944), (110, 34971), (114, 34995), (116, 35007), (118, 35010), (121, 35031), (125, 35052), (126, 35064), (127, 35067), (135, 35139), (139, 35151), (148, 35196), (149, 35202), (156, 35232), (159, 35259), (161, 35277), (162, 35280), (164, 35298), (171, 35331), (173, 35349), (183, 35391), (192, 35457), (195, 35475), (199, 35496), (210, 35541),

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

Candidate Starts for Seagreen_48:

(Start: 24 @35285 has 65 MA's), (47, 35453), (52, 35474), (Start: 54 @35486 has 1 MA's), (67, 35519), (76, 35552), (79, 35561), (83, 35597), (102, 35663), (110, 35702), (111, 35705), (116, 35738), (118,

35741), (121, 35762), (125, 35783), (126, 35795), (127, 35798), (139, 35879), (148, 35924), (149, 35930), (156, 35960), (159, 35987), (161, 36005), (162, 36008), (164, 36026), (171, 36059), (173, 36077), (183, 36119), (192, 36185), (195, 36203), (199, 36224), (210, 36269),

Gene: Shipwreck_36 Start: 29753, Stop: 30619, Start Num: 43

Candidate Starts for Shipwreck_36:

(Start: 43 @29753 has 45 MA's), (68, 29834), (75, 29858), (78, 29867), (81, 29894), (85, 29915), (113, 30023), (114, 30038), (130, 30149), (161, 30332), (171, 30386), (199, 30557), (212, 30605),

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

Candidate Starts for ShroomBoi_47:

(Start: 24 @35208 has 65 MA's), (47, 35376), (52, 35397), (Start: 54 @35409 has 1 MA's), (67, 35442), (73, 35457), (76, 35475), (79, 35484), (83, 35520), (97, 35568), (102, 35586), (106, 35598), (110, 35625), (114, 35649), (116, 35661), (118, 35664), (121, 35685), (125, 35706), (126, 35718), (127, 35721), (139, 35805), (148, 35850), (149, 35856), (156, 35886), (159, 35913), (161, 35931), (164, 35952), (171, 35985), (183, 36045), (195, 36129), (199, 36150), (202, 36159), (210, 36195), (215, 36204),

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

Candidate Starts for SiSi_47:

(Start: 24 @35103 has 65 MA's), (52, 35292), (Start: 54 @35304 has 1 MA's), (76, 35370), (79, 35379), (83, 35415), (102, 35481), (106, 35493), (110, 35520), (114, 35544), (118, 35559), (121, 35580), (125, 35601), (126, 35613), (127, 35616), (139, 35700), (148, 35745), (149, 35751), (156, 35781), (159, 35808), (161, 35826), (164, 35847), (171, 35880), (183, 35940), (185, 35967), (192, 36006), (195, 36024), (199, 36045), (202, 36054), (210, 36090), (215, 36099),

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

Candidate Starts for SimranZ1_47:

(Start: 24 @34553 has 65 MA's), (52, 34742), (Start: 54 @34754 has 1 MA's), (76, 34820), (79, 34829), (83, 34865), (102, 34931), (106, 34943), (110, 34970), (114, 34994), (118, 35009), (121, 35030), (125, 35051), (126, 35063), (127, 35066), (139, 35147), (148, 35192), (149, 35198), (150, 35204), (156, 35228), (159, 35255), (164, 35294), (171, 35327), (173, 35345), (183, 35387), (185, 35414), (192, 35453), (195, 35471), (199, 35492), (202, 35501), (210, 35537), (215, 35546),

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

Candidate Starts for Slim_48:

(Start: 24 @36252 has 65 MA's), (52, 36441), (Start: 54 @36453 has 1 MA's), (76, 36519), (79, 36528), (83, 36564), (102, 36630), (106, 36642), (110, 36669), (114, 36693), (118, 36708), (121, 36729), (125, 36750), (126, 36762), (127, 36765), (139, 36849), (148, 36894), (149, 36900), (156, 36930), (159, 36957), (161, 36975), (164, 36996), (171, 37029), (173, 37047), (183, 37089), (185, 37116), (192, 37155), (195, 37173), (199, 37194), (202, 37203), (210, 37239), (215, 37248),

Gene: Sonah_34 Start: 27925, Stop: 28791, Start Num: 43

Candidate Starts for Sonah_34:

(Start: 43 @27925 has 45 MA's), (68, 28006), (75, 28030), (78, 28039), (81, 28066), (85, 28087), (113, 28195), (114, 28210), (130, 28321), (161, 28504), (171, 28558), (191, 28687), (199, 28729), (212, 28777),

Gene: Squirty_40 Start: 32337, Stop: 33116, Start Num: 53

Candidate Starts for Squirty_40:

(Start: 46 @32307 has 1 MA's), (Start: 53 @32337 has 12 MA's), (70, 32361), (71, 32364), (79, 32400), (80, 32403), (85, 32448), (113, 32556), (114, 32571), (126, 32640), (132, 32688), (157, 32805), (163, 32856), (180, 32952), (197, 33057), (198, 33063), (209, 33105), (211, 33111),

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

Candidate Starts for Stap_46:

(Start: 24 @34844 has 65 MA's), (52, 35033), (Start: 54 @35045 has 1 MA's), (76, 35111), (79, 35120), (83, 35156), (102, 35222), (106, 35234), (110, 35261), (114, 35285), (118, 35300), (121, 35321), (125, 35342), (126, 35354), (127, 35357), (139, 35441), (148, 35486), (149, 35492), (156, 35522), (159, 35549), (161, 35567), (164, 35588), (171, 35621), (183, 35681), (185, 35708), (192, 35747), (195, 35765), (199, 35786), (202, 35795), (210, 35831), (215, 35840),

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

Candidate Starts for Starcevich_47:

(Start: 24 @35737 has 65 MA's), (52, 35926), (Start: 54 @35938 has 1 MA's), (76, 36004), (79, 36013), (83, 36049), (102, 36115), (106, 36127), (110, 36154), (114, 36178), (118, 36193), (121, 36214), (125, 36235), (126, 36247), (127, 36250), (139, 36334), (148, 36379), (149, 36385), (156, 36415), (159, 36442), (161, 36460), (164, 36481), (171, 36514), (183, 36574), (185, 36601), (192, 36640), (195, 36658), (199, 36679), (202, 36688), (210, 36724), (215, 36733),

Gene: StevieRay_34 Start: 27895, Stop: 28758, Start Num: 43

Candidate Starts for StevieRay_34:

(Start: 43 @27895 has 45 MA's), (75, 28000), (78, 28009), (85, 28057), (94, 28081), (113, 28162), (114, 28177), (130, 28288), (161, 28471), (171, 28525), (191, 28654), (199, 28696), (212, 28744),

Gene: StressBall_34 Start: 28196, Stop: 29059, Start Num: 43

Candidate Starts for StressBall_34:

(Start: 43 @28196 has 45 MA's), (68, 28277), (75, 28301), (78, 28310), (85, 28358), (94, 28382), (113, 28463), (114, 28478), (130, 28589), (161, 28772), (171, 28826), (191, 28955), (199, 28997), (212, 29045),

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

Candidate Starts for SuperGrey_48:

(Start: 24 @36177 has 65 MA's), (47, 36345), (52, 36366), (Start: 54 @36378 has 1 MA's), (67, 36411), (73, 36426), (76, 36444), (79, 36453), (83, 36489), (97, 36537), (102, 36555), (106, 36567), (110, 36594), (114, 36618), (116, 36630), (118, 36633), (121, 36654), (125, 36675), (126, 36687), (127, 36690), (135, 36762), (139, 36774), (149, 36825), (150, 36831), (159, 36882), (161, 36900), (164, 36921), (171, 36954), (173, 36972), (183, 37014), (185, 37041), (195, 37098), (202, 37128), (210, 37164), (212, 37167),

Gene: Techage_34 Start: 27962, Stop: 28828, Start Num: 43

Candidate Starts for Techage_34:

(Start: 43 @27962 has 45 MA's), (68, 28043), (75, 28067), (78, 28076), (85, 28124), (113, 28232), (114, 28247), (115, 28256), (130, 28358), (161, 28541), (171, 28595), (191, 28724), (199, 28766), (212, 28814),

Gene: Thespis_34 Start: 27932, Stop: 28798, Start Num: 43

Candidate Starts for Thespis_34:

(Start: 43 @27932 has 45 MA's), (68, 28013), (75, 28037), (78, 28046), (81, 28073), (85, 28094), (113, 28202), (114, 28217), (130, 28328), (161, 28511), (171, 28565), (191, 28694), (199, 28736), (212, 28784),

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

Candidate Starts for Totinger_47:

(Start: 24 @34879 has 65 MA's), (52, 35068), (Start: 54 @35080 has 1 MA's), (76, 35146), (79, 35155), (83, 35191), (102, 35257), (106, 35269), (110, 35296), (114, 35320), (118, 35335), (121, 35356), (125,

35377), (126, 35389), (127, 35392), (139, 35476), (148, 35521), (149, 35527), (156, 35557), (159, 35584), (161, 35602), (164, 35623), (171, 35656), (173, 35674), (183, 35716), (185, 35743), (192, 35782), (195, 35800), (199, 35821), (202, 35830), (210, 35866), (215, 35875),

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

Candidate Starts for Tweety_47:

(Start: 24 @35615 has 65 MA's), (52, 35804), (Start: 54 @35816 has 1 MA's), (76, 35882), (79, 35891), (83, 35927), (102, 35993), (106, 36005), (110, 36032), (114, 36056), (118, 36071), (121, 36092), (125, 36113), (126, 36125), (127, 36128), (139, 36212), (148, 36257), (149, 36263), (156, 36293), (159, 36320), (161, 36338), (164, 36359), (171, 36392), (183, 36452), (185, 36479), (192, 36518), (195, 36536), (199, 36557), (202, 36566), (210, 36602), (215, 36611),

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

Candidate Starts for Utz_39:

(29, 33918), (42, 34029), (Start: 64 @34104 has 17 MA's), (71, 34119), (81, 34182), (99, 34254), (110, 34299), (113, 34308), (114, 34323), (126, 34392), (142, 34488), (159, 34578), (193, 34770),

Gene: Venti_34 Start: 27939, Stop: 28805, Start Num: 43

Candidate Starts for Venti_34:

(Start: 43 @27939 has 45 MA's), (68, 28020), (75, 28044), (78, 28053), (85, 28101), (113, 28209), (114, 28224), (130, 28335), (161, 28518), (171, 28572), (191, 28701), (199, 28743), (212, 28791),

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

Candidate Starts for Veteran_45:

(Start: 24 @34747 has 65 MA's), (52, 34936), (Start: 54 @34948 has 1 MA's), (76, 35014), (79, 35023), (83, 35059), (102, 35125), (106, 35137), (110, 35164), (114, 35188), (118, 35203), (121, 35224), (125, 35245), (126, 35257), (127, 35260), (139, 35344), (148, 35389), (149, 35395), (156, 35425), (159, 35452), (161, 35470), (164, 35491), (171, 35524), (183, 35584), (185, 35611), (192, 35650), (195, 35668), (199, 35689), (202, 35698), (210, 35734), (215, 35743),

Gene: Vidya_34 Start: 27972, Stop: 28838, Start Num: 43

Candidate Starts for Vidya_34:

(Start: 43 @27972 has 45 MA's), (68, 28053), (75, 28077), (78, 28086), (85, 28134), (113, 28242), (114, 28257), (130, 28368), (161, 28551), (171, 28605), (191, 28734), (199, 28776), (212, 28824),

Gene: Vivum_52 Start: 35865, Stop: 36869, Start Num: 24

Candidate Starts for Vivum_52:

(Start: 24 @35865 has 65 MA's), (52, 36054), (Start: 54 @36066 has 1 MA's), (76, 36132), (79, 36141), (83, 36177), (102, 36243), (106, 36255), (110, 36282), (114, 36306), (118, 36321), (121, 36342), (125, 36363), (126, 36375), (127, 36378), (139, 36462), (148, 36507), (149, 36513), (156, 36543), (159, 36570), (161, 36588), (164, 36609), (171, 36642), (183, 36702), (185, 36729), (192, 36768), (195, 36786), (199, 36807), (202, 36816), (210, 36852), (215, 36861),

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

Candidate Starts for Wee_50:

(Start: 24 @36114 has 65 MA's), (52, 36303), (Start: 54 @36315 has 1 MA's), (76, 36381), (79, 36390), (83, 36426), (102, 36492), (106, 36504), (110, 36531), (114, 36555), (118, 36570), (121, 36591), (125, 36612), (126, 36624), (127, 36627), (139, 36711), (148, 36756), (149, 36762), (156, 36792), (159, 36819), (161, 36837), (164, 36858), (171, 36891), (183, 36951), (185, 36978), (192, 37017), (195, 37035), (199, 37056), (202, 37065), (210, 37101), (215, 37110),

Gene: Willsammy_33 Start: 27679, Stop: 28542, Start Num: 43

Candidate Starts for Willsammy_33:

(Start: 43 @27679 has 45 MA's), (68, 27760), (75, 27784), (78, 27793), (85, 27841), (94, 27865), (113, 27946), (114, 27961), (130, 28072), (161, 28255), (171, 28309), (191, 28438), (199, 28480), (212, 28528),

Gene: WinkNick_49 Start: 34309, Stop: 35058, Start Num: 59

Candidate Starts for WinkNick_49:

(3, 33670), (4, 33724), (5, 33757), (8, 33796), (10, 33817), (11, 33850), (13, 33862), (17, 33985), (18, 34006), (32, 34153), (Start: 59 @34309 has 8 MA's), (71, 34339), (76, 34366), (79, 34375), (105, 34492), (110, 34519), (114, 34543), (119, 34558), (123, 34588), (135, 34678), (136, 34681), (179, 34903),

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

Candidate Starts for Wisp_43:

(22, 33915), (29, 33969), (42, 34080), (Start: 64 @34155 has 17 MA's), (71, 34170), (90, 34269), (94, 34281), (105, 34323), (110, 34350), (126, 34443), (142, 34539), (159, 34629), (193, 34821), (203, 34866),

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

Candidate Starts for Wocket_45:

(25, 33104), (42, 33230), (Start: 64 @33305 has 17 MA's), (71, 33320), (90, 33419), (94, 33431), (105, 33473), (110, 33500), (125, 33581), (126, 33593), (142, 33689), (159, 33779), (170, 33845), (193, 33971), (203, 34016),

Gene: Wrigley_52 Start: 36935, Stop: 37699, Start Num: 57

Candidate Starts for Wrigley_52:

(Start: 57 @36935 has 1 MA's), (70, 36962), (71, 36965), (79, 37001), (90, 37064), (94, 37076), (106, 37118), (110, 37145), (126, 37238), (133, 37292), (157, 37406), (159, 37430), (161, 37448), (165, 37469), (166, 37472), (167, 37475), (171, 37499), (177, 37550), (178, 37553), (189, 37613),

Gene: Xula_31 Start: 27335, Stop: 28204, Start Num: 43

Candidate Starts for Xula_31:

(Start: 43 @27335 has 45 MA's), (75, 27443), (78, 27452), (85, 27500), (113, 27608), (114, 27623), (130, 27734), (161, 27917), (171, 27971), (191, 28100), (199, 28142), (212, 28190),

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

Candidate Starts for Yoshi_60:

(Start: 24 @36844 has 65 MA's), (52, 37033), (Start: 54 @37045 has 1 MA's), (67, 37078), (73, 37093), (76, 37111), (79, 37120), (83, 37156), (97, 37204), (102, 37222), (106, 37234), (110, 37261), (114, 37285), (116, 37297), (118, 37300), (121, 37321), (125, 37342), (126, 37354), (127, 37357), (135, 37426), (139, 37438), (148, 37483), (149, 37489), (150, 37495), (156, 37519), (159, 37546), (161, 37564), (164, 37585), (171, 37618), (173, 37636), (183, 37678), (185, 37705), (192, 37744), (195, 37762), (199, 37783), (202, 37792), (208, 37819), (218, 37876), (219, 38017),

Gene: YungMoney_53 Start: 42952, Stop: 43722, Start Num: 61

Candidate Starts for YungMoney_53:

(Start: 61 @42952 has 1 MA's), (65, 42964), (71, 42976), (85, 43057), (107, 43147), (110, 43159), (114, 43180), (115, 43189), (126, 43249), (137, 43321), (144, 43342), (152, 43369), (169, 43465), (175, 43516), (182, 43537), (185, 43564), (187, 43579), (216, 43699),

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

Candidate Starts for Zerg_46:

(16, 34896), (Start: 24 @35052 has 65 MA's), (Start: 54 @35253 has 1 MA's), (76, 35319), (79, 35328), (83, 35364), (102, 35430), (106, 35442), (110, 35469), (114, 35493), (118, 35508), (121, 35529), (125,

35550), (126, 35562), (127, 35565), (139, 35649), (148, 35694), (149, 35700), (156, 35730), (159, 35757), (161, 35775), (164, 35796), (171, 35829), (183, 35889), (192, 35955), (195, 35973), (199, 35994), (202, 36003), (210, 36039), (215, 36048),

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

Candidate Starts for ZiggyZoo_46:

(19, 35090), (29, 35189), (Start: 64 @35375 has 17 MA's), (71, 35390), (90, 35489), (94, 35501), (105, 35543), (110, 35570), (126, 35663), (142, 35759), (159, 35849), (193, 36041),

Gene: Zilizebeth_34 Start: 27971, Stop: 28837, Start Num: 43

Candidate Starts for Zilizebeth_34:

(Start: 43 @27971 has 45 MA's), (68, 28052), (75, 28076), (78, 28085), (85, 28133), (113, 28241), (114, 28256), (130, 28367), (161, 28550), (171, 28604), (191, 28733), (199, 28775), (212, 28823),

Gene: Zizzle_51 Start: 36006, Stop: 36785, Start Num: 53

Candidate Starts for Zizzle_51:

(Start: 46 @35976 has 1 MA's), (Start: 53 @36006 has 12 MA's), (70, 36030), (71, 36033), (79, 36069), (80, 36072), (85, 36117), (113, 36225), (114, 36240), (126, 36309), (132, 36357), (157, 36474), (163, 36525), (180, 36621), (197, 36726), (198, 36732), (209, 36774), (211, 36780),