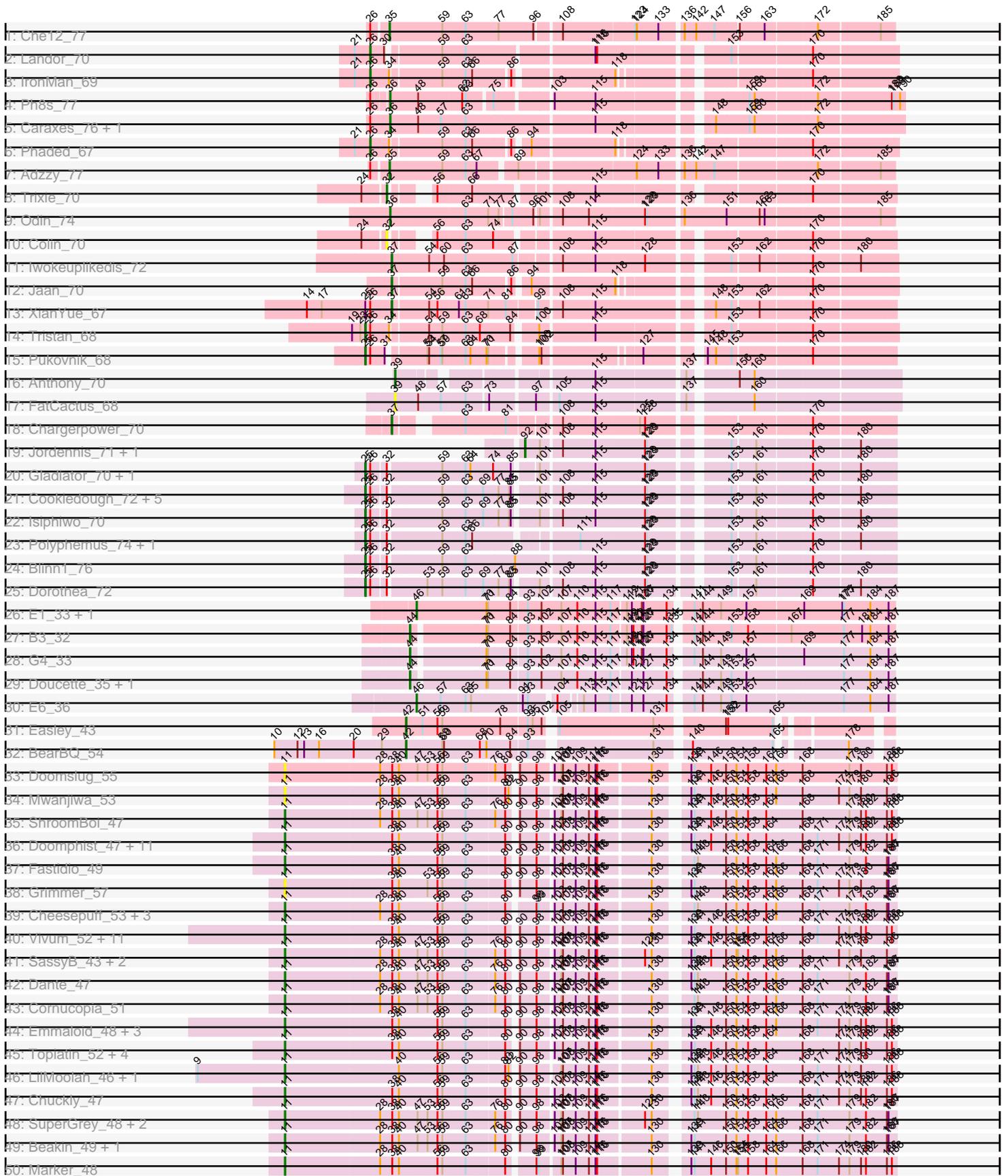
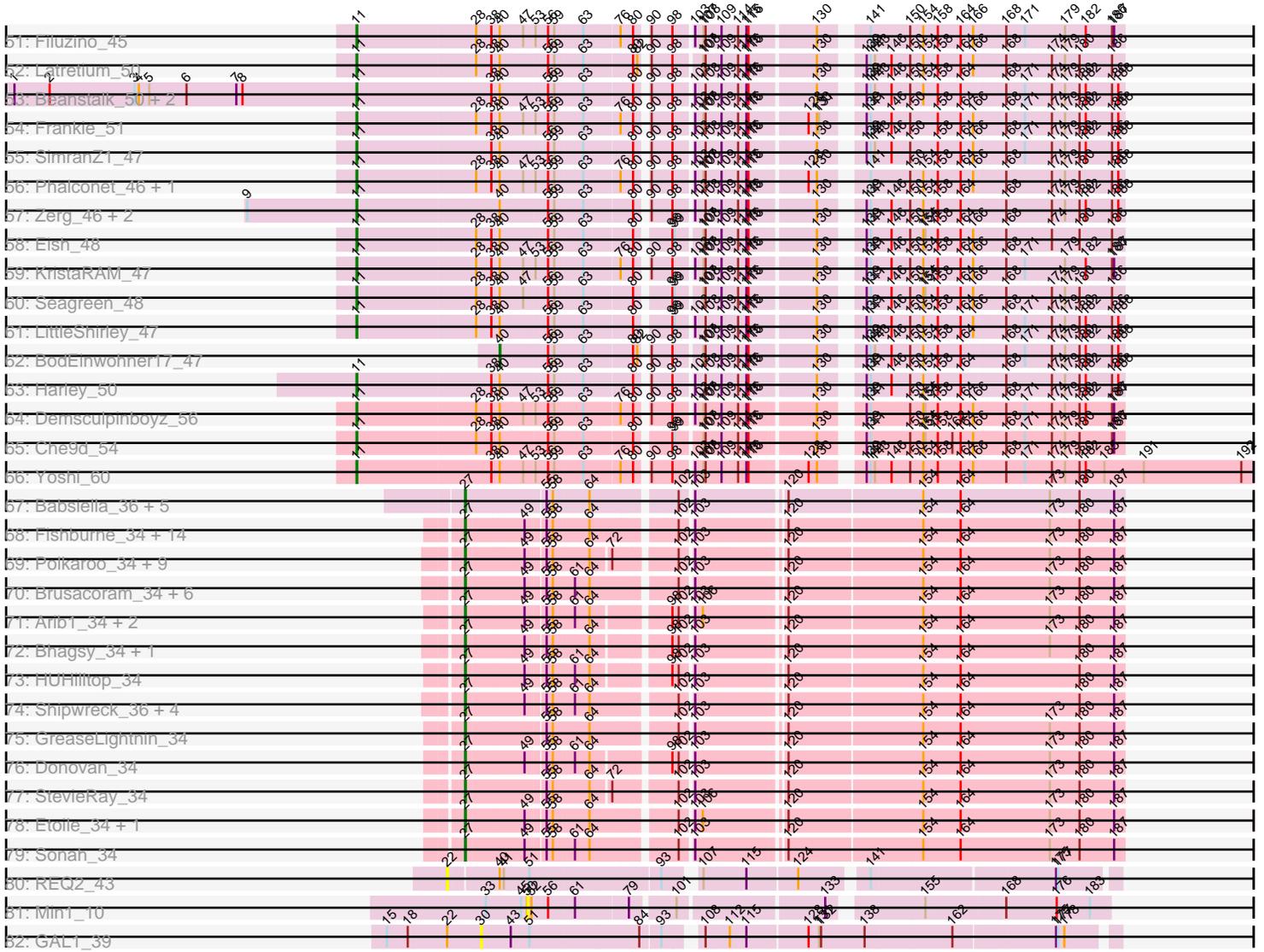


Pham 283523



Pham 283523



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 283523 Report

This analysis was run 02/23/26 on database version 636.

Pham number 283523 has 178 members, 19 are drafts.

Phages represented in each track:

- Track 1 : Che12_77
- Track 2 : Landor_70
- Track 3 : IronMan_69
- Track 4 : Ph8s_77
- Track 5 : Caraxes_76, Superchunk_75
- Track 6 : Phaded_67
- Track 7 : Adzzy_77
- Track 8 : Trixie_70
- Track 9 : Odin_74
- Track 10 : Colin_70
- Track 11 : Iwokeuplikedis_72
- Track 12 : Jaan_70
- Track 13 : XianYue_67
- Track 14 : Tristan_68
- Track 15 : Pukovnik_68
- Track 16 : Anthony_70
- Track 17 : FatCactus_68
- Track 18 : Chargerpower_70
- Track 19 : Jordennis_71, Priamo_74
- Track 20 : Gladiator_70, Newrala_72
- Track 21 : Cookiedough_72, Neeharika16_71, BABullseye_65, SuperCallie99_69, Pmask_71, SuperAwesome_72
- Track 22 : Isiphiwo_70
- Track 23 : Polyphemus_74, JewelBug_72
- Track 24 : Blinn1_76
- Track 25 : Dorothea_72
- Track 26 : E1_33, Anatole_33
- Track 27 : B3_32
- Track 28 : G4_33
- Track 29 : Doucette_35, B22_33
- Track 30 : E6_36
- Track 31 : Easley_43
- Track 32 : BearBQ_54
- Track 33 : Doomslug_55
- Track 34 : Mwanjiwa_53
- Track 35 : ShroomBoi_47

- Track 36 : 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 37 : Fastidio_49
- Track 38 : Grimmer_57
- Track 39 : Cheesepuff_53, DaWorst_49, Ogopogo_48, DillTech15_46
- Track 40 : Vivum_52, BuzzLyseyear_52, Starcevich_47, Karhdo_46, Veteran_45, GUmbie_45, Tweety_47, Mantra_44, GigiOuiOui_44, Wee_50, SiSi_47, Hamulus_48
- Track 41 : SassyB_43, Estave1_48, PopTart_43
- Track 42 : Dante_47
- Track 43 : Cornucopia_51
- Track 44 : Emmaloid_48, DotProduct_44, Totinger_47, Slim_48
- Track 45 : Topiatin_52, 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_50
- Track 49 : Beakin_49, Jant_52
- Track 50 : Marker_48
- Track 51 : Filuzino_45
- Track 52 : Latretium_50
- Track 53 : Beanstalk_50, MadMen_42, Krakatau_45
- Track 54 : Frankie_51
- Track 55 : SimranZ1_47
- Track 56 : Phalconet_46, PhesterPhotato_49
- Track 57 : Zerg_46, Phasih_45, RockyHorror_48
- Track 58 : Eish_48
- Track 59 : KristaRAM_47
- Track 60 : Seagreen_48
- Track 61 : LittleShirley_47
- Track 62 : BodEinwohner17_47
- Track 63 : Harley_50
- Track 64 : Demsculpinboyz_56
- Track 65 : Che9d_54
- Track 66 : Yoshi_60
- Track 67 : Babsiella_36, Brujita_36, HC_34, Island3_36, QueenHazel_32, Xula_31
- Track 68 : Fishburne_34, Bartholomew_33, Venti_34, Dynamo_34, BronnyJr_34, Mangethe_34, Phineas_34, Majeke_34, Vidya_34, Necropolis_34, Chubbello_34, Kari_34, FirstPlacePfu_34, Zilizebeth_34, Phegasus_34
- Track 69 : Polkaroo_34, KilKor_34, Gavriela_34, Willsammy_33, Phalm_34, Jung_33, Megiddo_34, Glaske_34, CactusJack_34, StressBall_34
- Track 70 : Brusacoram_34, Atcoo_34, Juniormint_34, Jebeks_35, Ksqured_34, Bunnies_34, Thespis_34
- Track 71 : Arib1_34, Langerak_34, GaloreK_34
- Track 72 : Bhagsy_34, PeanutPie_34
- Track 73 : HUHilltop_34
- Track 74 : Shipwreck_36, Pygmy_36, Camster_34, Bogie_36, Malithi_34
- Track 75 : GreaseLightnin_34
- Track 76 : Donovan_34
- Track 77 : StevieRay_34
- Track 78 : Etoile_34, Techage_34
- Track 79 : Sonah_34
- Track 80 : REQ2_43
- Track 81 : Min1_10
- Track 82 : GAL1_39

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

The start number called the most often in the published annotations is 11, it was called in 69 of the 159 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Beakin_49, Beanstalk_50, Blexus_45, BlueCrab_45, Boomer_50, Brushbloom_50, BuzzLyseyear_52, Che9d_54, CheesePuff_53, Chuckly_47, Cornucopia_51, DaWorst_49, Dante_47, Demsculpinboyz_56, DillTech15_46, Doomphist_47, Doomslug_55, Dorothy_44, DotProduct_44, Eish_48, Emmaloid_48, Estave1_48, Fastidio_49, Filuzino_45, Frankie_51, Fruitloop_46, GUmbie_45, GigiOuiOui_44, Girr_48, Grimmer_57, Hamulus_48, Harley_50, Jant_52, Job42_48, Karhdo_46, Krakatau_45, KristaRAM_47, Latretium_50, LilMoolah_46, LittleShirley_47, MadMen_42, Madiba_43, Mantra_44, Marker_48, MisterCuddles_47, Mwanjiwa_53, Nivrat_45, OgoPogo_48, PMC_42, Phalconet_46, Phasih_45, PhesterPotato_49, Poenanya_47, Pollywog_46, PopTart_43, RedBird_44, Rockne_45, RockyHorror_48, Ruby_46, SassyB_43, Seagreen_48, ShroomBoi_47, SiSi_47, SimranZ1_47, Slim_48, Stap_46, StarceVich_47, SuperGrey_48, Topiatin_52, Totinger_47, Tweety_47, Veteran_45, Vivum_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:

- Adzzy_77, Anatole_33, Anthony_70, Arib1_34, Atcoo_34, B22_33, B3_32, BABullseye_65, Babsiella_36, Bartholomew_33, BearBQ_54, Bhagsy_34, Blinn1_76, BodEinwohner17_47, Bogie_36, BronnyJr_34, Brujita_36, Brusacoram_34, Bunnies_34, CactusJack_34, Camster_34, Caraxes_76, Chargerpower_70, Che12_77, Chubbello_34, Colin_70, Cookiedough_72, Donovan_34, Dorothea_72, Doucette_35, Dynamo_34, E1_33, E6_36, Easley_43, Etoile_34, FatCactus_68, FirstPlacePfu_34, Fishburne_34, G4_33, GAL1_39, GaloreK_34, Gavriela_34, Gladiator_70, Glaske_34, GreaseLightnin_34, HC_34, HUHilltop_34, IronMan_69, Isiphiwo_70, Island3_36, Iwokeuplikedis_72, Jaan_70, Jebeks_35, JewelBug_72, Jordennis_71, Jung_33, Juniormint_34, Kari_34, KilKor_34, Ksquared_34, Landor_70, Langerak_34, Majeke_34, Malithi_34, Mangethe_34, Megiddo_34, Min1_10, Necropolis_34, Neeharika16_71, Newrala_72, Odin_74, PeanutPie_34, Ph8s_77, Phaded_67, Phalm_34, Phegasus_34, Phineas_34, Pmask_71, Polkaroo_34, Polyphemus_74, Priamo_74, Pukovnik_68, Pygmy_36, QueenHazel_32, REQ2_43, Shipwreck_36, Sonah_34, StevieRay_34, StressBall_34, SuperAwesome_72, SuperCallie99_69, Superchunk_75, Techage_34, Thespis_34, Tristan_68, Trixie_70, Venti_34, Vidya_34, Willsammy_33, XianYue_67, Xula_31, Zilizebeth_34,

Summary by start number:

Start 11:

- Found in 76 of 178 (42.7%) of genes in pham
- Manual Annotations of this start: 69 of 159
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Beakin_49 (F1), Beanstalk_50 (F1), Blexus_45 (F1), BlueCrab_45 (F1), Boomer_50 (F1), Brushbloom_50 (F1), BuzzLyseyear_52 (F1), Che9d_54 (F2), Cheesepuff_53 (F1), Chuckly_47 (F1), Cornucopia_51 (F1), DaWorst_49 (F1), Dante_47 (F1), Demsculpinboyz_56 (F2), DillTech15_46 (F1), Doomphist_47 (F1), Doomslug_55 (F), Dorothy_44 (F1), DotProduct_44 (F1), Eish_48 (F1), Emmaloid_48 (F1), Estave1_48 (F1), Fastidio_49 (F1), Filuzino_45 (F1), Frankie_51 (F1), Fruitloop_46 (F1), GUmbie_45 (F1), GigiOuiOui_44 (F1), Girr_48 (F1), Grimmer_57 (F1), Hamulus_48 (F1), Harley_50 (F1), Jant_52 (F1), Job42_48 (F1), Karhdo_46 (F1), Krakatau_45 (F1), KristaRAM_47 (F1), Latretium_50 (F1), LilMoolah_46 (F1), LittleShirley_47 (F1), MadMen_42 (F1), Madiba_43 (F1), Mantra_44 (F1), Marker_48 (F1), MisterCuddles_47 (F1), Mwanjiwa_53 (F1), Nivrat_45 (F1), Ogopogo_48 (F1), 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), Topiatin_52 (F1), Totinger_47 (F1), Tweety_47 (F1), Veteran_45 (F1), Vivum_52 (F1), Wee_50 (F1), Yoshi_60 (F2), Zerg_46 (F1),

Start 22:

- Found in 2 of 178 (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 25:

- Found in 16 of 178 (9.0%) of genes in pham
- Manual Annotations of this start: 15 of 159
- Called 93.8% of time when present
- Phage (with cluster) where this start called: BABullseye_65 (A6), Blinn1_76 (A6), Cookiedough_72 (A6), Dorothea_72 (A6), Gladiator_70 (A6), Isiphiwo_70 (A6), JewelBug_72 (A6), Neeharika16_71 (A6), Newrala_72 (A6), Pmask_71 (A6), Polyphemus_74 (A6), Pukovnik_68 (A2), SuperAwesome_72 (A6), SuperCallie99_69 (A6), Tristan_68 (A2),

Start 26:

- Found in 24 of 178 (13.5%) of genes in pham
- Manual Annotations of this start: 3 of 159
- Called 12.5% of time when present
- Phage (with cluster) where this start called: IronMan_69 (A2), Landor_70 (A2), Phaded_67 (A2),

Start 27:

- Found in 55 of 178 (30.9%) of genes in pham
- Manual Annotations of this start: 49 of 159
- 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), BronnyJr_34 (P1), Brujita_36 (I1), Brusacoram_34 (P1), Bunnies_34 (P1), CactusJack_34 (P1), Camster_34 (P1), Chubbello_34 (none), Donovan_34 (P1), Dynamo_34 (P1), Etoile_34 (P1), FirstPlacePfu_34 (P1), Fishburne_34 (P1), GaloreK_34 (P1), Gavriela_34 (P1), Glaske_34 (P1), GreaseLightnin_34 (P1), HC_34 (I1), HUHilltop_34 (P1), Island3_36 (I1), Jebeks_35 (P1), Jung_33 (P1),

Juniormint_34 (P1), Kari_34 (P1), KilKor_34 (P1), Ksquared_34 (P1), Langerak_34 (P1), Majeke_34 (P1), Malithi_34 (P1), Mangethe_34 (P1), Megiddo_34 (P1), Necropolis_34 (P1), PeanutPie_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 30:

- Found in 2 of 178 (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: GAL1_39 (singleton),

Start 32:

- Found in 15 of 178 (8.4%) of genes in pham
- Manual Annotations of this start: 1 of 159
- Called 13.3% of time when present
- Phage (with cluster) where this start called: Colin_70 (A2), Trixie_70 (A2),

Start 35:

- Found in 2 of 178 (1.1%) of genes in pham
- Manual Annotations of this start: 2 of 159
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Adzzy_77 (A2), Che12_77 (A2),

Start 36:

- Found in 4 of 178 (2.2%) of genes in pham
- Manual Annotations of this start: 3 of 159
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Caraxes_76 (A2), Odin_74 (A2), Ph8s_77 (A2), Superchunk_75 (A2),

Start 37:

- Found in 4 of 178 (2.2%) of genes in pham
- Manual Annotations of this start: 4 of 159
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Chargerpower_70 (A22), Iwokeuplikedis_72 (A2), Jaan_70 (A2), XianYue_67 (A2),

Start 39:

- Found in 2 of 178 (1.1%) of genes in pham
- Manual Annotations of this start: 1 of 159
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Anthony_70 (A20), FatCactus_68 (A20),

Start 40:

- Found in 78 of 178 (43.8%) of genes in pham
- Manual Annotations of this start: 1 of 159
- Called 1.3% of time when present
- Phage (with cluster) where this start called: BodEinwohner17_47 (F1),

Start 42:

- Found in 2 of 178 (1.1%) of genes in pham
- Manual Annotations of this start: 2 of 159
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BearBQ_54 (DN), Easley_43 (CZ4),

Start 44:

- Found in 4 of 178 (2.2%) of genes in pham
- Manual Annotations of this start: 4 of 159
- 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 46:

- Found in 3 of 178 (1.7%) of genes in pham
- Manual Annotations of this start: 3 of 159
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Anatole_33 (BV), E1_33 (BV), E6_36 (BW),

Start 50:

- Found in 1 of 178 (0.6%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Min1_10 (singleton),

Start 92:

- Found in 2 of 178 (1.1%) of genes in pham
- Manual Annotations of this start: 2 of 159
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Jordennis_71 (A6), Priamo_74 (A6),

Summary by clusters:

There are 15 clusters represented in this pham: A20, F1, singleton, P1, DN, F, I1, F2, CZ4, A22, BV, BW, none, A6, A2,

Info for manual annotations of cluster A2:

- Start number 25 was manually annotated 2 times for cluster A2.
- Start number 26 was manually annotated 3 times for cluster A2.
- Start number 32 was manually annotated 1 time for cluster A2.
- Start number 35 was manually annotated 2 times for cluster A2.
- Start number 36 was manually annotated 3 times for cluster A2.
- Start number 37 was manually annotated 3 times for cluster A2.

Info for manual annotations of cluster A20:

- Start number 39 was manually annotated 1 time for cluster A20.

Info for manual annotations of cluster A22:

- Start number 37 was manually annotated 1 time for cluster A22.

Info for manual annotations of cluster A6:

- Start number 25 was manually annotated 13 times for cluster A6.
- Start number 92 was manually annotated 2 times for cluster A6.

Info for manual annotations of cluster BV:

- Start number 44 was manually annotated 1 time for cluster BV.
- Start number 46 was manually annotated 2 times for cluster BV.

Info for manual annotations of cluster BW:

- Start number 44 was manually annotated 3 times for cluster BW.
- Start number 46 was manually annotated 1 time for cluster BW.

Info for manual annotations of cluster CZ4:

- Start number 42 was manually annotated 1 time for cluster CZ4.

Info for manual annotations of cluster DN:

- Start number 42 was manually annotated 1 time for cluster DN.

Info for manual annotations of cluster F1:

- Start number 11 was manually annotated 66 times for cluster F1.
- Start number 40 was manually annotated 1 time for cluster F1.

Info for manual annotations of cluster F2:

- Start number 11 was manually annotated 3 times for cluster F2.

Info for manual annotations of cluster I1:

- Start number 27 was manually annotated 6 times for cluster I1.

Info for manual annotations of cluster P1:

- Start number 27 was manually annotated 43 times for cluster P1.

Gene Information:

Gene: Adzzy_77 Start: 43239, Stop: 42412, Start Num: 35

Candidate Starts for Adzzy_77:

(Start: 26 @43266 has 3 MA's), (Start: 35 @43239 has 2 MA's), (59, 43146), (63, 43107), (67, 43089), (89, 43032), (124, 42843), (133, 42804), (136, 42768), (142, 42747), (147, 42714), (172, 42543), (185, 42435),

Gene: Anatole_33 Start: 24569, Stop: 25372, Start Num: 46

Candidate Starts for Anatole_33:

(Start: 46 @24569 has 3 MA's), (70, 24692), (71, 24695), (84, 24734), (93, 24761), (102, 24785), (107, 24821), (110, 24848), (115, 24881), (117, 24908), (119, 24929), (121, 24938), (126, 24956), (127, 24959), (134, 25001), (141, 25031), (144, 25043), (149, 25076), (157, 25121), (169, 25211), (175, 25277), (177, 25280), (184, 25328), (187, 25361),

Gene: Anthony_70 Start: 42960, Stop: 42178, Start Num: 39

Candidate Starts for Anthony_70:

(Start: 39 @42960 has 1 MA's), (115, 42675), (137, 42528), (156, 42453), (160, 42426),

Gene: Arib1_34 Start: 27945, Stop: 28808, Start Num: 27

Candidate Starts for Arib1_34:

(Start: 27 @27945 has 49 MA's), (49, 28026), (55, 28050), (58, 28059), (61, 28086), (64, 28107), (98, 28203), (102, 28212), (103, 28227), (106, 28236), (120, 28338), (154, 28521), (164, 28575), (173, 28704), (180, 28746), (187, 28794),

Gene: Atcoo_34 Start: 28426, Stop: 29292, Start Num: 27

Candidate Starts for Atcoo_34:

(Start: 27 @28426 has 49 MA's), (49, 28507), (55, 28531), (58, 28540), (61, 28567), (64, 28588), (102, 28696), (103, 28711), (120, 28822), (154, 29005), (164, 29059), (173, 29188), (180, 29230), (187, 29278),

Gene: B22_33 Start: 23699, Stop: 24502, Start Num: 44

Candidate Starts for B22_33:

(Start: 44 @23699 has 4 MA's), (70, 23822), (71, 23825), (84, 23864), (93, 23891), (102, 23915), (107, 23951), (110, 23978), (115, 24011), (117, 24038), (121, 24068), (127, 24089), (134, 24131), (144, 24173), (149, 24206), (153, 24224), (157, 24251), (177, 24410), (184, 24458), (187, 24491),

Gene: B3_32 Start: 23829, Stop: 24632, Start Num: 44

Candidate Starts for B3_32:

(Start: 44 @23829 has 4 MA's), (70, 23952), (71, 23955), (84, 23994), (93, 24021), (102, 24045), (107, 24081), (110, 24108), (115, 24141), (117, 24168), (119, 24189), (121, 24198), (122, 24201), (126, 24216), (127, 24219), (134, 24261), (135, 24270), (141, 24291), (144, 24303), (153, 24354), (158, 24384), (167, 24453), (177, 24540), (181, 24573), (184, 24588), (187, 24621),

Gene: BABullseye_65 Start: 39826, Stop: 38978, Start Num: 25

Candidate Starts for BABullseye_65:

(Start: 25 @39826 has 15 MA's), (Start: 26 @39817 has 3 MA's), (Start: 32 @39793 has 1 MA's), (59, 39703), (63, 39664), (69, 39634), (77, 39610), (83, 39592), (85, 39589), (101, 39550), (108, 39517), (115, 39463), (128, 39376), (129, 39373), (153, 39253), (161, 39214), (170, 39121), (180, 39040),

Gene: Babsiella_36 Start: 28877, Stop: 29746, Start Num: 27

Candidate Starts for Babsiella_36:

(Start: 27 @28877 has 49 MA's), (55, 28985), (58, 28994), (64, 29042), (102, 29150), (103, 29165), (120, 29276), (154, 29459), (164, 29513), (173, 29642), (180, 29684), (187, 29732),

Gene: Bartholomew_33 Start: 27939, Stop: 28805, Start Num: 27

Candidate Starts for Bartholomew_33:

(Start: 27 @27939 has 49 MA's), (49, 28020), (55, 28044), (58, 28053), (64, 28101), (102, 28209), (103, 28224), (120, 28335), (154, 28518), (164, 28572), (173, 28701), (180, 28743), (187, 28791),

Gene: Beakin_49 Start: 35134, Stop: 36138, Start Num: 11

Candidate Starts for Beakin_49:

(Start: 11 @35134 has 69 MA's), (28, 35302), (38, 35323), (Start: 40 @35335 has 1 MA's), (47, 35368), (53, 35383), (56, 35401), (59, 35410), (63, 35446), (76, 35494), (80, 35512), (90, 35524), (98, 35551), (103, 35575), (107, 35587), (108, 35590), (109, 35611), (114, 35632), (115, 35644), (116, 35647), (130, 35731), (139, 35776), (141, 35782), (150, 35839), (154, 35857), (158, 35878), (164, 35911), (166, 35929), (168, 35971), (171, 35998), (179, 36055), (182, 36085), (186, 36121), (187, 36124),

Gene: Beanstalk_50 Start: 34763, Stop: 35770, Start Num: 11

Candidate Starts for Beanstalk_50:

(1, 34268), (2, 34319), (3, 34442), (4, 34448), (5, 34463), (6, 34517), (7, 34589), (8, 34598), (Start: 11 @34763 has 69 MA's), (38, 34955), (Start: 40 @34967 has 1 MA's), (56, 35033), (59, 35042), (63, 35078), (80, 35144), (90, 35156), (98, 35183), (103, 35207), (108, 35222), (109, 35243), (114, 35264), (115, 35276), (116, 35279), (130, 35363), (139, 35408), (141, 35414), (143, 35420), (146, 35444),

(150, 35471), (154, 35489), (158, 35510), (164, 35543), (168, 35603), (171, 35630), (174, 35669), (179, 35687), (180, 35708), (182, 35717), (186, 35753), (188, 35762),

Gene: BearBQ_54 Start: 38297, Stop: 39052, Start Num: 42

Candidate Starts for BearBQ_54:

(10, 38063), (12, 38105), (13, 38117), (16, 38144), (20, 38207), (29, 38255), (Start: 42 @38297 has 2 MA's), (59, 38363), (60, 38366), (68, 38426), (70, 38438), (84, 38480), (93, 38507), (131, 38702), (140, 38753), (165, 38897), (178, 38990),

Gene: Bhagsy_34 Start: 27935, Stop: 28798, Start Num: 27

Candidate Starts for Bhagsy_34:

(Start: 27 @27935 has 49 MA's), (49, 28016), (55, 28040), (58, 28049), (64, 28097), (98, 28193), (102, 28202), (103, 28217), (120, 28328), (154, 28511), (164, 28565), (173, 28694), (180, 28736), (187, 28784),

Gene: Blexus_45 Start: 35131, Stop: 36135, Start Num: 11

Candidate Starts for Blexus_45:

(Start: 11 @35131 has 69 MA's), (38, 35320), (Start: 40 @35332 has 1 MA's), (56, 35398), (59, 35407), (63, 35443), (80, 35509), (90, 35521), (98, 35548), (103, 35572), (108, 35587), (109, 35608), (114, 35629), (115, 35641), (116, 35644), (130, 35728), (139, 35773), (141, 35779), (146, 35809), (150, 35836), (154, 35854), (158, 35875), (164, 35908), (168, 35968), (171, 35995), (174, 36034), (179, 36052), (180, 36073), (182, 36082), (186, 36118), (188, 36127),

Gene: Blinn1_76 Start: 42445, Stop: 41582, Start Num: 25

Candidate Starts for Blinn1_76:

(Start: 25 @42445 has 15 MA's), (Start: 26 @42436 has 3 MA's), (Start: 32 @42412 has 1 MA's), (59, 42322), (63, 42283), (88, 42196), (115, 42067), (128, 41980), (129, 41977), (153, 41857), (161, 41818), (170, 41725),

Gene: BlueCrab_45 Start: 34857, Stop: 35861, Start Num: 11

Candidate Starts for BlueCrab_45:

(Start: 11 @34857 has 69 MA's), (38, 35046), (Start: 40 @35058 has 1 MA's), (56, 35124), (59, 35133), (63, 35169), (80, 35235), (90, 35247), (98, 35274), (103, 35298), (108, 35313), (109, 35334), (114, 35355), (115, 35367), (116, 35370), (130, 35454), (139, 35499), (141, 35505), (146, 35535), (150, 35562), (154, 35580), (158, 35601), (164, 35634), (168, 35694), (171, 35721), (174, 35760), (179, 35778), (180, 35799), (182, 35808), (186, 35844), (188, 35853),

Gene: BodEinwohner17_47 Start: 35274, Stop: 36077, Start Num: 40

Candidate Starts for BodEinwohner17_47:

(Start: 40 @35274 has 1 MA's), (56, 35340), (59, 35349), (63, 35385), (80, 35451), (82, 35457), (90, 35463), (98, 35490), (107, 35526), (108, 35529), (109, 35550), (114, 35571), (115, 35583), (116, 35586), (130, 35670), (139, 35715), (141, 35721), (143, 35727), (146, 35751), (150, 35778), (154, 35796), (158, 35817), (164, 35850), (168, 35910), (171, 35937), (174, 35976), (179, 35994), (180, 36015), (182, 36024), (186, 36060), (188, 36069),

Gene: Bogie_36 Start: 29722, Stop: 30588, Start Num: 27

Candidate Starts for Bogie_36:

(Start: 27 @29722 has 49 MA's), (49, 29803), (55, 29827), (58, 29836), (61, 29863), (64, 29884), (102, 29992), (103, 30007), (120, 30118), (154, 30301), (164, 30355), (180, 30526), (187, 30574),

Gene: Boomer_50 Start: 36306, Stop: 37310, Start Num: 11

Candidate Starts for Boomer_50:

(Start: 11 @36306 has 69 MA's), (38, 36495), (Start: 40 @36507 has 1 MA's), (56, 36573), (59, 36582), (63, 36618), (80, 36684), (90, 36696), (98, 36723), (103, 36747), (108, 36762), (109, 36783), (114, 36804), (115, 36816), (116, 36819), (130, 36903), (139, 36948), (141, 36954), (146, 36984), (150, 37011), (154, 37029), (158, 37050), (164, 37083), (168, 37143), (174, 37209), (179, 37227), (180, 37248), (182, 37257), (186, 37293), (188, 37302),

Gene: BronnyJr_34 Start: 28436, Stop: 29302, Start Num: 27

Candidate Starts for BronnyJr_34:

(Start: 27 @28436 has 49 MA's), (49, 28517), (55, 28541), (58, 28550), (64, 28598), (102, 28706), (103, 28721), (120, 28832), (154, 29015), (164, 29069), (173, 29198), (180, 29240), (187, 29288),

Gene: Brujita_36 Start: 29775, Stop: 30644, Start Num: 27

Candidate Starts for Brujita_36:

(Start: 27 @29775 has 49 MA's), (55, 29883), (58, 29892), (64, 29940), (102, 30048), (103, 30063), (120, 30174), (154, 30357), (164, 30411), (173, 30540), (180, 30582), (187, 30630),

Gene: Brusacoram_34 Start: 27932, Stop: 28798, Start Num: 27

Candidate Starts for Brusacoram_34:

(Start: 27 @27932 has 49 MA's), (49, 28013), (55, 28037), (58, 28046), (61, 28073), (64, 28094), (102, 28202), (103, 28217), (120, 28328), (154, 28511), (164, 28565), (173, 28694), (180, 28736), (187, 28784),

Gene: Brushbloom_50 Start: 35774, Stop: 36778, Start Num: 11

Candidate Starts for Brushbloom_50:

(Start: 11 @35774 has 69 MA's), (28, 35942), (38, 35963), (Start: 40 @35975 has 1 MA's), (47, 36008), (53, 36023), (56, 36041), (59, 36050), (63, 36086), (76, 36134), (80, 36152), (90, 36164), (98, 36191), (103, 36215), (107, 36227), (108, 36230), (109, 36251), (114, 36272), (115, 36284), (116, 36287), (128, 36359), (130, 36371), (141, 36422), (143, 36428), (150, 36479), (154, 36497), (158, 36518), (164, 36551), (166, 36569), (168, 36611), (171, 36638), (179, 36695), (182, 36725), (186, 36761), (187, 36764),

Gene: Bunnies_34 Start: 27953, Stop: 28819, Start Num: 27

Candidate Starts for Bunnies_34:

(Start: 27 @27953 has 49 MA's), (49, 28034), (55, 28058), (58, 28067), (61, 28094), (64, 28115), (102, 28223), (103, 28238), (120, 28349), (154, 28532), (164, 28586), (173, 28715), (180, 28757), (187, 28805),

Gene: BuzzLyseyear_52 Start: 36683, Stop: 37687, Start Num: 11

Candidate Starts for BuzzLyseyear_52:

(Start: 11 @36683 has 69 MA's), (38, 36872), (Start: 40 @36884 has 1 MA's), (56, 36950), (59, 36959), (63, 36995), (80, 37061), (90, 37073), (98, 37100), (103, 37124), (108, 37139), (109, 37160), (114, 37181), (115, 37193), (116, 37196), (130, 37280), (139, 37325), (141, 37331), (146, 37361), (150, 37388), (154, 37406), (158, 37427), (164, 37460), (168, 37520), (171, 37547), (174, 37586), (179, 37604), (180, 37625), (182, 37634), (186, 37670), (188, 37679),

Gene: CactusJack_34 Start: 28196, Stop: 29059, Start Num: 27

Candidate Starts for CactusJack_34:

(Start: 27 @28196 has 49 MA's), (49, 28277), (55, 28301), (58, 28310), (64, 28358), (72, 28382), (102, 28463), (103, 28478), (120, 28589), (154, 28772), (164, 28826), (173, 28955), (180, 28997), (187, 29045),

Gene: Camster_34 Start: 27969, Stop: 28835, Start Num: 27

Candidate Starts for Camster_34:

(Start: 27 @27969 has 49 MA's), (49, 28050), (55, 28074), (58, 28083), (61, 28110), (64, 28131), (102, 28239), (103, 28254), (120, 28365), (154, 28548), (164, 28602), (180, 28773), (187, 28821),

Gene: Caraxes_76 Start: 43021, Stop: 42170, Start Num: 36

Candidate Starts for Caraxes_76:

(Start: 26 @43054 has 3 MA's), (Start: 36 @43021 has 3 MA's), (48, 42970), (57, 42931), (63, 42889), (115, 42673), (148, 42493), (159, 42433), (160, 42424), (172, 42319),

Gene: Chargerpower_70 Start: 41985, Stop: 41206, Start Num: 37

Candidate Starts for Chargerpower_70:

(Start: 37 @41985 has 4 MA's), (63, 41895), (81, 41829), (108, 41745), (115, 41691), (125, 41613), (128, 41604), (170, 41349),

Gene: Che12_77 Start: 43138, Stop: 42296, Start Num: 35

Candidate Starts for Che12_77:

(Start: 26 @43165 has 3 MA's), (Start: 35 @43138 has 2 MA's), (59, 43045), (63, 43006), (77, 42952), (96, 42889), (108, 42850), (123, 42730), (124, 42727), (133, 42688), (136, 42652), (142, 42631), (147, 42598), (156, 42559), (163, 42514), (172, 42427), (185, 42319),

Gene: Che9d_54 Start: 34668, Stop: 35669, Start Num: 11

Candidate Starts for Che9d_54:

(Start: 11 @34668 has 69 MA's), (28, 34836), (38, 34857), (Start: 40 @34869 has 1 MA's), (56, 34935), (59, 34944), (63, 34980), (80, 35046), (98, 35085), (99, 35088), (107, 35121), (108, 35124), (109, 35145), (114, 35166), (115, 35178), (116, 35181), (130, 35262), (139, 35307), (141, 35313), (150, 35370), (154, 35388), (155, 35391), (158, 35409), (162, 35430), (164, 35442), (166, 35460), (168, 35502), (171, 35529), (174, 35568), (179, 35586), (180, 35607), (186, 35652), (187, 35655),

Gene: Cheesepuff_53 Start: 37297, Stop: 38301, Start Num: 11

Candidate Starts for Cheesepuff_53:

(Start: 11 @37297 has 69 MA's), (28, 37465), (38, 37486), (Start: 40 @37498 has 1 MA's), (56, 37564), (59, 37573), (63, 37609), (80, 37675), (98, 37714), (99, 37717), (103, 37738), (108, 37753), (109, 37774), (114, 37795), (115, 37807), (116, 37810), (130, 37894), (141, 37945), (143, 37951), (150, 38002), (154, 38020), (158, 38041), (164, 38074), (166, 38092), (168, 38134), (171, 38161), (179, 38218), (182, 38248), (186, 38284), (187, 38287),

Gene: Chubbello_34 Start: 27935, Stop: 28801, Start Num: 27

Candidate Starts for Chubbello_34:

(Start: 27 @27935 has 49 MA's), (49, 28016), (55, 28040), (58, 28049), (64, 28097), (102, 28205), (103, 28220), (120, 28331), (154, 28514), (164, 28568), (173, 28697), (180, 28739), (187, 28787),

Gene: Chuckly_47 Start: 35101, Stop: 36108, Start Num: 11

Candidate Starts for Chuckly_47:

(Start: 11 @35101 has 69 MA's), (38, 35293), (Start: 40 @35305 has 1 MA's), (56, 35371), (59, 35380), (63, 35416), (80, 35482), (90, 35494), (98, 35521), (103, 35545), (108, 35560), (109, 35581), (114, 35602), (115, 35614), (116, 35617), (130, 35701), (139, 35746), (141, 35752), (143, 35758), (146, 35782), (150, 35809), (154, 35827), (158, 35848), (164, 35881), (168, 35941), (171, 35968), (174, 36007), (179, 36025), (180, 36046), (182, 36055), (186, 36091), (188, 36100),

Gene: Colin_70 Start: 43999, Stop: 43229, Start Num: 32

Candidate Starts for Colin_70:

(24, 44038), (Start: 32 @43999 has 1 MA's), (56, 43957), (63, 43909), (74, 43861), (115, 43711), (170, 43372),

Gene: Cookiedough_72 Start: 42134, Stop: 41286, Start Num: 25

Candidate Starts for Cookiedough_72:

(Start: 25 @42134 has 15 MA's), (Start: 26 @42125 has 3 MA's), (Start: 32 @42101 has 1 MA's), (59, 42011), (63, 41972), (69, 41942), (77, 41918), (83, 41900), (85, 41897), (101, 41858), (108, 41825), (115, 41771), (128, 41684), (129, 41681), (153, 41561), (161, 41522), (170, 41429), (180, 41348),

Gene: Cornucopia_51 Start: 36403, Stop: 37407, Start Num: 11

Candidate Starts for Cornucopia_51:

(Start: 11 @36403 has 69 MA's), (28, 36571), (38, 36592), (Start: 40 @36604 has 1 MA's), (47, 36637), (53, 36652), (56, 36670), (59, 36679), (63, 36715), (76, 36763), (80, 36781), (90, 36793), (98, 36820), (103, 36844), (107, 36856), (108, 36859), (109, 36880), (114, 36901), (115, 36913), (116, 36916), (130, 37000), (141, 37051), (143, 37057), (150, 37108), (154, 37126), (158, 37147), (164, 37180), (166, 37198), (168, 37240), (171, 37267), (179, 37324), (182, 37354), (186, 37390), (187, 37393),

Gene: DaWorst_49 Start: 35931, Stop: 36935, Start Num: 11

Candidate Starts for DaWorst_49:

(Start: 11 @35931 has 69 MA's), (28, 36099), (38, 36120), (Start: 40 @36132 has 1 MA's), (56, 36198), (59, 36207), (63, 36243), (80, 36309), (98, 36348), (99, 36351), (103, 36372), (108, 36387), (109, 36408), (114, 36429), (115, 36441), (116, 36444), (130, 36528), (141, 36579), (143, 36585), (150, 36636), (154, 36654), (158, 36675), (164, 36708), (166, 36726), (168, 36768), (171, 36795), (179, 36852), (182, 36882), (186, 36918), (187, 36921),

Gene: Dante_47 Start: 34836, Stop: 35840, Start Num: 11

Candidate Starts for Dante_47:

(Start: 11 @34836 has 69 MA's), (28, 35004), (38, 35025), (Start: 40 @35037 has 1 MA's), (47, 35070), (53, 35085), (56, 35103), (59, 35112), (63, 35148), (76, 35196), (80, 35214), (90, 35226), (98, 35253), (103, 35277), (107, 35289), (108, 35292), (109, 35313), (114, 35334), (115, 35346), (116, 35349), (130, 35433), (139, 35478), (141, 35484), (143, 35490), (150, 35541), (154, 35559), (158, 35580), (164, 35613), (166, 35631), (168, 35673), (171, 35700), (179, 35757), (182, 35787), (186, 35823), (187, 35826),

Gene: Demsculpinboyz_56 Start: 34780, Stop: 35781, Start Num: 11

Candidate Starts for Demsculpinboyz_56:

(Start: 11 @34780 has 69 MA's), (28, 34948), (38, 34969), (Start: 40 @34981 has 1 MA's), (47, 35014), (53, 35029), (56, 35047), (59, 35056), (63, 35092), (76, 35140), (80, 35158), (90, 35170), (98, 35197), (103, 35221), (107, 35233), (108, 35236), (109, 35257), (114, 35278), (115, 35290), (116, 35293), (130, 35374), (139, 35419), (141, 35425), (150, 35482), (154, 35500), (155, 35503), (158, 35521), (164, 35554), (166, 35572), (168, 35614), (171, 35641), (174, 35680), (179, 35698), (180, 35719), (182, 35728), (186, 35764), (187, 35767),

Gene: DillTech15_46 Start: 34346, Stop: 35350, Start Num: 11

Candidate Starts for DillTech15_46:

(Start: 11 @34346 has 69 MA's), (28, 34514), (38, 34535), (Start: 40 @34547 has 1 MA's), (56, 34613), (59, 34622), (63, 34658), (80, 34724), (98, 34763), (99, 34766), (103, 34787), (108, 34802), (109, 34823), (114, 34844), (115, 34856), (116, 34859), (130, 34943), (141, 34994), (143, 35000), (150, 35051), (154, 35069), (158, 35090), (164, 35123), (166, 35141), (168, 35183), (171, 35210), (179, 35267), (182, 35297), (186, 35333), (187, 35336),

Gene: Donovan_34 Start: 27961, Stop: 28824, Start Num: 27

Candidate Starts for Donovan_34:

(Start: 27 @27961 has 49 MA's), (49, 28042), (55, 28066), (58, 28075), (61, 28102), (64, 28123), (98, 28219), (102, 28228), (103, 28243), (120, 28354), (154, 28537), (164, 28591), (173, 28720), (180, 28762), (187, 28810),

Gene: Doomphist_47 Start: 36071, Stop: 37075, Start Num: 11

Candidate Starts for Doomphist_47:

(Start: 11 @36071 has 69 MA's), (38, 36260), (Start: 40 @36272 has 1 MA's), (56, 36338), (59, 36347), (63, 36383), (80, 36449), (90, 36461), (98, 36488), (103, 36512), (108, 36527), (109, 36548), (114, 36569), (115, 36581), (116, 36584), (130, 36668), (139, 36713), (141, 36719), (146, 36749), (150, 36776), (154, 36794), (158, 36815), (164, 36848), (168, 36908), (171, 36935), (174, 36974), (179, 36992), (180, 37013), (182, 37022), (186, 37058), (188, 37067),

Gene: Doomslug_55 Start: 35048, Stop: 36052, Start Num: 11

Candidate Starts for Doomslug_55:

(Start: 11 @35048 has 69 MA's), (28, 35216), (38, 35237), (Start: 40 @35249 has 1 MA's), (47, 35282), (53, 35297), (56, 35315), (59, 35324), (63, 35360), (76, 35408), (80, 35426), (90, 35438), (98, 35465), (103, 35489), (107, 35501), (108, 35504), (109, 35525), (114, 35546), (115, 35558), (116, 35561), (130, 35645), (139, 35690), (141, 35696), (146, 35726), (150, 35753), (154, 35771), (158, 35792), (164, 35825), (166, 35843), (168, 35885), (179, 35969), (180, 35990), (186, 36035), (188, 36044),

Gene: Dorothea_72 Start: 42132, Stop: 41284, Start Num: 25

Candidate Starts for Dorothea_72:

(Start: 25 @42132 has 15 MA's), (Start: 26 @42123 has 3 MA's), (Start: 32 @42099 has 1 MA's), (53, 42036), (59, 42009), (63, 41970), (69, 41940), (77, 41916), (83, 41898), (85, 41895), (101, 41856), (108, 41823), (115, 41769), (128, 41682), (129, 41679), (153, 41559), (161, 41520), (170, 41427), (180, 41346),

Gene: Dorothy_44 Start: 34870, Stop: 35874, Start Num: 11

Candidate Starts for Dorothy_44:

(Start: 11 @34870 has 69 MA's), (38, 35059), (Start: 40 @35071 has 1 MA's), (56, 35137), (59, 35146), (63, 35182), (80, 35248), (90, 35260), (98, 35287), (103, 35311), (108, 35326), (109, 35347), (114, 35368), (115, 35380), (116, 35383), (130, 35467), (139, 35512), (141, 35518), (146, 35548), (150, 35575), (154, 35593), (158, 35614), (164, 35647), (168, 35707), (171, 35734), (174, 35773), (179, 35791), (180, 35812), (182, 35821), (186, 35857), (188, 35866),

Gene: DotProduct_44 Start: 34531, Stop: 35535, Start Num: 11

Candidate Starts for DotProduct_44:

(Start: 11 @34531 has 69 MA's), (38, 34720), (Start: 40 @34732 has 1 MA's), (56, 34798), (59, 34807), (63, 34843), (80, 34909), (90, 34921), (98, 34948), (103, 34972), (108, 34987), (109, 35008), (114, 35029), (115, 35041), (116, 35044), (130, 35128), (139, 35173), (141, 35179), (146, 35209), (150, 35236), (154, 35254), (158, 35275), (164, 35308), (166, 35326), (168, 35368), (171, 35395), (174, 35434), (179, 35452), (180, 35473), (182, 35482), (186, 35518), (188, 35527),

Gene: Doucette_35 Start: 25113, Stop: 25916, Start Num: 44

Candidate Starts for Doucette_35:

(Start: 44 @25113 has 4 MA's), (70, 25236), (71, 25239), (84, 25278), (93, 25305), (102, 25329), (107, 25365), (110, 25392), (115, 25425), (117, 25452), (121, 25482), (127, 25503), (134, 25545), (144, 25587), (149, 25620), (153, 25638), (157, 25665), (177, 25824), (184, 25872), (187, 25905),

Gene: Dynamo_34 Start: 28347, Stop: 29213, Start Num: 27

Candidate Starts for Dynamo_34:

(Start: 27 @28347 has 49 MA's), (49, 28428), (55, 28452), (58, 28461), (64, 28509), (102, 28617), (103, 28632), (120, 28743), (154, 28926), (164, 28980), (173, 29109), (180, 29151), (187, 29199),

Gene: E1_33 Start: 24569, Stop: 25372, Start Num: 46

Candidate Starts for E1_33:

(Start: 46 @24569 has 3 MA's), (70, 24692), (71, 24695), (84, 24734), (93, 24761), (102, 24785), (107, 24821), (110, 24848), (115, 24881), (117, 24908), (119, 24929), (121, 24938), (126, 24956), (127, 24959), (134, 25001), (141, 25031), (144, 25043), (149, 25076), (157, 25121), (169, 25211), (175, 25277), (177, 25280), (184, 25328), (187, 25361),

Gene: E6_36 Start: 26500, Stop: 27273, Start Num: 46

Candidate Starts for E6_36:

(Start: 46 @26500 has 3 MA's), (57, 26542), (63, 26584), (65, 26593), (91, 26680), (93, 26689), (104, 26728), (113, 26761), (115, 26782), (117, 26809), (121, 26839), (127, 26860), (134, 26902), (141, 26932), (144, 26944), (149, 26977), (153, 26995), (157, 27022), (177, 27181), (184, 27229), (187, 27262),

Gene: Easley_43 Start: 32655, Stop: 33410, Start Num: 42

Candidate Starts for Easley_43:

(Start: 42 @32655 has 2 MA's), (51, 32685), (56, 32712), (59, 32721), (78, 32820), (93, 32865), (95, 32874), (102, 32889), (105, 32898), (131, 33060), (150, 33171), (152, 33174), (165, 33255),

Gene: Eish_48 Start: 35416, Stop: 36417, Start Num: 11

Candidate Starts for Eish_48:

(Start: 11 @35416 has 69 MA's), (28, 35584), (38, 35605), (Start: 40 @35617 has 1 MA's), (56, 35683), (59, 35692), (63, 35728), (80, 35794), (98, 35833), (99, 35836), (107, 35869), (108, 35872), (109, 35893), (114, 35914), (115, 35926), (116, 35929), (130, 36010), (139, 36055), (141, 36061), (146, 36091), (150, 36118), (154, 36136), (155, 36139), (158, 36157), (164, 36190), (166, 36208), (168, 36250), (174, 36316), (180, 36355), (186, 36400),

Gene: Emmaloid_48 Start: 36261, Stop: 37265, Start Num: 11

Candidate Starts for Emmaloid_48:

(Start: 11 @36261 has 69 MA's), (38, 36450), (Start: 40 @36462 has 1 MA's), (56, 36528), (59, 36537), (63, 36573), (80, 36639), (90, 36651), (98, 36678), (103, 36702), (108, 36717), (109, 36738), (114, 36759), (115, 36771), (116, 36774), (130, 36858), (139, 36903), (141, 36909), (146, 36939), (150, 36966), (154, 36984), (158, 37005), (164, 37038), (166, 37056), (168, 37098), (171, 37125), (174, 37164), (179, 37182), (180, 37203), (182, 37212), (186, 37248), (188, 37257),

Gene: Estave1_48 Start: 34820, Stop: 35824, Start Num: 11

Candidate Starts for Estave1_48:

(Start: 11 @34820 has 69 MA's), (28, 34988), (38, 35009), (Start: 40 @35021 has 1 MA's), (47, 35054), (53, 35069), (56, 35087), (59, 35096), (63, 35132), (76, 35180), (80, 35198), (90, 35210), (98, 35237), (103, 35261), (107, 35273), (108, 35276), (109, 35297), (114, 35318), (115, 35330), (116, 35333), (128, 35405), (130, 35417), (139, 35462), (141, 35468), (146, 35498), (150, 35525), (154, 35543), (155, 35546), (158, 35564), (164, 35597), (166, 35615), (168, 35657), (174, 35723), (179, 35741), (180, 35762), (186, 35807),

Gene: Etoile_34 Start: 27939, Stop: 28805, Start Num: 27

Candidate Starts for Etoile_34:

(Start: 27 @27939 has 49 MA's), (49, 28020), (55, 28044), (58, 28053), (64, 28101), (102, 28209), (103, 28224), (106, 28233), (120, 28335), (154, 28518), (164, 28572), (173, 28701), (180, 28743), (187, 28791),

Gene: Fastidio_49 Start: 34493, Stop: 35497, Start Num: 11

Candidate Starts for Fastidio_49:

(Start: 11 @34493 has 69 MA's), (38, 34682), (Start: 40 @34694 has 1 MA's), (56, 34760), (59, 34769), (63, 34805), (80, 34871), (90, 34883), (98, 34910), (103, 34934), (108, 34949), (109, 34970), (114, 34991), (115, 35003), (116, 35006), (130, 35090), (141, 35141), (143, 35147), (150, 35198), (154,

35216), (158, 35237), (164, 35270), (166, 35288), (168, 35330), (171, 35357), (179, 35414), (182, 35444), (186, 35480), (187, 35483),

Gene: FatCactus_68 Start: 42406, Stop: 41588, Start Num: 39

Candidate Starts for FatCactus_68:

(Start: 39 @42406 has 1 MA's), (48, 42364), (57, 42325), (63, 42283), (73, 42250), (97, 42178), (105, 42145), (115, 42085), (137, 41938), (160, 41836),

Gene: Filuzino_45 Start: 34250, Stop: 35254, Start Num: 11

Candidate Starts for Filuzino_45:

(Start: 11 @34250 has 69 MA's), (28, 34418), (38, 34439), (Start: 40 @34451 has 1 MA's), (47, 34484), (53, 34499), (56, 34517), (59, 34526), (63, 34562), (76, 34610), (80, 34628), (90, 34640), (98, 34667), (103, 34691), (107, 34703), (108, 34706), (109, 34727), (114, 34748), (115, 34760), (116, 34763), (130, 34847), (141, 34898), (150, 34955), (154, 34973), (158, 34994), (164, 35027), (166, 35045), (168, 35087), (171, 35114), (179, 35171), (182, 35201), (186, 35237), (187, 35240),

Gene: FirstPlacePfu_34 Start: 27971, Stop: 28837, Start Num: 27

Candidate Starts for FirstPlacePfu_34:

(Start: 27 @27971 has 49 MA's), (49, 28052), (55, 28076), (58, 28085), (64, 28133), (102, 28241), (103, 28256), (120, 28367), (154, 28550), (164, 28604), (173, 28733), (180, 28775), (187, 28823),

Gene: Fishburne_34 Start: 27939, Stop: 28805, Start Num: 27

Candidate Starts for Fishburne_34:

(Start: 27 @27939 has 49 MA's), (49, 28020), (55, 28044), (58, 28053), (64, 28101), (102, 28209), (103, 28224), (120, 28335), (154, 28518), (164, 28572), (173, 28701), (180, 28743), (187, 28791),

Gene: Frankie_51 Start: 36473, Stop: 37477, Start Num: 11

Candidate Starts for Frankie_51:

(Start: 11 @36473 has 69 MA's), (28, 36641), (38, 36662), (Start: 40 @36674 has 1 MA's), (47, 36707), (53, 36722), (56, 36740), (59, 36749), (63, 36785), (76, 36833), (80, 36851), (90, 36863), (98, 36890), (103, 36914), (107, 36926), (108, 36929), (109, 36950), (114, 36971), (115, 36983), (116, 36986), (128, 37058), (130, 37070), (131, 37073), (139, 37115), (141, 37121), (146, 37151), (150, 37178), (158, 37217), (164, 37250), (166, 37268), (168, 37310), (171, 37337), (174, 37376), (179, 37394), (180, 37415), (182, 37424), (186, 37460), (188, 37469),

Gene: Fruitloop_46 Start: 36116, Stop: 37120, Start Num: 11

Candidate Starts for Fruitloop_46:

(Start: 11 @36116 has 69 MA's), (28, 36284), (38, 36305), (Start: 40 @36317 has 1 MA's), (47, 36350), (53, 36365), (56, 36383), (59, 36392), (63, 36428), (76, 36476), (80, 36494), (90, 36506), (98, 36533), (103, 36557), (107, 36569), (108, 36572), (109, 36593), (114, 36614), (115, 36626), (116, 36629), (128, 36701), (130, 36713), (141, 36764), (143, 36770), (150, 36821), (154, 36839), (158, 36860), (164, 36893), (166, 36911), (168, 36953), (171, 36980), (179, 37037), (182, 37067), (186, 37103), (187, 37106),

Gene: G4_33 Start: 24732, Stop: 25535, Start Num: 44

Candidate Starts for G4_33:

(Start: 44 @24732 has 4 MA's), (70, 24855), (71, 24858), (84, 24897), (93, 24924), (102, 24948), (107, 24984), (110, 25011), (115, 25044), (117, 25071), (119, 25092), (121, 25101), (122, 25104), (126, 25119), (127, 25122), (134, 25164), (141, 25194), (144, 25206), (149, 25239), (157, 25284), (169, 25374), (177, 25443), (184, 25491), (187, 25524),

Gene: GAL1_39 Start: 32334, Stop: 33173, Start Num: 30

Candidate Starts for GAL1_39:

(15, 32199), (18, 32229), (22, 32286), (30, 32334), (43, 32376), (51, 32403), (84, 32556), (93, 32583), (108, 32622), (112, 32652), (115, 32676), (128, 32757), (131, 32772), (132, 32775), (138, 32838), (162, 32961), (175, 33096), (177, 33099), (178, 33108),

Gene: GUmbie_45 Start: 34760, Stop: 35764, Start Num: 11

Candidate Starts for GUmbie_45:

(Start: 11 @34760 has 69 MA's), (38, 34949), (Start: 40 @34961 has 1 MA's), (56, 35027), (59, 35036), (63, 35072), (80, 35138), (90, 35150), (98, 35177), (103, 35201), (108, 35216), (109, 35237), (114, 35258), (115, 35270), (116, 35273), (130, 35357), (139, 35402), (141, 35408), (146, 35438), (150, 35465), (154, 35483), (158, 35504), (164, 35537), (168, 35597), (171, 35624), (174, 35663), (179, 35681), (180, 35702), (182, 35711), (186, 35747), (188, 35756),

Gene: GaloreK_34 Start: 27935, Stop: 28798, Start Num: 27

Candidate Starts for GaloreK_34:

(Start: 27 @27935 has 49 MA's), (49, 28016), (55, 28040), (58, 28049), (61, 28076), (64, 28097), (98, 28193), (102, 28202), (103, 28217), (106, 28226), (120, 28328), (154, 28511), (164, 28565), (173, 28694), (180, 28736), (187, 28784),

Gene: Gavriela_34 Start: 28196, Stop: 29059, Start Num: 27

Candidate Starts for Gavriela_34:

(Start: 27 @28196 has 49 MA's), (49, 28277), (55, 28301), (58, 28310), (64, 28358), (72, 28382), (102, 28463), (103, 28478), (120, 28589), (154, 28772), (164, 28826), (173, 28955), (180, 28997), (187, 29045),

Gene: GigiOuiOui_44 Start: 34673, Stop: 35677, Start Num: 11

Candidate Starts for GigiOuiOui_44:

(Start: 11 @34673 has 69 MA's), (38, 34862), (Start: 40 @34874 has 1 MA's), (56, 34940), (59, 34949), (63, 34985), (80, 35051), (90, 35063), (98, 35090), (103, 35114), (108, 35129), (109, 35150), (114, 35171), (115, 35183), (116, 35186), (130, 35270), (139, 35315), (141, 35321), (146, 35351), (150, 35378), (154, 35396), (158, 35417), (164, 35450), (168, 35510), (171, 35537), (174, 35576), (179, 35594), (180, 35615), (182, 35624), (186, 35660), (188, 35669),

Gene: Girr_48 Start: 35732, Stop: 36736, Start Num: 11

Candidate Starts for Girr_48:

(Start: 11 @35732 has 69 MA's), (38, 35921), (Start: 40 @35933 has 1 MA's), (56, 35999), (59, 36008), (63, 36044), (80, 36110), (90, 36122), (98, 36149), (103, 36173), (108, 36188), (109, 36209), (114, 36230), (115, 36242), (116, 36245), (130, 36329), (139, 36374), (141, 36380), (146, 36410), (150, 36437), (154, 36455), (158, 36476), (164, 36509), (168, 36569), (171, 36596), (174, 36635), (179, 36653), (180, 36674), (182, 36683), (186, 36719), (188, 36728),

Gene: Gladiator_70 Start: 41751, Stop: 40912, Start Num: 25

Candidate Starts for Gladiator_70:

(Start: 25 @41751 has 15 MA's), (Start: 26 @41742 has 3 MA's), (Start: 32 @41718 has 1 MA's), (59, 41628), (63, 41589), (64, 41580), (74, 41547), (85, 41517), (101, 41484), (115, 41397), (128, 41310), (129, 41307), (153, 41187), (161, 41148), (170, 41055), (180, 40974),

Gene: Glaske_34 Start: 28196, Stop: 29059, Start Num: 27

Candidate Starts for Glaske_34:

(Start: 27 @28196 has 49 MA's), (49, 28277), (55, 28301), (58, 28310), (64, 28358), (72, 28382), (102, 28463), (103, 28478), (120, 28589), (154, 28772), (164, 28826), (173, 28955), (180, 28997), (187, 29045),

Gene: GreaseLightnin_34 Start: 28179, Stop: 29045, Start Num: 27

Candidate Starts for GreaseLightnin_34:

(Start: 27 @28179 has 49 MA's), (55, 28284), (58, 28293), (64, 28341), (102, 28449), (103, 28464), (120, 28575), (154, 28758), (164, 28812), (173, 28941), (180, 28983), (187, 29031),

Gene: Grimmer_57 Start: 37247, Stop: 38248, Start Num: 11

Candidate Starts for Grimmer_57:

(Start: 11 @37247 has 69 MA's), (38, 37436), (Start: 40 @37448 has 1 MA's), (53, 37496), (56, 37514), (59, 37523), (63, 37559), (80, 37625), (90, 37637), (98, 37664), (103, 37688), (108, 37703), (109, 37724), (114, 37745), (115, 37757), (116, 37760), (130, 37841), (139, 37886), (141, 37892), (150, 37949), (154, 37967), (158, 37988), (164, 38021), (166, 38039), (168, 38081), (171, 38108), (174, 38147), (179, 38165), (180, 38186), (186, 38231), (187, 38234),

Gene: HC_34 Start: 27658, Stop: 28527, Start Num: 27

Candidate Starts for HC_34:

(Start: 27 @27658 has 49 MA's), (55, 27766), (58, 27775), (64, 27823), (102, 27931), (103, 27946), (120, 28057), (154, 28240), (164, 28294), (173, 28423), (180, 28465), (187, 28513),

Gene: HUHilltop_34 Start: 27972, Stop: 28835, Start Num: 27

Candidate Starts for HUHilltop_34:

(Start: 27 @27972 has 49 MA's), (49, 28053), (55, 28077), (58, 28086), (61, 28113), (64, 28134), (98, 28230), (102, 28239), (103, 28254), (120, 28365), (154, 28548), (164, 28602), (180, 28773), (187, 28821),

Gene: Hamulus_48 Start: 36115, Stop: 37119, Start Num: 11

Candidate Starts for Hamulus_48:

(Start: 11 @36115 has 69 MA's), (38, 36304), (Start: 40 @36316 has 1 MA's), (56, 36382), (59, 36391), (63, 36427), (80, 36493), (90, 36505), (98, 36532), (103, 36556), (108, 36571), (109, 36592), (114, 36613), (115, 36625), (116, 36628), (130, 36712), (139, 36757), (141, 36763), (146, 36793), (150, 36820), (154, 36838), (158, 36859), (164, 36892), (168, 36952), (171, 36979), (174, 37018), (179, 37036), (180, 37057), (182, 37066), (186, 37102), (188, 37111),

Gene: Harley_50 Start: 35468, Stop: 36472, Start Num: 11

Candidate Starts for Harley_50:

(Start: 11 @35468 has 69 MA's), (38, 35657), (Start: 40 @35669 has 1 MA's), (56, 35735), (59, 35744), (63, 35780), (80, 35846), (90, 35858), (98, 35885), (103, 35909), (108, 35924), (109, 35945), (114, 35966), (115, 35978), (116, 35981), (130, 36065), (139, 36110), (141, 36116), (146, 36146), (150, 36173), (154, 36191), (158, 36212), (164, 36245), (168, 36305), (174, 36371), (179, 36389), (180, 36410), (182, 36419), (186, 36455), (188, 36464),

Gene: IronMan_69 Start: 44419, Stop: 43604, Start Num: 26

Candidate Starts for IronMan_69:

(21, 44446), (Start: 26 @44419 has 3 MA's), (34, 44386), (59, 44302), (63, 44263), (66, 44251), (86, 44194), (118, 44041), (170, 43750),

Gene: Isiphiwo_70 Start: 41692, Stop: 40844, Start Num: 25

Candidate Starts for Isiphiwo_70:

(Start: 25 @41692 has 15 MA's), (Start: 26 @41683 has 3 MA's), (Start: 32 @41659 has 1 MA's), (59, 41569), (63, 41530), (69, 41500), (77, 41476), (83, 41458), (85, 41455), (101, 41416), (108, 41383), (115, 41329), (128, 41242), (129, 41239), (153, 41119), (161, 41080), (170, 40987), (180, 40906),

Gene: Island3_36 Start: 29775, Stop: 30644, Start Num: 27

Candidate Starts for Island3_36:

(Start: 27 @29775 has 49 MA's), (55, 29883), (58, 29892), (64, 29940), (102, 30048), (103, 30063), (120, 30174), (154, 30357), (164, 30411), (173, 30540), (180, 30582), (187, 30630),

Gene: Iwokeuplikedis_72 Start: 43407, Stop: 42592, Start Num: 37

Candidate Starts for Iwokeuplikedis_72:

(Start: 37 @43407 has 4 MA's), (54, 43341), (60, 43314), (63, 43278), (87, 43203), (108, 43134), (115, 43080), (128, 42993), (153, 42870), (162, 42825), (170, 42738), (180, 42657),

Gene: Jaan_70 Start: 44554, Stop: 43772, Start Num: 37

Candidate Starts for Jaan_70:

(Start: 37 @44554 has 4 MA's), (59, 44470), (63, 44431), (66, 44419), (86, 44362), (94, 44341), (118, 44209), (170, 43918),

Gene: Jant_52 Start: 37127, Stop: 38131, Start Num: 11

Candidate Starts for Jant_52:

(Start: 11 @37127 has 69 MA's), (28, 37295), (38, 37316), (Start: 40 @37328 has 1 MA's), (47, 37361), (53, 37376), (56, 37394), (59, 37403), (63, 37439), (76, 37487), (80, 37505), (90, 37517), (98, 37544), (103, 37568), (107, 37580), (108, 37583), (109, 37604), (114, 37625), (115, 37637), (116, 37640), (130, 37724), (139, 37769), (141, 37775), (150, 37832), (154, 37850), (158, 37871), (164, 37904), (166, 37922), (168, 37964), (171, 37991), (179, 38048), (182, 38078), (186, 38114), (187, 38117),

Gene: Jebeks_35 Start: 27924, Stop: 28790, Start Num: 27

Candidate Starts for Jebeks_35:

(Start: 27 @27924 has 49 MA's), (49, 28005), (55, 28029), (58, 28038), (61, 28065), (64, 28086), (102, 28194), (103, 28209), (120, 28320), (154, 28503), (164, 28557), (173, 28686), (180, 28728), (187, 28776),

Gene: JewelBug_72 Start: 42414, Stop: 41578, Start Num: 25

Candidate Starts for JewelBug_72:

(Start: 25 @42414 has 15 MA's), (Start: 26 @42405 has 3 MA's), (Start: 32 @42381 has 1 MA's), (59, 42291), (63, 42252), (66, 42240), (111, 42090), (128, 41976), (129, 41973), (153, 41853), (161, 41814), (170, 41721), (180, 41640),

Gene: Job42_48 Start: 36721, Stop: 37725, Start Num: 11

Candidate Starts for Job42_48:

(Start: 11 @36721 has 69 MA's), (38, 36910), (Start: 40 @36922 has 1 MA's), (56, 36988), (59, 36997), (63, 37033), (80, 37099), (90, 37111), (98, 37138), (103, 37162), (108, 37177), (109, 37198), (114, 37219), (115, 37231), (116, 37234), (130, 37318), (139, 37363), (141, 37369), (146, 37399), (150, 37426), (154, 37444), (158, 37465), (164, 37498), (168, 37558), (171, 37585), (174, 37624), (179, 37642), (180, 37663), (182, 37672), (186, 37708), (188, 37717),

Gene: Jordennis_71 Start: 41658, Stop: 41059, Start Num: 92

Candidate Starts for Jordennis_71:

(Start: 92 @41658 has 2 MA's), (101, 41631), (108, 41598), (115, 41544), (128, 41457), (129, 41454), (153, 41334), (161, 41295), (170, 41202), (180, 41121),

Gene: Jung_33 Start: 27903, Stop: 28766, Start Num: 27

Candidate Starts for Jung_33:

(Start: 27 @27903 has 49 MA's), (49, 27984), (55, 28008), (58, 28017), (64, 28065), (72, 28089), (102, 28170), (103, 28185), (120, 28296), (154, 28479), (164, 28533), (173, 28662), (180, 28704), (187, 28752),

Gene: Juniormint_34 Start: 27975, Stop: 28841, Start Num: 27

Candidate Starts for Juniormint_34:

(Start: 27 @27975 has 49 MA's), (49, 28056), (55, 28080), (58, 28089), (61, 28116), (64, 28137), (102, 28245), (103, 28260), (120, 28371), (154, 28554), (164, 28608), (173, 28737), (180, 28779), (187, 28827),

Gene: Karhdo_46 Start: 35555, Stop: 36559, Start Num: 11

Candidate Starts for Karhdo_46:

(Start: 11 @35555 has 69 MA's), (38, 35744), (Start: 40 @35756 has 1 MA's), (56, 35822), (59, 35831), (63, 35867), (80, 35933), (90, 35945), (98, 35972), (103, 35996), (108, 36011), (109, 36032), (114, 36053), (115, 36065), (116, 36068), (130, 36152), (139, 36197), (141, 36203), (146, 36233), (150, 36260), (154, 36278), (158, 36299), (164, 36332), (168, 36392), (171, 36419), (174, 36458), (179, 36476), (180, 36497), (182, 36506), (186, 36542), (188, 36551),

Gene: Kari_34 Start: 27936, Stop: 28802, Start Num: 27

Candidate Starts for Kari_34:

(Start: 27 @27936 has 49 MA's), (49, 28017), (55, 28041), (58, 28050), (64, 28098), (102, 28206), (103, 28221), (120, 28332), (154, 28515), (164, 28569), (173, 28698), (180, 28740), (187, 28788),

Gene: KilKor_34 Start: 28196, Stop: 29059, Start Num: 27

Candidate Starts for KilKor_34:

(Start: 27 @28196 has 49 MA's), (49, 28277), (55, 28301), (58, 28310), (64, 28358), (72, 28382), (102, 28463), (103, 28478), (120, 28589), (154, 28772), (164, 28826), (173, 28955), (180, 28997), (187, 29045),

Gene: Krakatau_45 Start: 35226, Stop: 36230, Start Num: 11

Candidate Starts for Krakatau_45:

(1, 34731), (2, 34782), (3, 34905), (4, 34911), (5, 34926), (6, 34980), (7, 35052), (8, 35061), (Start: 11 @35226 has 69 MA's), (38, 35415), (Start: 40 @35427 has 1 MA's), (56, 35493), (59, 35502), (63, 35538), (80, 35604), (90, 35616), (98, 35643), (103, 35667), (108, 35682), (109, 35703), (114, 35724), (115, 35736), (116, 35739), (130, 35823), (139, 35868), (141, 35874), (143, 35880), (146, 35904), (150, 35931), (154, 35949), (158, 35970), (164, 36003), (168, 36063), (171, 36090), (174, 36129), (179, 36147), (180, 36168), (182, 36177), (186, 36213), (188, 36222),

Gene: KristaRAM_47 Start: 36438, Stop: 37442, Start Num: 11

Candidate Starts for KristaRAM_47:

(Start: 11 @36438 has 69 MA's), (28, 36606), (38, 36627), (Start: 40 @36639 has 1 MA's), (47, 36672), (53, 36687), (56, 36705), (59, 36714), (63, 36750), (76, 36798), (80, 36816), (90, 36828), (98, 36855), (103, 36879), (107, 36891), (108, 36894), (109, 36915), (114, 36936), (115, 36948), (116, 36951), (130, 37035), (139, 37080), (141, 37086), (146, 37116), (150, 37143), (154, 37161), (158, 37182), (164, 37215), (166, 37233), (168, 37275), (171, 37302), (179, 37359), (182, 37389), (186, 37425), (187, 37428),

Gene: Ksquared_34 Start: 27953, Stop: 28819, Start Num: 27

Candidate Starts for Ksquared_34:

(Start: 27 @27953 has 49 MA's), (49, 28034), (55, 28058), (58, 28067), (61, 28094), (64, 28115), (102, 28223), (103, 28238), (120, 28349), (154, 28532), (164, 28586), (173, 28715), (180, 28757), (187, 28805),

Gene: Landor_70 Start: 44512, Stop: 43679, Start Num: 26

Candidate Starts for Landor_70:

(21, 44539), (Start: 26 @44512 has 3 MA's), (30, 44488), (59, 44404), (63, 44365), (115, 44164), (116, 44161), (153, 43957), (170, 43825),

Gene: Langerak_34 Start: 27955, Stop: 28818, Start Num: 27

Candidate Starts for Langerak_34:

(Start: 27 @27955 has 49 MA's), (49, 28036), (55, 28060), (58, 28069), (61, 28096), (64, 28117), (98, 28213), (102, 28222), (103, 28237), (106, 28246), (120, 28348), (154, 28531), (164, 28585), (173, 28714), (180, 28756), (187, 28804),

Gene: Latretium_50 Start: 36344, Stop: 37345, Start Num: 11

Candidate Starts for Latretium_50:

(Start: 11 @36344 has 69 MA's), (28, 36512), (38, 36533), (Start: 40 @36545 has 1 MA's), (56, 36611), (59, 36620), (63, 36656), (80, 36722), (82, 36728), (90, 36734), (98, 36761), (107, 36797), (108, 36800), (109, 36821), (114, 36842), (115, 36854), (116, 36857), (130, 36938), (139, 36983), (141, 36989), (143, 36995), (146, 37019), (150, 37046), (154, 37064), (158, 37085), (164, 37118), (166, 37136), (168, 37178), (174, 37244), (179, 37262), (180, 37283), (186, 37328),

Gene: LilMoolah_46 Start: 35122, Stop: 36126, Start Num: 11

Candidate Starts for LilMoolah_46:

(9, 34966), (Start: 11 @35122 has 69 MA's), (Start: 40 @35323 has 1 MA's), (56, 35389), (59, 35398), (63, 35434), (80, 35500), (82, 35506), (90, 35512), (98, 35539), (107, 35575), (108, 35578), (109, 35599), (114, 35620), (115, 35632), (116, 35635), (130, 35719), (139, 35764), (141, 35770), (143, 35776), (146, 35800), (150, 35827), (154, 35845), (158, 35866), (164, 35899), (168, 35959), (171, 35986), (174, 36025), (179, 36043), (180, 36064), (186, 36109), (188, 36118),

Gene: LittleShirley_47 Start: 36153, Stop: 37157, Start Num: 11

Candidate Starts for LittleShirley_47:

(Start: 11 @36153 has 69 MA's), (28, 36321), (38, 36342), (Start: 40 @36354 has 1 MA's), (56, 36420), (59, 36429), (63, 36465), (80, 36531), (98, 36570), (99, 36573), (103, 36594), (108, 36609), (109, 36630), (114, 36651), (115, 36663), (116, 36666), (130, 36750), (139, 36795), (141, 36801), (146, 36831), (150, 36858), (154, 36876), (158, 36897), (164, 36930), (166, 36948), (168, 36990), (171, 37017), (174, 37056), (179, 37074), (180, 37095), (182, 37104), (186, 37140), (188, 37149),

Gene: MadMen_42 Start: 34172, Stop: 35179, Start Num: 11

Candidate Starts for MadMen_42:

(1, 33677), (2, 33728), (3, 33851), (4, 33857), (5, 33872), (6, 33926), (7, 33998), (8, 34007), (Start: 11 @34172 has 69 MA's), (38, 34364), (Start: 40 @34376 has 1 MA's), (56, 34442), (59, 34451), (63, 34487), (80, 34553), (90, 34565), (98, 34592), (103, 34616), (108, 34631), (109, 34652), (114, 34673), (115, 34685), (116, 34688), (130, 34772), (139, 34817), (141, 34823), (143, 34829), (146, 34853), (150, 34880), (154, 34898), (158, 34919), (164, 34952), (168, 35012), (171, 35039), (174, 35078), (179, 35096), (180, 35117), (182, 35126), (186, 35162), (188, 35171),

Gene: Madiba_43 Start: 33464, Stop: 34468, Start Num: 11

Candidate Starts for Madiba_43:

(Start: 11 @33464 has 69 MA's), (38, 33653), (Start: 40 @33665 has 1 MA's), (56, 33731), (59, 33740), (63, 33776), (80, 33842), (90, 33854), (98, 33881), (103, 33905), (108, 33920), (109, 33941), (114, 33962), (115, 33974), (116, 33977), (130, 34061), (139, 34106), (141, 34112), (146, 34142), (150, 34169), (154, 34187), (158, 34208), (164, 34241), (168, 34301), (171, 34328), (174, 34367), (179, 34385), (180, 34406), (182, 34415), (186, 34451), (188, 34460),

Gene: Majeke_34 Start: 27977, Stop: 28843, Start Num: 27

Candidate Starts for Majeke_34:

(Start: 27 @27977 has 49 MA's), (49, 28058), (55, 28082), (58, 28091), (64, 28139), (102, 28247), (103, 28262), (120, 28373), (154, 28556), (164, 28610), (173, 28739), (180, 28781), (187, 28829),

Gene: Malithi_34 Start: 27862, Stop: 28728, Start Num: 27

Candidate Starts for Malithi_34:

(Start: 27 @27862 has 49 MA's), (49, 27943), (55, 27967), (58, 27976), (61, 28003), (64, 28024), (102, 28132), (103, 28147), (120, 28258), (154, 28441), (164, 28495), (180, 28666), (187, 28714),

Gene: Mangethe_34 Start: 27977, Stop: 28843, Start Num: 27

Candidate Starts for Mangethe_34:

(Start: 27 @27977 has 49 MA's), (49, 28058), (55, 28082), (58, 28091), (64, 28139), (102, 28247), (103, 28262), (120, 28373), (154, 28556), (164, 28610), (173, 28739), (180, 28781), (187, 28829),

Gene: Mantra_44 Start: 34639, Stop: 35643, Start Num: 11

Candidate Starts for Mantra_44:

(Start: 11 @34639 has 69 MA's), (38, 34828), (Start: 40 @34840 has 1 MA's), (56, 34906), (59, 34915), (63, 34951), (80, 35017), (90, 35029), (98, 35056), (103, 35080), (108, 35095), (109, 35116), (114, 35137), (115, 35149), (116, 35152), (130, 35236), (139, 35281), (141, 35287), (146, 35317), (150, 35344), (154, 35362), (158, 35383), (164, 35416), (168, 35476), (171, 35503), (174, 35542), (179, 35560), (180, 35581), (182, 35590), (186, 35626), (188, 35635),

Gene: Marker_48 Start: 35024, Stop: 36025, Start Num: 11

Candidate Starts for Marker_48:

(Start: 11 @35024 has 69 MA's), (28, 35192), (38, 35213), (Start: 40 @35225 has 1 MA's), (56, 35291), (59, 35300), (63, 35336), (80, 35402), (98, 35441), (99, 35444), (107, 35477), (108, 35480), (109, 35501), (114, 35522), (115, 35534), (116, 35537), (130, 35618), (139, 35663), (141, 35669), (146, 35699), (150, 35726), (154, 35744), (155, 35747), (158, 35765), (164, 35798), (166, 35816), (168, 35858), (171, 35885), (174, 35924), (179, 35942), (180, 35963), (182, 35972), (186, 36008), (188, 36017),

Gene: Megiddo_34 Start: 28196, Stop: 29059, Start Num: 27

Candidate Starts for Megiddo_34:

(Start: 27 @28196 has 49 MA's), (49, 28277), (55, 28301), (58, 28310), (64, 28358), (72, 28382), (102, 28463), (103, 28478), (120, 28589), (154, 28772), (164, 28826), (173, 28955), (180, 28997), (187, 29045),

Gene: Min1_10 Start: 3743, Stop: 4495, Start Num: 50

Candidate Starts for Min1_10:

(33, 3686), (45, 3734), (50, 3743), (52, 3749), (56, 3773), (61, 3809), (79, 3881), (101, 3935), (133, 4118), (155, 4235), (168, 4346), (176, 4418), (183, 4466),

Gene: MisterCuddles_47 Start: 35732, Stop: 36736, Start Num: 11

Candidate Starts for MisterCuddles_47:

(Start: 11 @35732 has 69 MA's), (38, 35921), (Start: 40 @35933 has 1 MA's), (56, 35999), (59, 36008), (63, 36044), (80, 36110), (90, 36122), (98, 36149), (103, 36173), (108, 36188), (109, 36209), (114, 36230), (115, 36242), (116, 36245), (130, 36329), (139, 36374), (141, 36380), (146, 36410), (150, 36437), (154, 36455), (158, 36476), (164, 36509), (168, 36569), (171, 36596), (174, 36635), (179, 36653), (180, 36674), (182, 36683), (186, 36719), (188, 36728),

Gene: Mwanjiwa_53 Start: 36107, Stop: 37108, Start Num: 11

Candidate Starts for Mwanjiwa_53:

(Start: 11 @36107 has 69 MA's), (28, 36275), (38, 36296), (Start: 40 @36308 has 1 MA's), (56, 36374), (59, 36383), (63, 36419), (80, 36485), (82, 36491), (90, 36497), (98, 36524), (107, 36560), (108, 36563), (109, 36584), (114, 36605), (115, 36617), (116, 36620), (130, 36701), (139, 36746), (141, 36752), (146, 36782), (150, 36809), (154, 36827), (158, 36848), (164, 36881), (166, 36899), (168, 36941), (174, 37007), (179, 37025), (180, 37046), (186, 37091),

Gene: Necropolis_34 Start: 27936, Stop: 28802, Start Num: 27

Candidate Starts for Necropolis_34:

(Start: 27 @27936 has 49 MA's), (49, 28017), (55, 28041), (58, 28050), (64, 28098), (102, 28206), (103, 28221), (120, 28332), (154, 28515), (164, 28569), (173, 28698), (180, 28740), (187, 28788),

Gene: Neeharika16_71 Start: 41586, Stop: 40738, Start Num: 25

Candidate Starts for Neeharika16_71:

(Start: 25 @41586 has 15 MA's), (Start: 26 @41577 has 3 MA's), (Start: 32 @41553 has 1 MA's), (59, 41463), (63, 41424), (69, 41394), (77, 41370), (83, 41352), (85, 41349), (101, 41310), (108, 41277), (115, 41223), (128, 41136), (129, 41133), (153, 41013), (161, 40974), (170, 40881), (180, 40800),

Gene: Newrala_72 Start: 42117, Stop: 41278, Start Num: 25

Candidate Starts for Newrala_72:

(Start: 25 @42117 has 15 MA's), (Start: 26 @42108 has 3 MA's), (Start: 32 @42084 has 1 MA's), (59, 41994), (63, 41955), (64, 41946), (74, 41913), (85, 41883), (101, 41850), (115, 41763), (128, 41676), (129, 41673), (153, 41553), (161, 41514), (170, 41421), (180, 41340),

Gene: Nivrat_45 Start: 34995, Stop: 35999, Start Num: 11

Candidate Starts for Nivrat_45:

(9, 34839), (Start: 11 @34995 has 69 MA's), (Start: 40 @35196 has 1 MA's), (56, 35262), (59, 35271), (63, 35307), (80, 35373), (82, 35379), (90, 35385), (98, 35412), (107, 35448), (108, 35451), (109, 35472), (114, 35493), (115, 35505), (116, 35508), (130, 35592), (139, 35637), (141, 35643), (143, 35649), (146, 35673), (150, 35700), (154, 35718), (158, 35739), (164, 35772), (168, 35832), (171, 35859), (174, 35898), (179, 35916), (180, 35937), (186, 35982), (188, 35991),

Gene: Odin_74 Start: 43407, Stop: 42565, Start Num: 36

Candidate Starts for Odin_74:

(Start: 36 @43407 has 3 MA's), (63, 43275), (71, 43236), (77, 43221), (87, 43203), (96, 43167), (101, 43161), (108, 43128), (114, 43086), (128, 42987), (129, 42984), (136, 42927), (151, 42852), (162, 42792), (163, 42783), (185, 42588),

Gene: Ogopogo_48 Start: 34646, Stop: 35650, Start Num: 11

Candidate Starts for Ogopogo_48:

(Start: 11 @34646 has 69 MA's), (28, 34814), (38, 34835), (Start: 40 @34847 has 1 MA's), (56, 34913), (59, 34922), (63, 34958), (80, 35024), (98, 35063), (99, 35066), (103, 35087), (108, 35102), (109, 35123), (114, 35144), (115, 35156), (116, 35159), (130, 35243), (141, 35294), (143, 35300), (150, 35351), (154, 35369), (158, 35390), (164, 35423), (166, 35441), (168, 35483), (171, 35510), (179, 35567), (182, 35597), (186, 35633), (187, 35636),

Gene: PMC_42 Start: 34542, Stop: 35546, Start Num: 11

Candidate Starts for PMC_42:

(Start: 11 @34542 has 69 MA's), (38, 34731), (Start: 40 @34743 has 1 MA's), (56, 34809), (59, 34818), (63, 34854), (80, 34920), (90, 34932), (98, 34959), (103, 34983), (108, 34998), (109, 35019), (114, 35040), (115, 35052), (116, 35055), (130, 35139), (139, 35184), (141, 35190), (146, 35220), (150, 35247), (154, 35265), (158, 35286), (164, 35319), (168, 35379), (174, 35445), (179, 35463), (180, 35484), (182, 35493), (186, 35529), (188, 35538),

Gene: PeanutPie_34 Start: 27935, Stop: 28798, Start Num: 27

Candidate Starts for PeanutPie_34:

(Start: 27 @27935 has 49 MA's), (49, 28016), (55, 28040), (58, 28049), (64, 28097), (98, 28193), (102, 28202), (103, 28217), (120, 28328), (154, 28511), (164, 28565), (173, 28694), (180, 28736), (187, 28784),

Gene: Ph8s_77 Start: 43456, Stop: 42623, Start Num: 36

Candidate Starts for Ph8s_77:

(Start: 26 @43483 has 3 MA's), (Start: 36 @43456 has 3 MA's), (48, 43405), (62, 43330), (63, 43324), (75, 43285), (103, 43195), (115, 43126), (159, 42886), (160, 42877), (172, 42772), (188, 42646), (189, 42643), (190, 42631),

Gene: Phaded_67 Start: 44471, Stop: 43656, Start Num: 26

Candidate Starts for Phaded_67:

(21, 44498), (Start: 26 @44471 has 3 MA's), (34, 44438), (59, 44354), (63, 44315), (66, 44303), (86, 44246), (94, 44225), (118, 44093), (170, 43802),

Gene: Phalconet_46 Start: 34873, Stop: 35877, Start Num: 11

Candidate Starts for Phalconet_46:

(Start: 11 @34873 has 69 MA's), (28, 35041), (38, 35062), (Start: 40 @35074 has 1 MA's), (47, 35107), (53, 35122), (56, 35140), (59, 35149), (63, 35185), (76, 35233), (80, 35251), (90, 35263), (98, 35290), (103, 35314), (107, 35326), (108, 35329), (109, 35350), (114, 35371), (115, 35383), (116, 35386), (128, 35458), (130, 35470), (141, 35521), (150, 35578), (154, 35596), (158, 35617), (164, 35650), (166, 35668), (168, 35710), (174, 35776), (179, 35794), (180, 35815), (186, 35860), (188, 35869),

Gene: Phalm_34 Start: 28196, Stop: 29059, Start Num: 27

Candidate Starts for Phalm_34:

(Start: 27 @28196 has 49 MA's), (49, 28277), (55, 28301), (58, 28310), (64, 28358), (72, 28382), (102, 28463), (103, 28478), (120, 28589), (154, 28772), (164, 28826), (173, 28955), (180, 28997), (187, 29045),

Gene: Phasih_45 Start: 35085, Stop: 36089, Start Num: 11

Candidate Starts for Phasih_45:

(9, 34929), (Start: 11 @35085 has 69 MA's), (Start: 40 @35286 has 1 MA's), (56, 35352), (59, 35361), (63, 35397), (80, 35463), (90, 35475), (98, 35502), (103, 35526), (108, 35541), (109, 35562), (114, 35583), (115, 35595), (116, 35598), (130, 35682), (139, 35727), (141, 35733), (146, 35763), (150, 35790), (154, 35808), (158, 35829), (164, 35862), (168, 35922), (174, 35988), (179, 36006), (180, 36027), (182, 36036), (186, 36072), (188, 36081),

Gene: Phegasus_34 Start: 27944, Stop: 28810, Start Num: 27

Candidate Starts for Phegasus_34:

(Start: 27 @27944 has 49 MA's), (49, 28025), (55, 28049), (58, 28058), (64, 28106), (102, 28214), (103, 28229), (120, 28340), (154, 28523), (164, 28577), (173, 28706), (180, 28748), (187, 28796),

Gene: PhesterPhotato_49 Start: 35828, Stop: 36832, Start Num: 11

Candidate Starts for PhesterPhotato_49:

(Start: 11 @35828 has 69 MA's), (28, 35996), (38, 36017), (Start: 40 @36029 has 1 MA's), (47, 36062), (53, 36077), (56, 36095), (59, 36104), (63, 36140), (76, 36188), (80, 36206), (90, 36218), (98, 36245), (103, 36269), (107, 36281), (108, 36284), (109, 36305), (114, 36326), (115, 36338), (116, 36341), (128, 36413), (130, 36425), (141, 36476), (150, 36533), (154, 36551), (158, 36572), (164, 36605), (166, 36623), (168, 36665), (174, 36731), (179, 36749), (180, 36770), (186, 36815), (188, 36824),

Gene: Phineas_34 Start: 28307, Stop: 29173, Start Num: 27

Candidate Starts for Phineas_34:

(Start: 27 @28307 has 49 MA's), (49, 28388), (55, 28412), (58, 28421), (64, 28469), (102, 28577), (103, 28592), (120, 28703), (154, 28886), (164, 28940), (173, 29069), (180, 29111), (187, 29159),

Gene: Pmask_71 Start: 42122, Stop: 41274, Start Num: 25

Candidate Starts for Pmask_71:

(Start: 25 @42122 has 15 MA's), (Start: 26 @42113 has 3 MA's), (Start: 32 @42089 has 1 MA's), (59, 41999), (63, 41960), (69, 41930), (77, 41906), (83, 41888), (85, 41885), (101, 41846), (108, 41813), (115, 41759), (128, 41672), (129, 41669), (153, 41549), (161, 41510), (170, 41417), (180, 41336),

Gene: Poenanya_47 Start: 36071, Stop: 37075, Start Num: 11

Candidate Starts for Poenanya_47:

(Start: 11 @36071 has 69 MA's), (38, 36260), (Start: 40 @36272 has 1 MA's), (56, 36338), (59, 36347), (63, 36383), (80, 36449), (90, 36461), (98, 36488), (103, 36512), (108, 36527), (109, 36548), (114, 36569), (115, 36581), (116, 36584), (130, 36668), (139, 36713), (141, 36719), (146, 36749), (150, 36776), (154, 36794), (158, 36815), (164, 36848), (168, 36908), (171, 36935), (174, 36974), (179, 36992), (180, 37013), (182, 37022), (186, 37058), (188, 37067),

Gene: Polkaroo_34 Start: 27953, Stop: 28816, Start Num: 27

Candidate Starts for Polkaroo_34:

(Start: 27 @27953 has 49 MA's), (49, 28034), (55, 28058), (58, 28067), (64, 28115), (72, 28139), (102, 28220), (103, 28235), (120, 28346), (154, 28529), (164, 28583), (173, 28712), (180, 28754), (187, 28802),

Gene: Pollywog_46 Start: 35249, Stop: 36253, Start Num: 11

Candidate Starts for Pollywog_46:

(Start: 11 @35249 has 69 MA's), (38, 35438), (Start: 40 @35450 has 1 MA's), (56, 35516), (59, 35525), (63, 35561), (80, 35627), (90, 35639), (98, 35666), (103, 35690), (108, 35705), (109, 35726), (114, 35747), (115, 35759), (116, 35762), (130, 35846), (139, 35891), (141, 35897), (146, 35927), (150, 35954), (154, 35972), (158, 35993), (164, 36026), (168, 36086), (174, 36152), (179, 36170), (180, 36191), (182, 36200), (186, 36236), (188, 36245),

Gene: Polyphemus_74 Start: 42500, Stop: 41664, Start Num: 25

Candidate Starts for Polyphemus_74:

(Start: 25 @42500 has 15 MA's), (Start: 26 @42491 has 3 MA's), (Start: 32 @42467 has 1 MA's), (59, 42377), (63, 42338), (66, 42326), (111, 42176), (128, 42062), (129, 42059), (153, 41939), (161, 41900), (170, 41807), (180, 41726),

Gene: PopTart_43 Start: 34554, Stop: 35558, Start Num: 11

Candidate Starts for PopTart_43:

(Start: 11 @34554 has 69 MA's), (28, 34722), (38, 34743), (Start: 40 @34755 has 1 MA's), (47, 34788), (53, 34803), (56, 34821), (59, 34830), (63, 34866), (76, 34914), (80, 34932), (90, 34944), (98, 34971), (103, 34995), (107, 35007), (108, 35010), (109, 35031), (114, 35052), (115, 35064), (116, 35067), (128, 35139), (130, 35151), (139, 35196), (141, 35202), (146, 35232), (150, 35259), (154, 35277), (155, 35280), (158, 35298), (164, 35331), (166, 35349), (168, 35391), (174, 35457), (179, 35475), (180, 35496), (186, 35541),

Gene: Priamo_74 Start: 41728, Stop: 41129, Start Num: 92

Candidate Starts for Priamo_74:

(Start: 92 @41728 has 2 MA's), (101, 41701), (108, 41668), (115, 41614), (128, 41527), (129, 41524), (153, 41404), (161, 41365), (170, 41272), (180, 41191),

Gene: Pukovnik_68 Start: 44139, Stop: 43324, Start Num: 25

Candidate Starts for Pukovnik_68:

(Start: 25 @44139 has 15 MA's), (Start: 26 @44130 has 3 MA's), (31, 44106), (53, 44049), (54, 44046), (57, 44025), (59, 44022), (63, 43983), (64, 43974), (70, 43947), (71, 43944), (100, 43878), (102, 43875), (127, 43725), (145, 43641), (148, 43626), (153, 43599), (170, 43467),

Gene: Pygmy_36 Start: 29778, Stop: 30644, Start Num: 27

Candidate Starts for Pygmy_36:

(Start: 27 @29778 has 49 MA's), (49, 29859), (55, 29883), (58, 29892), (61, 29919), (64, 29940), (102, 30048), (103, 30063), (120, 30174), (154, 30357), (164, 30411), (180, 30582), (187, 30630),

Gene: QueenHazel_32 Start: 27811, Stop: 28680, Start Num: 27

Candidate Starts for QueenHazel_32:

(Start: 27 @27811 has 49 MA's), (55, 27919), (58, 27928), (64, 27976), (102, 28084), (103, 28099), (120, 28210), (154, 28393), (164, 28447), (173, 28576), (180, 28618), (187, 28666),

Gene: REQ2_43 Start: 33255, Stop: 34112, Start Num: 22

Candidate Starts for REQ2_43:

(22, 33255), (Start: 40 @33318 has 1 MA's), (41, 33324), (51, 33360), (93, 33540), (107, 33576), (115, 33633), (124, 33699), (141, 33783), (175, 34029), (177, 34032),

Gene: RedBird_44 Start: 34882, Stop: 35886, Start Num: 11

Candidate Starts for RedBird_44:

(Start: 11 @34882 has 69 MA's), (38, 35071), (Start: 40 @35083 has 1 MA's), (56, 35149), (59, 35158), (63, 35194), (80, 35260), (90, 35272), (98, 35299), (103, 35323), (108, 35338), (109, 35359), (114, 35380), (115, 35392), (116, 35395), (130, 35479), (139, 35524), (141, 35530), (146, 35560), (150, 35587), (154, 35605), (158, 35626), (164, 35659), (168, 35719), (171, 35746), (174, 35785), (179, 35803), (180, 35824), (182, 35833), (186, 35869), (188, 35878),

Gene: Rockne_45 Start: 34542, Stop: 35546, Start Num: 11

Candidate Starts for Rockne_45:

(Start: 11 @34542 has 69 MA's), (38, 34731), (Start: 40 @34743 has 1 MA's), (56, 34809), (59, 34818), (63, 34854), (80, 34920), (90, 34932), (98, 34959), (103, 34983), (108, 34998), (109, 35019), (114, 35040), (115, 35052), (116, 35055), (130, 35139), (139, 35184), (141, 35190), (146, 35220), (150, 35247), (154, 35265), (158, 35286), (164, 35319), (168, 35379), (174, 35445), (179, 35463), (180, 35484), (182, 35493), (186, 35529), (188, 35538),

Gene: RockyHorror_48 Start: 34943, Stop: 35947, Start Num: 11

Candidate Starts for RockyHorror_48:

(9, 34787), (Start: 11 @34943 has 69 MA's), (Start: 40 @35144 has 1 MA's), (56, 35210), (59, 35219), (63, 35255), (80, 35321), (90, 35333), (98, 35360), (103, 35384), (108, 35399), (109, 35420), (114, 35441), (115, 35453), (116, 35456), (130, 35540), (139, 35585), (141, 35591), (146, 35621), (150, 35648), (154, 35666), (158, 35687), (164, 35720), (168, 35780), (174, 35846), (179, 35864), (180, 35885), (182, 35894), (186, 35930), (188, 35939),

Gene: Ruby_46 Start: 35733, Stop: 36737, Start Num: 11

Candidate Starts for Ruby_46:

(Start: 11 @35733 has 69 MA's), (38, 35922), (Start: 40 @35934 has 1 MA's), (56, 36000), (59, 36009), (63, 36045), (80, 36111), (90, 36123), (98, 36150), (103, 36174), (108, 36189), (109, 36210), (114, 36231), (115, 36243), (116, 36246), (130, 36330), (139, 36375), (141, 36381), (146, 36411), (150, 36438), (154, 36456), (158, 36477), (164, 36510), (168, 36570), (171, 36597), (174, 36636), (179, 36654), (180, 36675), (182, 36684), (186, 36720), (188, 36729),

Gene: SassyB_43 Start: 34554, Stop: 35558, Start Num: 11

Candidate Starts for SassyB_43:

(Start: 11 @34554 has 69 MA's), (28, 34722), (38, 34743), (Start: 40 @34755 has 1 MA's), (47, 34788), (53, 34803), (56, 34821), (59, 34830), (63, 34866), (76, 34914), (80, 34932), (90, 34944), (98, 34971), (103, 34995), (107, 35007), (108, 35010), (109, 35031), (114, 35052), (115, 35064), (116, 35067), (128, 35139), (130, 35151), (139, 35196), (141, 35202), (146, 35232), (150, 35259), (154, 35277), (155, 35280), (158, 35298), (164, 35331), (166, 35349), (168, 35391), (174, 35457), (179, 35475),

(180, 35496), (186, 35541),

Gene: Seagreen_48 Start: 35285, Stop: 36286, Start Num: 11

Candidate Starts for Seagreen_48:

(Start: 11 @35285 has 69 MA's), (28, 35453), (38, 35474), (Start: 40 @35486 has 1 MA's), (47, 35519), (56, 35552), (59, 35561), (63, 35597), (80, 35663), (98, 35702), (99, 35705), (107, 35738), (108, 35741), (109, 35762), (114, 35783), (115, 35795), (116, 35798), (130, 35879), (139, 35924), (141, 35930), (146, 35960), (150, 35987), (154, 36005), (155, 36008), (158, 36026), (164, 36059), (166, 36077), (168, 36119), (174, 36185), (179, 36203), (180, 36224), (186, 36269),

Gene: Shipwreck_36 Start: 29753, Stop: 30619, Start Num: 27

Candidate Starts for Shipwreck_36:

(Start: 27 @29753 has 49 MA's), (49, 29834), (55, 29858), (58, 29867), (61, 29894), (64, 29915), (102, 30023), (103, 30038), (120, 30149), (154, 30332), (164, 30386), (180, 30557), (187, 30605),

Gene: ShroomBoi_47 Start: 35208, Stop: 36212, Start Num: 11

Candidate Starts for ShroomBoi_47:

(Start: 11 @35208 has 69 MA's), (28, 35376), (38, 35397), (Start: 40 @35409 has 1 MA's), (47, 35442), (53, 35457), (56, 35475), (59, 35484), (63, 35520), (76, 35568), (80, 35586), (90, 35598), (98, 35625), (103, 35649), (107, 35661), (108, 35664), (109, 35685), (114, 35706), (115, 35718), (116, 35721), (130, 35805), (139, 35850), (141, 35856), (146, 35886), (150, 35913), (154, 35931), (158, 35952), (164, 35985), (168, 36045), (179, 36129), (180, 36150), (182, 36159), (186, 36195), (188, 36204),

Gene: SiSi_47 Start: 35103, Stop: 36107, Start Num: 11

Candidate Starts for SiSi_47:

(Start: 11 @35103 has 69 MA's), (38, 35292), (Start: 40 @35304 has 1 MA's), (56, 35370), (59, 35379), (63, 35415), (80, 35481), (90, 35493), (98, 35520), (103, 35544), (108, 35559), (109, 35580), (114, 35601), (115, 35613), (116, 35616), (130, 35700), (139, 35745), (141, 35751), (146, 35781), (150, 35808), (154, 35826), (158, 35847), (164, 35880), (168, 35940), (171, 35967), (174, 36006), (179, 36024), (180, 36045), (182, 36054), (186, 36090), (188, 36099),

Gene: SimranZ1_47 Start: 34553, Stop: 35554, Start Num: 11

Candidate Starts for SimranZ1_47:

(Start: 11 @34553 has 69 MA's), (38, 34742), (Start: 40 @34754 has 1 MA's), (56, 34820), (59, 34829), (63, 34865), (80, 34931), (90, 34943), (98, 34970), (103, 34994), (108, 35009), (109, 35030), (114, 35051), (115, 35063), (116, 35066), (130, 35147), (139, 35192), (141, 35198), (143, 35204), (146, 35228), (150, 35255), (158, 35294), (164, 35327), (166, 35345), (168, 35387), (171, 35414), (174, 35453), (179, 35471), (180, 35492), (182, 35501), (186, 35537), (188, 35546),

Gene: Slim_48 Start: 36252, Stop: 37256, Start Num: 11

Candidate Starts for Slim_48:

(Start: 11 @36252 has 69 MA's), (38, 36441), (Start: 40 @36453 has 1 MA's), (56, 36519), (59, 36528), (63, 36564), (80, 36630), (90, 36642), (98, 36669), (103, 36693), (108, 36708), (109, 36729), (114, 36750), (115, 36762), (116, 36765), (130, 36849), (139, 36894), (141, 36900), (146, 36930), (150, 36957), (154, 36975), (158, 36996), (164, 37029), (166, 37047), (168, 37089), (171, 37116), (174, 37155), (179, 37173), (180, 37194), (182, 37203), (186, 37239), (188, 37248),

Gene: Sonah_34 Start: 27925, Stop: 28791, Start Num: 27

Candidate Starts for Sonah_34:

(Start: 27 @27925 has 49 MA's), (49, 28006), (55, 28030), (58, 28039), (61, 28066), (64, 28087), (102, 28195), (103, 28210), (120, 28321), (154, 28504), (164, 28558), (173, 28687), (180, 28729), (187, 28777),

Gene: Stap_46 Start: 34844, Stop: 35848, Start Num: 11

Candidate Starts for Stap_46:

(Start: 11 @34844 has 69 MA's), (38, 35033), (Start: 40 @35045 has 1 MA's), (56, 35111), (59, 35120), (63, 35156), (80, 35222), (90, 35234), (98, 35261), (103, 35285), (108, 35300), (109, 35321), (114, 35342), (115, 35354), (116, 35357), (130, 35441), (139, 35486), (141, 35492), (146, 35522), (150, 35549), (154, 35567), (158, 35588), (164, 35621), (168, 35681), (171, 35708), (174, 35747), (179, 35765), (180, 35786), (182, 35795), (186, 35831), (188, 35840),

Gene: Starcevich_47 Start: 35737, Stop: 36741, Start Num: 11

Candidate Starts for Starcevich_47:

(Start: 11 @35737 has 69 MA's), (38, 35926), (Start: 40 @35938 has 1 MA's), (56, 36004), (59, 36013), (63, 36049), (80, 36115), (90, 36127), (98, 36154), (103, 36178), (108, 36193), (109, 36214), (114, 36235), (115, 36247), (116, 36250), (130, 36334), (139, 36379), (141, 36385), (146, 36415), (150, 36442), (154, 36460), (158, 36481), (164, 36514), (168, 36574), (171, 36601), (174, 36640), (179, 36658), (180, 36679), (182, 36688), (186, 36724), (188, 36733),

Gene: StevieRay_34 Start: 27895, Stop: 28758, Start Num: 27

Candidate Starts for StevieRay_34:

(Start: 27 @27895 has 49 MA's), (55, 28000), (58, 28009), (64, 28057), (72, 28081), (102, 28162), (103, 28177), (120, 28288), (154, 28471), (164, 28525), (173, 28654), (180, 28696), (187, 28744),

Gene: StressBall_34 Start: 28196, Stop: 29059, Start Num: 27

Candidate Starts for StressBall_34:

(Start: 27 @28196 has 49 MA's), (49, 28277), (55, 28301), (58, 28310), (64, 28358), (72, 28382), (102, 28463), (103, 28478), (120, 28589), (154, 28772), (164, 28826), (173, 28955), (180, 28997), (187, 29045),

Gene: SuperAwesome_72 Start: 42164, Stop: 41316, Start Num: 25

Candidate Starts for SuperAwesome_72:

(Start: 25 @42164 has 15 MA's), (Start: 26 @42155 has 3 MA's), (Start: 32 @42131 has 1 MA's), (59, 42041), (63, 42002), (69, 41972), (77, 41948), (83, 41930), (85, 41927), (101, 41888), (108, 41855), (115, 41801), (128, 41714), (129, 41711), (153, 41591), (161, 41552), (170, 41459), (180, 41378),

Gene: SuperCallie99_69 Start: 42006, Stop: 41158, Start Num: 25

Candidate Starts for SuperCallie99_69:

(Start: 25 @42006 has 15 MA's), (Start: 26 @41997 has 3 MA's), (Start: 32 @41973 has 1 MA's), (59, 41883), (63, 41844), (69, 41814), (77, 41790), (83, 41772), (85, 41769), (101, 41730), (108, 41697), (115, 41643), (128, 41556), (129, 41553), (153, 41433), (161, 41394), (170, 41301), (180, 41220),

Gene: SuperGrey_48 Start: 36177, Stop: 37181, Start Num: 11

Candidate Starts for SuperGrey_48:

(Start: 11 @36177 has 69 MA's), (28, 36345), (38, 36366), (Start: 40 @36378 has 1 MA's), (47, 36411), (53, 36426), (56, 36444), (59, 36453), (63, 36489), (76, 36537), (80, 36555), (90, 36567), (98, 36594), (103, 36618), (107, 36630), (108, 36633), (109, 36654), (114, 36675), (115, 36687), (116, 36690), (128, 36762), (130, 36774), (141, 36825), (143, 36831), (150, 36882), (154, 36900), (158, 36921), (164, 36954), (166, 36972), (168, 37014), (171, 37041), (179, 37098), (182, 37128), (186, 37164), (187, 37167),

Gene: Superchunk_75 Start: 43021, Stop: 42170, Start Num: 36

Candidate Starts for Superchunk_75:

(Start: 26 @43054 has 3 MA's), (Start: 36 @43021 has 3 MA's), (48, 42970), (57, 42931), (63, 42889), (115, 42673), (148, 42493), (159, 42433), (160, 42424), (172, 42319),

Gene: Techage_34 Start: 27962, Stop: 28828, Start Num: 27

Candidate Starts for Techage_34:

(Start: 27 @27962 has 49 MA's), (49, 28043), (55, 28067), (58, 28076), (64, 28124), (102, 28232), (103, 28247), (106, 28256), (120, 28358), (154, 28541), (164, 28595), (173, 28724), (180, 28766), (187, 28814),

Gene: Thespis_34 Start: 27932, Stop: 28798, Start Num: 27

Candidate Starts for Thespis_34:

(Start: 27 @27932 has 49 MA's), (49, 28013), (55, 28037), (58, 28046), (61, 28073), (64, 28094), (102, 28202), (103, 28217), (120, 28328), (154, 28511), (164, 28565), (173, 28694), (180, 28736), (187, 28784),

Gene: Topiatin_52 Start: 36612, Stop: 37616, Start Num: 11

Candidate Starts for Topiatin_52:

(Start: 11 @36612 has 69 MA's), (38, 36801), (Start: 40 @36813 has 1 MA's), (56, 36879), (59, 36888), (63, 36924), (80, 36990), (90, 37002), (98, 37029), (103, 37053), (108, 37068), (109, 37089), (114, 37110), (115, 37122), (116, 37125), (130, 37209), (139, 37254), (141, 37260), (146, 37290), (150, 37317), (154, 37335), (158, 37356), (164, 37389), (168, 37449), (174, 37515), (179, 37533), (180, 37554), (182, 37563), (186, 37599), (188, 37608),

Gene: Totinger_47 Start: 34879, Stop: 35883, Start Num: 11

Candidate Starts for Totinger_47:

(Start: 11 @34879 has 69 MA's), (38, 35068), (Start: 40 @35080 has 1 MA's), (56, 35146), (59, 35155), (63, 35191), (80, 35257), (90, 35269), (98, 35296), (103, 35320), (108, 35335), (109, 35356), (114, 35377), (115, 35389), (116, 35392), (130, 35476), (139, 35521), (141, 35527), (146, 35557), (150, 35584), (154, 35602), (158, 35623), (164, 35656), (166, 35674), (168, 35716), (171, 35743), (174, 35782), (179, 35800), (180, 35821), (182, 35830), (186, 35866), (188, 35875),

Gene: Tristan_68 Start: 44342, Stop: 43494, Start Num: 25

Candidate Starts for Tristan_68:

(19, 44366), (23, 44351), (Start: 25 @44342 has 15 MA's), (Start: 26 @44333 has 3 MA's), (34, 44300), (54, 44240), (59, 44216), (63, 44177), (68, 44153), (84, 44099), (100, 44066), (115, 43979), (153, 43772), (170, 43640),

Gene: Trixie_70 Start: 43815, Stop: 43045, Start Num: 32

Candidate Starts for Trixie_70:

(24, 43854), (Start: 32 @43815 has 1 MA's), (56, 43773), (66, 43713), (115, 43527), (170, 43188),

Gene: Tweety_47 Start: 35615, Stop: 36619, Start Num: 11

Candidate Starts for Tweety_47:

(Start: 11 @35615 has 69 MA's), (38, 35804), (Start: 40 @35816 has 1 MA's), (56, 35882), (59, 35891), (63, 35927), (80, 35993), (90, 36005), (98, 36032), (103, 36056), (108, 36071), (109, 36092), (114, 36113), (115, 36125), (116, 36128), (130, 36212), (139, 36257), (141, 36263), (146, 36293), (150, 36320), (154, 36338), (158, 36359), (164, 36392), (168, 36452), (171, 36479), (174, 36518), (179, 36536), (180, 36557), (182, 36566), (186, 36602), (188, 36611),

Gene: Venti_34 Start: 27939, Stop: 28805, Start Num: 27

Candidate Starts for Venti_34:

(Start: 27 @27939 has 49 MA's), (49, 28020), (55, 28044), (58, 28053), (64, 28101), (102, 28209), (103, 28224), (120, 28335), (154, 28518), (164, 28572), (173, 28701), (180, 28743), (187, 28791),

Gene: Veteran_45 Start: 34747, Stop: 35751, Start Num: 11

Candidate Starts for Veteran_45:

(Start: 11 @34747 has 69 MA's), (38, 34936), (Start: 40 @34948 has 1 MA's), (56, 35014), (59, 35023), (63, 35059), (80, 35125), (90, 35137), (98, 35164), (103, 35188), (108, 35203), (109, 35224), (114, 35245), (115, 35257), (116, 35260), (130, 35344), (139, 35389), (141, 35395), (146, 35425), (150, 35452), (154, 35470), (158, 35491), (164, 35524), (168, 35584), (171, 35611), (174, 35650), (179, 35668), (180, 35689), (182, 35698), (186, 35734), (188, 35743),

Gene: Vidya_34 Start: 27972, Stop: 28838, Start Num: 27

Candidate Starts for Vidya_34:

(Start: 27 @27972 has 49 MA's), (49, 28053), (55, 28077), (58, 28086), (64, 28134), (102, 28242), (103, 28257), (120, 28368), (154, 28551), (164, 28605), (173, 28734), (180, 28776), (187, 28824),

Gene: Vivum_52 Start: 35865, Stop: 36869, Start Num: 11

Candidate Starts for Vivum_52:

(Start: 11 @35865 has 69 MA's), (38, 36054), (Start: 40 @36066 has 1 MA's), (56, 36132), (59, 36141), (63, 36177), (80, 36243), (90, 36255), (98, 36282), (103, 36306), (108, 36321), (109, 36342), (114, 36363), (115, 36375), (116, 36378), (130, 36462), (139, 36507), (141, 36513), (146, 36543), (150, 36570), (154, 36588), (158, 36609), (164, 36642), (168, 36702), (171, 36729), (174, 36768), (179, 36786), (180, 36807), (182, 36816), (186, 36852), (188, 36861),

Gene: Wee_50 Start: 36114, Stop: 37118, Start Num: 11

Candidate Starts for Wee_50:

(Start: 11 @36114 has 69 MA's), (38, 36303), (Start: 40 @36315 has 1 MA's), (56, 36381), (59, 36390), (63, 36426), (80, 36492), (90, 36504), (98, 36531), (103, 36555), (108, 36570), (109, 36591), (114, 36612), (115, 36624), (116, 36627), (130, 36711), (139, 36756), (141, 36762), (146, 36792), (150, 36819), (154, 36837), (158, 36858), (164, 36891), (168, 36951), (171, 36978), (174, 37017), (179, 37035), (180, 37056), (182, 37065), (186, 37101), (188, 37110),

Gene: Willsammy_33 Start: 27679, Stop: 28542, Start Num: 27

Candidate Starts for Willsammy_33:

(Start: 27 @27679 has 49 MA's), (49, 27760), (55, 27784), (58, 27793), (64, 27841), (72, 27865), (102, 27946), (103, 27961), (120, 28072), (154, 28255), (164, 28309), (173, 28438), (180, 28480), (187, 28528),

Gene: XianYue_67 Start: 43032, Stop: 42220, Start Num: 37

Candidate Starts for XianYue_67:

(14, 43182), (17, 43155), (Start: 25 @43077 has 15 MA's), (Start: 26 @43068 has 3 MA's), (Start: 37 @43032 has 4 MA's), (54, 42972), (56, 42957), (61, 42921), (63, 42909), (71, 42870), (81, 42843), (99, 42795), (108, 42759), (115, 42705), (148, 42522), (153, 42495), (162, 42450), (170, 42363),

Gene: Xula_31 Start: 27335, Stop: 28204, Start Num: 27

Candidate Starts for Xula_31:

(Start: 27 @27335 has 49 MA's), (55, 27443), (58, 27452), (64, 27500), (102, 27608), (103, 27623), (120, 27734), (154, 27917), (164, 27971), (173, 28100), (180, 28142), (187, 28190),

Gene: Yoshi_60 Start: 36844, Stop: 38034, Start Num: 11

Candidate Starts for Yoshi_60:

(Start: 11 @36844 has 69 MA's), (38, 37033), (Start: 40 @37045 has 1 MA's), (47, 37078), (53, 37093), (56, 37111), (59, 37120), (63, 37156), (76, 37204), (80, 37222), (90, 37234), (98, 37261), (103, 37285), (107, 37297), (108, 37300), (109, 37321), (114, 37342), (115, 37354), (116, 37357), (128, 37426), (130, 37438), (139, 37483), (141, 37489), (143, 37495), (146, 37519), (150, 37546), (154, 37564), (158, 37585), (164, 37618), (166, 37636), (168, 37678), (171, 37705), (174, 37744), (179, 37762), (180, 37783), (182, 37792), (185, 37819), (191, 37876), (192, 38017),

Gene: Zerg_46 Start: 35052, Stop: 36056, Start Num: 11

Candidate Starts for Zerg_46:

(9, 34896), (Start: 11 @35052 has 69 MA's), (Start: 40 @35253 has 1 MA's), (56, 35319), (59, 35328), (63, 35364), (80, 35430), (90, 35442), (98, 35469), (103, 35493), (108, 35508), (109, 35529), (114, 35550), (115, 35562), (116, 35565), (130, 35649), (139, 35694), (141, 35700), (146, 35730), (150, 35757), (154, 35775), (158, 35796), (164, 35829), (168, 35889), (174, 35955), (179, 35973), (180, 35994), (182, 36003), (186, 36039), (188, 36048),

Gene: Zilizebeth_34 Start: 27971, Stop: 28837, Start Num: 27

Candidate Starts for Zilizebeth_34:

(Start: 27 @27971 has 49 MA's), (49, 28052), (55, 28076), (58, 28085), (64, 28133), (102, 28241), (103, 28256), (120, 28367), (154, 28550), (164, 28604), (173, 28733), (180, 28775), (187, 28823),