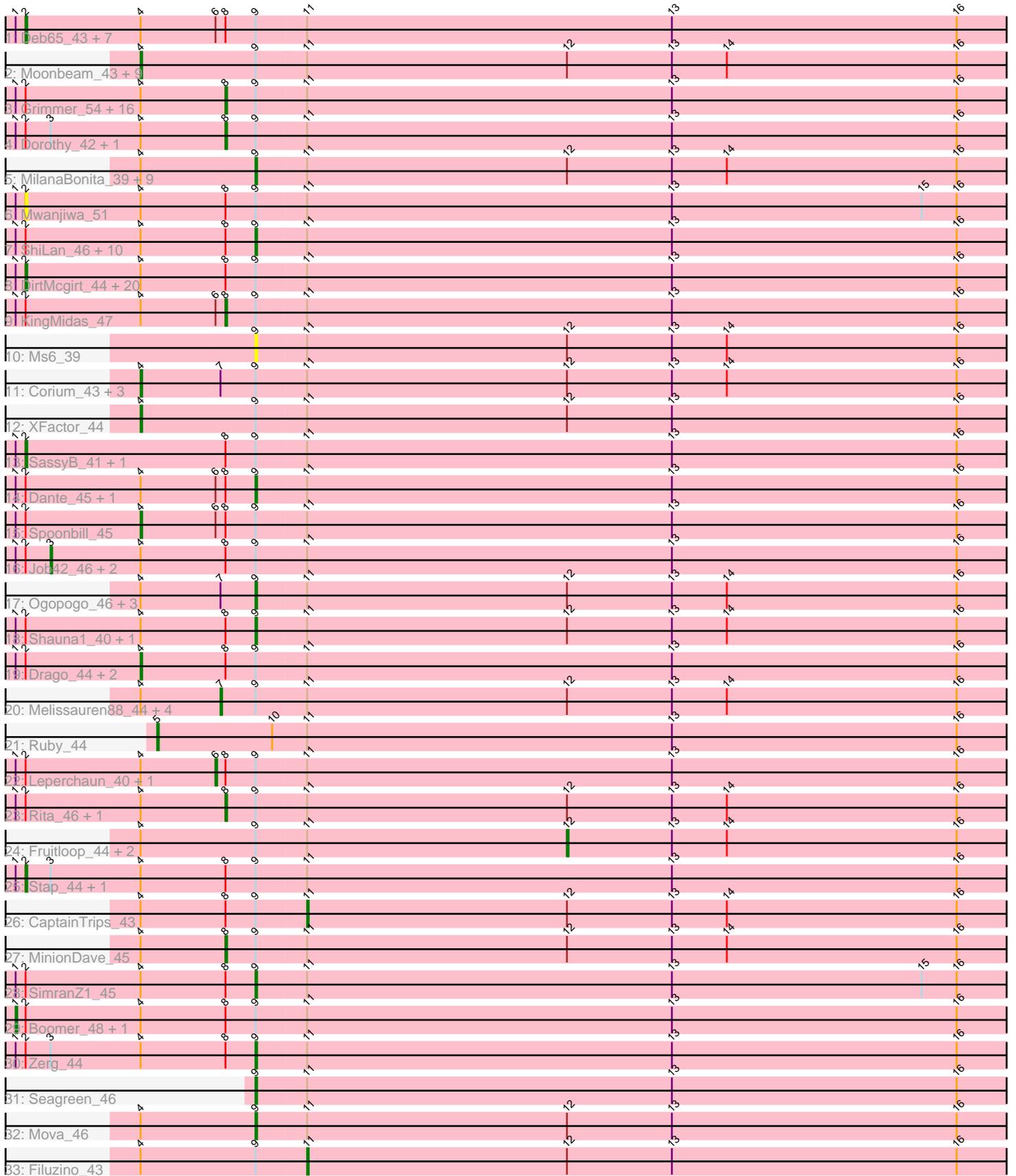


Pham 283602



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 283602 Report

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

Pham number 283602 has 128 members, 14 are drafts.

Phages represented in each track:

- Track 1 : Deb65_43, Nimbo_42, JoeyJr_43, PHappiness_43, Inventum_42, Geralt_43, Polka14_44, Pacc40_42
- Track 2 : Moonbeam_43, DLane_43, ShroomBoi_45, Medindi_43, EleanorGeorge_43, Cornucopia_49, Beakin_47, Emma_46, SilverChicken_55, Brushbloom_48
- Track 3 : Grimmer_54, TDanisky_48, Chuckly_45, Estave1_46, Marker_46, Modragons_46, Blarby_56, Llama_47, Tchotchke_46, Tootsieroll_47, Krakatau_43, OfUltron_47, Taj_47, OlympiaSaint_45, Burwell21_45, Phatniss_43, DoRead_47
- Track 4 : Dorothy_42, Doomphist_45
- Track 5 : MilanaBonita_39, StAnnes_45, Cheesepuff_51, Akhila_39, LunaBlu_48, Galactic_45, KristaRAM_45, Flathead_46, Guppsters_46, Ovechkin_43
- Track 6 : Mwanjiwa_51
- Track 7 : ShiLan_46, MadMen_40, Leozinho_45, Crumble_41, NormanBulbieJr_47, Chevrolet_52, Mozy_54, ShowerHandel_48, FreddyB_46, Seabastian_47, Eish_46
- Track 8 : DirtMcgirt_44, Nivrat_44, Martik_46, Jarcob_46, Lij_42, Lizziana_52, Topiatin_50, Koella_40, Nitzel_41, Ibhubesi_46, LilMoolah_44, Latretium_48, Priscilla_46, Eradicator_37, ArcusAngelus_49, Lucia_45, BodEinwohner17_44, Yorick_43, Sparkdehlily_48, Peridot_49, Cabrinians_47
- Track 9 : KingMidas_47
- Track 10 : Ms6_39
- Track 11 : Corium_43, Batiatus_45, PatoPoderoso_43, Lorde_47
- Track 12 : XFactor_44
- Track 13 : SassyB_41, PopTart_41
- Track 14 : Dante_45, Scottish_46
- Track 15 : Spoonbill_45
- Track 16 : Job42_46, Blexus_43, RockyHorror_46
- Track 17 : Ogopogo_46, PhesterPhotato_47, SG4_44, Enby_47
- Track 18 : Shauna1_40, LittleShirley_45
- Track 19 : Drago_44, Rockne_43, PMC_40
- Track 20 : Melissauren88_44, KingJulian_44, Phalconet_44, VRedHorse_46, Jant_48
- Track 21 : Ruby_44
- Track 22 : Leperchaun_40, RitaG_43
- Track 23 : Rita_46, Kenuha5_41
- Track 24 : Fruitloop_44, Ardmore_38, SuperGrey_46
- Track 25 : Stap_44, Phasih_43
- Track 26 : CaptainTrips_43

- Track 27 : MinionDave_45
- Track 28 : SimranZ1_45
- Track 29 : Boomer_48, Plumbus_45
- Track 30 : Zerg_44
- Track 31 : Seagreen_46
- Track 32 : Mova_46
- Track 33 : Filuzino_43

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

The start number called the most often in the published annotations is 9, it was called in 33 of the 114 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Akhila_39, CheesePuff_51, Chevrolet_52, Crumble_41, Dante_45, Eish_46, Enby_47, Flathead_46, FreddyB_46, Galactic_45, Guppsters_46, KristaRAM_45, Leozinho_45, LittleShirley_45, LunaBlu_48, MadMen_40, MilanaBonita_39, Mova_46, Mozy_54, Ms6_39, NormanBulbieJr_47, OgoPogo_46, Ovechkin_43, PhesterPotato_47, SG4_44, Scottish_46, Sebastian_47, Seagreen_46, Shauna1_40, ShiLan_46, ShowerHandel_48, SimranZ1_45, StAnnes_45, Zerg_44,

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

- ArcusAngelus_49, Ardmere_38, Batiatus_45, Beakin_47, Blarby_56, Blexus_43, BodEinwohner17_44, Boomer_48, Brushbloom_48, Burwell21_45, Cabrinians_47, CaptainTrips_43, Chuckly_45, Corium_43, Cornucopia_49, DLane_43, Deb65_43, DirtMcGirt_44, DoRead_47, Doomphist_45, Dorothy_42, Drago_44, EleanorGeorge_43, Emma_46, Eradicator_37, Estave1_46, Filuzino_43, Fruitloop_44, Geralt_43, Grimmer_54, Ibhubesi_46, Inventum_42, Jant_48, Jarcob_46, Job42_46, JoeyJr_43, Kenuha5_41, KingJulian_44, KingMidas_47, Koella_40, Krakatau_43, Latretium_48, Leperchaun_40, LilMoolah_44, Lizziana_52, Llama_47, Llij_42, Lorde_47, Lucia_45, Marker_46, Martik_46, Medindi_43, Melissauren88_44, MinionDave_45, Modragons_46, Moonbeam_43, Mwanjiwa_51, Nimbo_42, Nitzel_41, Nivrat_44, OfUltron_47, OlympiaSaint_45, PHappiness_43, PMC_40, Pacc40_42, PatoPoderoso_43, Peridot_49, Phalconet_44, Phasih_43, Phatniss_43, Plumbus_45, Polka14_44, PopTart_41, Priscilla_46, RitaG_43, Rita_46, Rockne_43, RockyHorror_46, SassyB_41, ShroomBoi_45, SilverChicken_55, Sparkdehlily_48, Spoonbill_45, Stap_44, SuperGrey_46, TDanisky_48, Taj_47, Tchochke_46, Tootsieroll_47, Topiatin_50, VRedHorse_46, XFactor_44, Yorick_43,

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

- Ruby_44,

Summary by start number:

Start 1:

- Found in 84 of 128 (65.6%) of genes in pham
- Manual Annotations of this start: 2 of 114
- Called 2.4% of time when present
- Phage (with cluster) where this start called: Boomer_48 (F1), Plumbus_45 (F1),

Start 2:

- Found in 84 of 128 (65.6%) of genes in pham
- Manual Annotations of this start: 30 of 114
- Called 40.5% of time when present
- Phage (with cluster) where this start called: ArcusAngelus_49 (F1), BodEinwohner17_44 (F1), Cabrinians_47 (F1), Deb65_43 (F1), DirtMcgirt_44 (F1), Eradicator_37 (F1), Geralt_43 (F1), Ibhubesi_46 (F1), Inventum_42 (F1), Jarcob_46 (F1), JoeyJr_43 (F1), Koella_40 (F1), Latretium_48 (F1), LilMoolah_44 (F1), Lizziana_52 (F1), Llij_42 (F1), Lucia_45 (F1), Martik_46 (F1), Mwanjiwa_51 (F1), Nimbo_42 (F1), Nitzel_41 (F1), Nivrat_44 (F1), PHappiness_43 (F1), Pacc40_42 (F1), Peridot_49 (F1), Phasih_43 (F1), Polka14_44 (F1), PopTart_41 (F1), Priscilla_46 (F1), SassyB_41 (F1), Sparkdehlily_48 (F1), Stap_44 (F1), Topiatin_50 (F1), Yorick_43 (F1),

Start 3:

- Found in 8 of 128 (6.2%) of genes in pham
- Manual Annotations of this start: 3 of 114
- Called 37.5% of time when present
- Phage (with cluster) where this start called: Blexus_43 (F1), Job42_46 (F1), RockyHorror_46 (F1),

Start 4:

- Found in 123 of 128 (96.1%) of genes in pham
- Manual Annotations of this start: 15 of 114
- Called 15.4% of time when present
- Phage (with cluster) where this start called: Batiatus_45 (F1), Beakin_47 (F1), Brushbloom_48 (F1), Corium_43 (F1), Cornucopia_49 (F1), DLane_43 (F1), Drago_44 (F1), EleanorGeorge_43 (F1), Emma_46 (F1), Lorde_47 (F1), Medindi_43 (F1), Moonbeam_43 (F1), PMC_40 (F1), PatoPoderoso_43 (F1), Rockne_43 (F1), ShroomBoi_45 (F1), SilverChicken_55 (F2), Spoonbill_45 (F1), XFactor_44 (F1),

Start 5:

- Found in 1 of 128 (0.8%) of genes in pham
- Manual Annotations of this start: 1 of 114
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ruby_44 (F1),

Start 6:

- Found in 14 of 128 (10.9%) of genes in pham
- Manual Annotations of this start: 2 of 114
- Called 14.3% of time when present
- Phage (with cluster) where this start called: Leperchaun_40 (F1), RitaG_43 (F1),

Start 7:

- Found in 13 of 128 (10.2%) of genes in pham
- Manual Annotations of this start: 4 of 114
- Called 38.5% of time when present
- Phage (with cluster) where this start called: Jant_48 (F1), KingJulian_44 (F1), Melissauren88_44 (F1), Phalconet_44 (F1), VRedHorse_46 (F1),

Start 8:

- Found in 86 of 128 (67.2%) of genes in pham
- Manual Annotations of this start: 20 of 114

- Called 26.7% of time when present
- Phage (with cluster) where this start called: Blarby_56 (F), Burwell21_45 (F1), Chuckly_45 (F1), DoRead_47 (F1), Doomphist_45 (F1), Dorothy_42 (F1), Estave1_46 (F1), Grimmer_54 (F1), Kenuha5_41 (F1), KingMidas_47 (F1), Krakatau_43 (F1), Llama_47 (F1), Marker_46 (F1), MinionDave_45 (F1), Modragons_46 (F1), OfUltron_47 (F1), OlympiaSaint_45 (F1), Phatniss_43 (F1), Rita_46 (F1), TDanisky_48 (F1), Taj_47 (F1), Tchotchke_46 (F1), Tootsieroll_47 (F1),

Start 9:

- Found in 127 of 128 (99.2%) of genes in pham
- Manual Annotations of this start: 33 of 114
- Called 26.8% of time when present
- Phage (with cluster) where this start called: Akhila_39 (F1), CheesePuff_51 (F1), Chevrolet_52 (F1), Crumble_41 (F1), Dante_45 (F1), Eish_46 (F1), Enby_47 (F1), Flathead_46 (F1), FreddyB_46 (F1), Galactic_45 (F1), Guppsters_46 (F1), KristaRAM_45 (F1), Leozinho_45 (F1), LittleShirley_45 (F1), LunaBlu_48 (F1), MadMen_40 (F1), MilanaBonita_39 (F1), Mova_46 (F1), Mozy_54 (F1), Ms6_39 (F1), NormanBulbieJr_47 (F1), Ogopogo_46 (F1), Ovechkin_43 (F1), PhesterPotato_47 (F1), SG4_44 (F1), Scottish_46 (F1), Seabastian_47 (F1), Seagreen_46 (F1), Shauna1_40 (F1), ShiLan_46 (F1), ShowerHandel_48 (F1), SimranZ1_45 (F1), StAnnes_45 (F1), Zerg_44 (F1),

Start 11:

- Found in 128 of 128 (100.0%) of genes in pham
- Manual Annotations of this start: 2 of 114
- Called 1.6% of time when present
- Phage (with cluster) where this start called: CaptainTrips_43 (F1), Filuzino_43 (F1),

Start 12:

- Found in 46 of 128 (35.9%) of genes in pham
- Manual Annotations of this start: 2 of 114
- Called 6.5% of time when present
- Phage (with cluster) where this start called: Ardmore_38 (F1), Fruitloop_44 (F1), SuperGrey_46 (F1),

Summary by clusters:

There are 3 clusters represented in this pham: F1, F2, F,

Info for manual annotations of cluster F1:

- Start number 1 was manually annotated 2 times for cluster F1.
- Start number 2 was manually annotated 30 times for cluster F1.
- Start number 3 was manually annotated 3 times for cluster F1.
- Start number 4 was manually annotated 15 times for cluster F1.
- Start number 5 was manually annotated 1 time for cluster F1.
- Start number 6 was manually annotated 2 times for cluster F1.
- Start number 7 was manually annotated 4 times for cluster F1.
- Start number 8 was manually annotated 20 times for cluster F1.
- Start number 9 was manually annotated 33 times for cluster F1.
- Start number 11 was manually annotated 2 times for cluster F1.
- Start number 12 was manually annotated 2 times for cluster F1.

Gene Information:

Gene: Akhila_39 Start: 31622, Stop: 31023, Start Num: 9

Candidate Starts for Akhila_39:

(Start: 4 @31691 has 15 MA's), (Start: 9 @31622 has 33 MA's), (Start: 11 @31592 has 2 MA's), (Start: 12 @31436 has 2 MA's), (13, 31373), (14, 31340), (16, 31202),

Gene: ArcusAngelus_49 Start: 37110, Stop: 36370, Start Num: 2

Candidate Starts for ArcusAngelus_49:

(Start: 1 @37116 has 2 MA's), (Start: 2 @37110 has 30 MA's), (Start: 4 @37041 has 15 MA's), (Start: 8 @36990 has 20 MA's), (Start: 9 @36972 has 33 MA's), (Start: 11 @36942 has 2 MA's), (13, 36723), (16, 36552),

Gene: Ardmore_38 Start: 33212, Stop: 32799, Start Num: 12

Candidate Starts for Ardmore_38:

(Start: 4 @33467 has 15 MA's), (Start: 9 @33398 has 33 MA's), (Start: 11 @33368 has 2 MA's), (Start: 12 @33212 has 2 MA's), (13, 33149), (14, 33116), (16, 32978),

Gene: Batiatus_45 Start: 35723, Stop: 35055, Start Num: 4

Candidate Starts for Batiatus_45:

(Start: 4 @35723 has 15 MA's), (Start: 7 @35675 has 4 MA's), (Start: 9 @35654 has 33 MA's), (Start: 11 @35624 has 2 MA's), (Start: 12 @35468 has 2 MA's), (13, 35405), (14, 35372), (16, 35234),

Gene: Beakin_47 Start: 34776, Stop: 34108, Start Num: 4

Candidate Starts for Beakin_47:

(Start: 4 @34776 has 15 MA's), (Start: 9 @34707 has 33 MA's), (Start: 11 @34677 has 2 MA's), (Start: 12 @34521 has 2 MA's), (13, 34458), (14, 34425), (16, 34287),

Gene: Blarby_56 Start: 35403, Stop: 34783, Start Num: 8

Candidate Starts for Blarby_56:

(Start: 1 @35529 has 2 MA's), (Start: 2 @35523 has 30 MA's), (Start: 4 @35454 has 15 MA's), (Start: 8 @35403 has 20 MA's), (Start: 9 @35385 has 33 MA's), (Start: 11 @35355 has 2 MA's), (13, 35136), (16, 34965),

Gene: Blexus_43 Start: 34826, Stop: 34104, Start Num: 3

Candidate Starts for Blexus_43:

(Start: 1 @34847 has 2 MA's), (Start: 2 @34841 has 30 MA's), (Start: 3 @34826 has 3 MA's), (Start: 4 @34772 has 15 MA's), (Start: 8 @34721 has 20 MA's), (Start: 9 @34703 has 33 MA's), (Start: 11 @34673 has 2 MA's), (13, 34454), (16, 34283),

Gene: BodEinwohner17_44 Start: 34783, Stop: 34043, Start Num: 2

Candidate Starts for BodEinwohner17_44:

(Start: 1 @34789 has 2 MA's), (Start: 2 @34783 has 30 MA's), (Start: 4 @34714 has 15 MA's), (Start: 8 @34663 has 20 MA's), (Start: 9 @34645 has 33 MA's), (Start: 11 @34615 has 2 MA's), (13, 34396), (16, 34225),

Gene: Boomer_48 Start: 36022, Stop: 35276, Start Num: 1

Candidate Starts for Boomer_48:

(Start: 1 @36022 has 2 MA's), (Start: 2 @36016 has 30 MA's), (Start: 4 @35947 has 15 MA's), (Start: 8 @35896 has 20 MA's), (Start: 9 @35878 has 33 MA's), (Start: 11 @35848 has 2 MA's), (13, 35629),

(16, 35458),

Gene: Brushbloom_48 Start: 35416, Stop: 34748, Start Num: 4

Candidate Starts for Brushbloom_48:

(Start: 4 @35416 has 15 MA's), (Start: 9 @35347 has 33 MA's), (Start: 11 @35317 has 2 MA's), (Start: 12 @35161 has 2 MA's), (13, 35098), (14, 35065), (16, 34927),

Gene: Burwell21_45 Start: 35928, Stop: 35308, Start Num: 8

Candidate Starts for Burwell21_45:

(Start: 1 @36054 has 2 MA's), (Start: 2 @36048 has 30 MA's), (Start: 4 @35979 has 15 MA's), (Start: 8 @35928 has 20 MA's), (Start: 9 @35910 has 33 MA's), (Start: 11 @35880 has 2 MA's), (13, 35661), (16, 35490),

Gene: Cabrinians_47 Start: 36126, Stop: 35386, Start Num: 2

Candidate Starts for Cabrinians_47:

(Start: 1 @36132 has 2 MA's), (Start: 2 @36126 has 30 MA's), (Start: 4 @36057 has 15 MA's), (Start: 8 @36006 has 20 MA's), (Start: 9 @35988 has 33 MA's), (Start: 11 @35958 has 2 MA's), (13, 35739), (16, 35568),

Gene: CaptainTrips_43 Start: 34800, Stop: 34231, Start Num: 11

Candidate Starts for CaptainTrips_43:

(Start: 4 @34899 has 15 MA's), (Start: 8 @34848 has 20 MA's), (Start: 9 @34830 has 33 MA's), (Start: 11 @34800 has 2 MA's), (Start: 12 @34644 has 2 MA's), (13, 34581), (14, 34548), (16, 34410),

Gene: Cheesepuff_51 Start: 36870, Stop: 36271, Start Num: 9

Candidate Starts for Cheesepuff_51:

(Start: 4 @36939 has 15 MA's), (Start: 9 @36870 has 33 MA's), (Start: 11 @36840 has 2 MA's), (Start: 12 @36684 has 2 MA's), (13, 36621), (14, 36588), (16, 36450),

Gene: Chevrolet_52 Start: 36973, Stop: 36371, Start Num: 9

Candidate Starts for Chevrolet_52:

(Start: 1 @37117 has 2 MA's), (Start: 2 @37111 has 30 MA's), (Start: 4 @37042 has 15 MA's), (Start: 8 @36991 has 20 MA's), (Start: 9 @36973 has 33 MA's), (Start: 11 @36943 has 2 MA's), (13, 36724), (16, 36553),

Gene: Chuckly_45 Start: 34691, Stop: 34071, Start Num: 8

Candidate Starts for Chuckly_45:

(Start: 1 @34817 has 2 MA's), (Start: 2 @34811 has 30 MA's), (Start: 4 @34742 has 15 MA's), (Start: 8 @34691 has 20 MA's), (Start: 9 @34673 has 33 MA's), (Start: 11 @34643 has 2 MA's), (13, 34424), (16, 34253),

Gene: Corium_43 Start: 34988, Stop: 34320, Start Num: 4

Candidate Starts for Corium_43:

(Start: 4 @34988 has 15 MA's), (Start: 7 @34940 has 4 MA's), (Start: 9 @34919 has 33 MA's), (Start: 11 @34889 has 2 MA's), (Start: 12 @34733 has 2 MA's), (13, 34670), (14, 34637), (16, 34499),

Gene: Cornucopia_49 Start: 36045, Stop: 35377, Start Num: 4

Candidate Starts for Cornucopia_49:

(Start: 4 @36045 has 15 MA's), (Start: 9 @35976 has 33 MA's), (Start: 11 @35946 has 2 MA's), (Start: 12 @35790 has 2 MA's), (13, 35727), (14, 35694), (16, 35556),

Gene: Crumble_41 Start: 31924, Stop: 31322, Start Num: 9

Candidate Starts for Crumble_41:

(Start: 1 @32068 has 2 MA's), (Start: 2 @32062 has 30 MA's), (Start: 4 @31993 has 15 MA's), (Start: 8 @31942 has 20 MA's), (Start: 9 @31924 has 33 MA's), (Start: 11 @31894 has 2 MA's), (13, 31675), (16, 31504),

Gene: DLane_43 Start: 34828, Stop: 34160, Start Num: 4

Candidate Starts for DLane_43:

(Start: 4 @34828 has 15 MA's), (Start: 9 @34759 has 33 MA's), (Start: 11 @34729 has 2 MA's), (Start: 12 @34573 has 2 MA's), (13, 34510), (14, 34477), (16, 34339),

Gene: Dante_45 Start: 34409, Stop: 33807, Start Num: 9

Candidate Starts for Dante_45:

(Start: 1 @34553 has 2 MA's), (Start: 2 @34547 has 30 MA's), (Start: 4 @34478 has 15 MA's), (Start: 6 @34433 has 2 MA's), (Start: 8 @34427 has 20 MA's), (Start: 9 @34409 has 33 MA's), (Start: 11 @34379 has 2 MA's), (13, 34160), (16, 33989),

Gene: Deb65_43 Start: 34402, Stop: 33662, Start Num: 2

Candidate Starts for Deb65_43:

(Start: 1 @34408 has 2 MA's), (Start: 2 @34402 has 30 MA's), (Start: 4 @34333 has 15 MA's), (Start: 6 @34288 has 2 MA's), (Start: 8 @34282 has 20 MA's), (Start: 9 @34264 has 33 MA's), (Start: 11 @34234 has 2 MA's), (13, 34015), (16, 33844),

Gene: DirtMcgirt_44 Start: 34084, Stop: 33344, Start Num: 2

Candidate Starts for DirtMcgirt_44:

(Start: 1 @34090 has 2 MA's), (Start: 2 @34084 has 30 MA's), (Start: 4 @34015 has 15 MA's), (Start: 8 @33964 has 20 MA's), (Start: 9 @33946 has 33 MA's), (Start: 11 @33916 has 2 MA's), (13, 33697), (16, 33526),

Gene: DoRead_47 Start: 34679, Stop: 34059, Start Num: 8

Candidate Starts for DoRead_47:

(Start: 1 @34805 has 2 MA's), (Start: 2 @34799 has 30 MA's), (Start: 4 @34730 has 15 MA's), (Start: 8 @34679 has 20 MA's), (Start: 9 @34661 has 33 MA's), (Start: 11 @34631 has 2 MA's), (13, 34412), (16, 34241),

Gene: Doomphist_45 Start: 35661, Stop: 35041, Start Num: 8

Candidate Starts for Doomphist_45:

(Start: 1 @35787 has 2 MA's), (Start: 2 @35781 has 30 MA's), (Start: 3 @35766 has 3 MA's), (Start: 4 @35712 has 15 MA's), (Start: 8 @35661 has 20 MA's), (Start: 9 @35643 has 33 MA's), (Start: 11 @35613 has 2 MA's), (13, 35394), (16, 35223),

Gene: Dorothy_42 Start: 34460, Stop: 33840, Start Num: 8

Candidate Starts for Dorothy_42:

(Start: 1 @34586 has 2 MA's), (Start: 2 @34580 has 30 MA's), (Start: 3 @34565 has 3 MA's), (Start: 4 @34511 has 15 MA's), (Start: 8 @34460 has 20 MA's), (Start: 9 @34442 has 33 MA's), (Start: 11 @34412 has 2 MA's), (13, 34193), (16, 34022),

Gene: Drago_44 Start: 34018, Stop: 33347, Start Num: 4

Candidate Starts for Drago_44:

(Start: 1 @34093 has 2 MA's), (Start: 2 @34087 has 30 MA's), (Start: 4 @34018 has 15 MA's), (Start: 8 @33967 has 20 MA's), (Start: 9 @33949 has 33 MA's), (Start: 11 @33919 has 2 MA's), (13, 33700), (16, 33529),

Gene: Eish_46 Start: 34990, Stop: 34388, Start Num: 9

Candidate Starts for Eish_46:

(Start: 1 @35134 has 2 MA's), (Start: 2 @35128 has 30 MA's), (Start: 4 @35059 has 15 MA's), (Start: 8 @35008 has 20 MA's), (Start: 9 @34990 has 33 MA's), (Start: 11 @34960 has 2 MA's), (13, 34741), (16, 34570),

Gene: EleanorGeorge_43 Start: 34206, Stop: 33538, Start Num: 4

Candidate Starts for EleanorGeorge_43:

(Start: 4 @34206 has 15 MA's), (Start: 9 @34137 has 33 MA's), (Start: 11 @34107 has 2 MA's), (Start: 12 @33951 has 2 MA's), (13, 33888), (14, 33855), (16, 33717),

Gene: Emma_46 Start: 35235, Stop: 34567, Start Num: 4

Candidate Starts for Emma_46:

(Start: 4 @35235 has 15 MA's), (Start: 9 @35166 has 33 MA's), (Start: 11 @35136 has 2 MA's), (Start: 12 @34980 has 2 MA's), (13, 34917), (14, 34884), (16, 34746),

Gene: Enby_47 Start: 34342, Stop: 33743, Start Num: 9

Candidate Starts for Enby_47:

(Start: 4 @34411 has 15 MA's), (Start: 7 @34363 has 4 MA's), (Start: 9 @34342 has 33 MA's), (Start: 11 @34312 has 2 MA's), (Start: 12 @34156 has 2 MA's), (13, 34093), (14, 34060), (16, 33922),

Gene: Eradicator_37 Start: 32723, Stop: 31983, Start Num: 2

Candidate Starts for Eradicator_37:

(Start: 1 @32729 has 2 MA's), (Start: 2 @32723 has 30 MA's), (Start: 4 @32654 has 15 MA's), (Start: 8 @32603 has 20 MA's), (Start: 9 @32585 has 33 MA's), (Start: 11 @32555 has 2 MA's), (13, 32336), (16, 32165),

Gene: Estave1_46 Start: 34410, Stop: 33790, Start Num: 8

Candidate Starts for Estave1_46:

(Start: 1 @34536 has 2 MA's), (Start: 2 @34530 has 30 MA's), (Start: 4 @34461 has 15 MA's), (Start: 8 @34410 has 20 MA's), (Start: 9 @34392 has 33 MA's), (Start: 11 @34362 has 2 MA's), (13, 34143), (16, 33972),

Gene: Filuzino_43 Start: 33794, Stop: 33225, Start Num: 11

Candidate Starts for Filuzino_43:

(Start: 4 @33893 has 15 MA's), (Start: 9 @33824 has 33 MA's), (Start: 11 @33794 has 2 MA's), (Start: 12 @33638 has 2 MA's), (13, 33575), (16, 33404),

Gene: Flathead_46 Start: 36098, Stop: 35499, Start Num: 9

Candidate Starts for Flathead_46:

(Start: 4 @36167 has 15 MA's), (Start: 9 @36098 has 33 MA's), (Start: 11 @36068 has 2 MA's), (Start: 12 @35912 has 2 MA's), (13, 35849), (14, 35816), (16, 35678),

Gene: FreddyB_46 Start: 34836, Stop: 34234, Start Num: 9

Candidate Starts for FreddyB_46:

(Start: 1 @34980 has 2 MA's), (Start: 2 @34974 has 30 MA's), (Start: 4 @34905 has 15 MA's), (Start: 8 @34854 has 20 MA's), (Start: 9 @34836 has 33 MA's), (Start: 11 @34806 has 2 MA's), (13, 34587), (16, 34416),

Gene: Fruitloop_44 Start: 35504, Stop: 35091, Start Num: 12

Candidate Starts for Fruitloop_44:

(Start: 4 @35759 has 15 MA's), (Start: 9 @35690 has 33 MA's), (Start: 11 @35660 has 2 MA's), (Start: 12 @35504 has 2 MA's), (13, 35441), (14, 35408), (16, 35270),

Gene: Galactic_45 Start: 35277, Stop: 34678, Start Num: 9

Candidate Starts for Galactic_45:

(Start: 4 @35346 has 15 MA's), (Start: 9 @35277 has 33 MA's), (Start: 11 @35247 has 2 MA's), (Start: 12 @35091 has 2 MA's), (13, 35028), (14, 34995), (16, 34857),

Gene: Geralt_43 Start: 34401, Stop: 33661, Start Num: 2

Candidate Starts for Geralt_43:

(Start: 1 @34407 has 2 MA's), (Start: 2 @34401 has 30 MA's), (Start: 4 @34332 has 15 MA's), (Start: 6 @34287 has 2 MA's), (Start: 8 @34281 has 20 MA's), (Start: 9 @34263 has 33 MA's), (Start: 11 @34233 has 2 MA's), (13, 34014), (16, 33843),

Gene: Grimmer_54 Start: 36839, Stop: 36219, Start Num: 8

Candidate Starts for Grimmer_54:

(Start: 1 @36965 has 2 MA's), (Start: 2 @36959 has 30 MA's), (Start: 4 @36890 has 15 MA's), (Start: 8 @36839 has 20 MA's), (Start: 9 @36821 has 33 MA's), (Start: 11 @36791 has 2 MA's), (13, 36572), (16, 36401),

Gene: Guppsters_46 Start: 35045, Stop: 34446, Start Num: 9

Candidate Starts for Guppsters_46:

(Start: 4 @35114 has 15 MA's), (Start: 9 @35045 has 33 MA's), (Start: 11 @35015 has 2 MA's), (Start: 12 @34859 has 2 MA's), (13, 34796), (14, 34763), (16, 34625),

Gene: Ibhubesi_46 Start: 35173, Stop: 34433, Start Num: 2

Candidate Starts for Ibhubesi_46:

(Start: 1 @35179 has 2 MA's), (Start: 2 @35173 has 30 MA's), (Start: 4 @35104 has 15 MA's), (Start: 8 @35053 has 20 MA's), (Start: 9 @35035 has 33 MA's), (Start: 11 @35005 has 2 MA's), (13, 34786), (16, 34615),

Gene: Inventum_42 Start: 35114, Stop: 34374, Start Num: 2

Candidate Starts for Inventum_42:

(Start: 1 @35120 has 2 MA's), (Start: 2 @35114 has 30 MA's), (Start: 4 @35045 has 15 MA's), (Start: 6 @35000 has 2 MA's), (Start: 8 @34994 has 20 MA's), (Start: 9 @34976 has 33 MA's), (Start: 11 @34946 has 2 MA's), (13, 34727), (16, 34556),

Gene: Jant_48 Start: 36721, Stop: 36101, Start Num: 7

Candidate Starts for Jant_48:

(Start: 4 @36769 has 15 MA's), (Start: 7 @36721 has 4 MA's), (Start: 9 @36700 has 33 MA's), (Start: 11 @36670 has 2 MA's), (Start: 12 @36514 has 2 MA's), (13, 36451), (14, 36418), (16, 36280),

Gene: Jacob_46 Start: 36094, Stop: 35354, Start Num: 2

Candidate Starts for Jacob_46:

(Start: 1 @36100 has 2 MA's), (Start: 2 @36094 has 30 MA's), (Start: 4 @36025 has 15 MA's), (Start: 8 @35974 has 20 MA's), (Start: 9 @35956 has 33 MA's), (Start: 11 @35926 has 2 MA's), (13, 35707), (16, 35536),

Gene: Job42_46 Start: 36416, Stop: 35691, Start Num: 3

Candidate Starts for Job42_46:

(Start: 1 @36437 has 2 MA's), (Start: 2 @36431 has 30 MA's), (Start: 3 @36416 has 3 MA's), (Start: 4 @36362 has 15 MA's), (Start: 8 @36311 has 20 MA's), (Start: 9 @36293 has 33 MA's), (Start: 11 @36263 has 2 MA's), (13, 36044), (16, 35873),

Gene: JoeyJr_43 Start: 34601, Stop: 33861, Start Num: 2

Candidate Starts for JoeyJr_43:

(Start: 1 @34607 has 2 MA's), (Start: 2 @34601 has 30 MA's), (Start: 4 @34532 has 15 MA's), (Start: 6 @34487 has 2 MA's), (Start: 8 @34481 has 20 MA's), (Start: 9 @34463 has 33 MA's), (Start: 11 @34433 has 2 MA's), (13, 34214), (16, 34043),

Gene: Kenuha5_41 Start: 33689, Stop: 33072, Start Num: 8

Candidate Starts for Kenuha5_41:

(Start: 1 @33815 has 2 MA's), (Start: 2 @33809 has 30 MA's), (Start: 4 @33740 has 15 MA's), (Start: 8 @33689 has 20 MA's), (Start: 9 @33671 has 33 MA's), (Start: 11 @33641 has 2 MA's), (Start: 12 @33485 has 2 MA's), (13, 33422), (14, 33389), (16, 33251),

Gene: KingJulian_44 Start: 34940, Stop: 34320, Start Num: 7

Candidate Starts for KingJulian_44:

(Start: 4 @34988 has 15 MA's), (Start: 7 @34940 has 4 MA's), (Start: 9 @34919 has 33 MA's), (Start: 11 @34889 has 2 MA's), (Start: 12 @34733 has 2 MA's), (13, 34670), (14, 34637), (16, 34499),

Gene: KingMidas_47 Start: 36143, Stop: 35523, Start Num: 8

Candidate Starts for KingMidas_47:

(Start: 1 @36269 has 2 MA's), (Start: 2 @36263 has 30 MA's), (Start: 4 @36194 has 15 MA's), (Start: 6 @36149 has 2 MA's), (Start: 8 @36143 has 20 MA's), (Start: 9 @36125 has 33 MA's), (Start: 11 @36095 has 2 MA's), (13, 35876), (16, 35705),

Gene: Koella_40 Start: 32024, Stop: 31284, Start Num: 2

Candidate Starts for Koella_40:

(Start: 1 @32030 has 2 MA's), (Start: 2 @32024 has 30 MA's), (Start: 4 @31955 has 15 MA's), (Start: 8 @31904 has 20 MA's), (Start: 9 @31886 has 33 MA's), (Start: 11 @31856 has 2 MA's), (13, 31637), (16, 31466),

Gene: Krakatau_43 Start: 34815, Stop: 34195, Start Num: 8

Candidate Starts for Krakatau_43:

(Start: 1 @34941 has 2 MA's), (Start: 2 @34935 has 30 MA's), (Start: 4 @34866 has 15 MA's), (Start: 8 @34815 has 20 MA's), (Start: 9 @34797 has 33 MA's), (Start: 11 @34767 has 2 MA's), (13, 34548), (16, 34377),

Gene: KristaRAM_45 Start: 36010, Stop: 35411, Start Num: 9

Candidate Starts for KristaRAM_45:

(Start: 4 @36079 has 15 MA's), (Start: 9 @36010 has 33 MA's), (Start: 11 @35980 has 2 MA's), (Start: 12 @35824 has 2 MA's), (13, 35761), (14, 35728), (16, 35590),

Gene: Latretium_48 Start: 36053, Stop: 35313, Start Num: 2

Candidate Starts for Latretium_48:

(Start: 1 @36059 has 2 MA's), (Start: 2 @36053 has 30 MA's), (Start: 4 @35984 has 15 MA's), (Start: 8 @35933 has 20 MA's), (Start: 9 @35915 has 33 MA's), (Start: 11 @35885 has 2 MA's), (13, 35666), (16, 35495),

Gene: Leozinho_45 Start: 34717, Stop: 34115, Start Num: 9

Candidate Starts for Leozinho_45:

(Start: 1 @34861 has 2 MA's), (Start: 2 @34855 has 30 MA's), (Start: 4 @34786 has 15 MA's), (Start: 8 @34735 has 20 MA's), (Start: 9 @34717 has 33 MA's), (Start: 11 @34687 has 2 MA's), (13, 34468), (16, 34297),

Gene: Leperchaun_40 Start: 33717, Stop: 33091, Start Num: 6

Candidate Starts for Leperchaun_40:

(Start: 1 @33837 has 2 MA's), (Start: 2 @33831 has 30 MA's), (Start: 4 @33762 has 15 MA's), (Start: 6 @33717 has 2 MA's), (Start: 8 @33711 has 20 MA's), (Start: 9 @33693 has 33 MA's), (Start: 11 @33663 has 2 MA's), (13, 33444), (16, 33273),

Gene: LilMoolah_44 Start: 34833, Stop: 34093, Start Num: 2

Candidate Starts for LilMoolah_44:

(Start: 1 @34839 has 2 MA's), (Start: 2 @34833 has 30 MA's), (Start: 4 @34764 has 15 MA's), (Start: 8 @34713 has 20 MA's), (Start: 9 @34695 has 33 MA's), (Start: 11 @34665 has 2 MA's), (13, 34446), (16, 34275),

Gene: LittleShirley_45 Start: 35726, Stop: 35127, Start Num: 9

Candidate Starts for LittleShirley_45:

(Start: 1 @35870 has 2 MA's), (Start: 2 @35864 has 30 MA's), (Start: 4 @35795 has 15 MA's), (Start: 8 @35744 has 20 MA's), (Start: 9 @35726 has 33 MA's), (Start: 11 @35696 has 2 MA's), (Start: 12 @35540 has 2 MA's), (13, 35477), (14, 35444), (16, 35306),

Gene: Lizziana_52 Start: 37097, Stop: 36357, Start Num: 2

Candidate Starts for Lizziana_52:

(Start: 1 @37103 has 2 MA's), (Start: 2 @37097 has 30 MA's), (Start: 4 @37028 has 15 MA's), (Start: 8 @36977 has 20 MA's), (Start: 9 @36959 has 33 MA's), (Start: 11 @36929 has 2 MA's), (13, 36710), (16, 36539),

Gene: Llama_47 Start: 35849, Stop: 35229, Start Num: 8

Candidate Starts for Llama_47:

(Start: 1 @35975 has 2 MA's), (Start: 2 @35969 has 30 MA's), (Start: 4 @35900 has 15 MA's), (Start: 8 @35849 has 20 MA's), (Start: 9 @35831 has 33 MA's), (Start: 11 @35801 has 2 MA's), (13, 35582), (16, 35411),

Gene: Llij_42 Start: 34241, Stop: 33501, Start Num: 2

Candidate Starts for Llij_42:

(Start: 1 @34247 has 2 MA's), (Start: 2 @34241 has 30 MA's), (Start: 4 @34172 has 15 MA's), (Start: 8 @34121 has 20 MA's), (Start: 9 @34103 has 33 MA's), (Start: 11 @34073 has 2 MA's), (13, 33854), (16, 33683),

Gene: Lorde_47 Start: 34386, Stop: 33718, Start Num: 4

Candidate Starts for Lorde_47:

(Start: 4 @34386 has 15 MA's), (Start: 7 @34338 has 4 MA's), (Start: 9 @34317 has 33 MA's), (Start: 11 @34287 has 2 MA's), (Start: 12 @34131 has 2 MA's), (13, 34068), (14, 34035), (16, 33897),

Gene: Lucia_45 Start: 34385, Stop: 33645, Start Num: 2

Candidate Starts for Lucia_45:

(Start: 1 @34391 has 2 MA's), (Start: 2 @34385 has 30 MA's), (Start: 4 @34316 has 15 MA's), (Start: 8 @34265 has 20 MA's), (Start: 9 @34247 has 33 MA's), (Start: 11 @34217 has 2 MA's), (13, 33998), (16, 33827),

Gene: LunaBlu_48 Start: 35936, Stop: 35337, Start Num: 9

Candidate Starts for LunaBlu_48:

(Start: 4 @36005 has 15 MA's), (Start: 9 @35936 has 33 MA's), (Start: 11 @35906 has 2 MA's), (Start: 12 @35750 has 2 MA's), (13, 35687), (14, 35654), (16, 35516),

Gene: MadMen_40 Start: 33743, Stop: 33141, Start Num: 9

Candidate Starts for MadMen_40:

(Start: 1 @33887 has 2 MA's), (Start: 2 @33881 has 30 MA's), (Start: 4 @33812 has 15 MA's), (Start: 8 @33761 has 20 MA's), (Start: 9 @33743 has 33 MA's), (Start: 11 @33713 has 2 MA's), (13, 33494), (16, 33323),

Gene: Marker_46 Start: 34616, Stop: 33996, Start Num: 8

Candidate Starts for Marker_46:

(Start: 1 @34742 has 2 MA's), (Start: 2 @34736 has 30 MA's), (Start: 4 @34667 has 15 MA's), (Start: 8 @34616 has 20 MA's), (Start: 9 @34598 has 33 MA's), (Start: 11 @34568 has 2 MA's), (13, 34349), (16, 34178),

Gene: Martik_46 Start: 36050, Stop: 35310, Start Num: 2

Candidate Starts for Martik_46:

(Start: 1 @36056 has 2 MA's), (Start: 2 @36050 has 30 MA's), (Start: 4 @35981 has 15 MA's), (Start: 8 @35930 has 20 MA's), (Start: 9 @35912 has 33 MA's), (Start: 11 @35882 has 2 MA's), (13, 35663), (16, 35492),

Gene: Medindi_43 Start: 34049, Stop: 33381, Start Num: 4

Candidate Starts for Medindi_43:

(Start: 4 @34049 has 15 MA's), (Start: 9 @33980 has 33 MA's), (Start: 11 @33950 has 2 MA's), (Start: 12 @33794 has 2 MA's), (13, 33731), (14, 33698), (16, 33560),

Gene: Melissauren88_44 Start: 35089, Stop: 34469, Start Num: 7

Candidate Starts for Melissauren88_44:

(Start: 4 @35137 has 15 MA's), (Start: 7 @35089 has 4 MA's), (Start: 9 @35068 has 33 MA's), (Start: 11 @35038 has 2 MA's), (Start: 12 @34882 has 2 MA's), (13, 34819), (14, 34786), (16, 34648),

Gene: MilanaBonita_39 Start: 31622, Stop: 31023, Start Num: 9

Candidate Starts for MilanaBonita_39:

(Start: 4 @31691 has 15 MA's), (Start: 9 @31622 has 33 MA's), (Start: 11 @31592 has 2 MA's), (Start: 12 @31436 has 2 MA's), (13, 31373), (14, 31340), (16, 31202),

Gene: MinionDave_45 Start: 35623, Stop: 35006, Start Num: 8

Candidate Starts for MinionDave_45:

(Start: 4 @35674 has 15 MA's), (Start: 8 @35623 has 20 MA's), (Start: 9 @35605 has 33 MA's), (Start: 11 @35575 has 2 MA's), (Start: 12 @35419 has 2 MA's), (13, 35356), (14, 35323), (16, 35185),

Gene: Modragons_46 Start: 35695, Stop: 35075, Start Num: 8

Candidate Starts for Modragons_46:

(Start: 1 @35821 has 2 MA's), (Start: 2 @35815 has 30 MA's), (Start: 4 @35746 has 15 MA's), (Start: 8 @35695 has 20 MA's), (Start: 9 @35677 has 33 MA's), (Start: 11 @35647 has 2 MA's), (13, 35428), (16, 35257),

Gene: Moonbeam_43 Start: 35191, Stop: 34523, Start Num: 4

Candidate Starts for Moonbeam_43:

(Start: 4 @35191 has 15 MA's), (Start: 9 @35122 has 33 MA's), (Start: 11 @35092 has 2 MA's), (Start: 12 @34936 has 2 MA's), (13, 34873), (14, 34840), (16, 34702),

Gene: Mova_46 Start: 34887, Stop: 34285, Start Num: 9

Candidate Starts for Mova_46:

(Start: 4 @34956 has 15 MA's), (Start: 9 @34887 has 33 MA's), (Start: 11 @34857 has 2 MA's), (Start: 12 @34701 has 2 MA's), (13, 34638), (16, 34467),

Gene: Mozy_54 Start: 37161, Stop: 36559, Start Num: 9

Candidate Starts for Mozy_54:

(Start: 1 @37305 has 2 MA's), (Start: 2 @37299 has 30 MA's), (Start: 4 @37230 has 15 MA's), (Start: 8 @37179 has 20 MA's), (Start: 9 @37161 has 33 MA's), (Start: 11 @37131 has 2 MA's), (13, 36912), (16, 36741),

Gene: Ms6_39 Start: 30134, Stop: 29535, Start Num: 9

Candidate Starts for Ms6_39:

(Start: 9 @30134 has 33 MA's), (Start: 11 @30104 has 2 MA's), (Start: 12 @29948 has 2 MA's), (13, 29885), (14, 29852), (16, 29714),

Gene: Mwanjiwa_51 Start: 35819, Stop: 35079, Start Num: 2

Candidate Starts for Mwanjiwa_51:

(Start: 1 @35825 has 2 MA's), (Start: 2 @35819 has 30 MA's), (Start: 4 @35750 has 15 MA's), (Start: 8 @35699 has 20 MA's), (Start: 9 @35681 has 33 MA's), (Start: 11 @35651 has 2 MA's), (13, 35432), (15, 35282), (16, 35261),

Gene: Nimbo_42 Start: 34404, Stop: 33664, Start Num: 2

Candidate Starts for Nimbo_42:

(Start: 1 @34410 has 2 MA's), (Start: 2 @34404 has 30 MA's), (Start: 4 @34335 has 15 MA's), (Start: 6 @34290 has 2 MA's), (Start: 8 @34284 has 20 MA's), (Start: 9 @34266 has 33 MA's), (Start: 11 @34236 has 2 MA's), (13, 34017), (16, 33846),

Gene: Nitzel_41 Start: 34509, Stop: 33769, Start Num: 2

Candidate Starts for Nitzel_41:

(Start: 1 @34515 has 2 MA's), (Start: 2 @34509 has 30 MA's), (Start: 4 @34440 has 15 MA's), (Start: 8 @34389 has 20 MA's), (Start: 9 @34371 has 33 MA's), (Start: 11 @34341 has 2 MA's), (13, 34122), (16, 33951),

Gene: Nivrat_44 Start: 34706, Stop: 33966, Start Num: 2

Candidate Starts for Nivrat_44:

(Start: 1 @34712 has 2 MA's), (Start: 2 @34706 has 30 MA's), (Start: 4 @34637 has 15 MA's), (Start: 8 @34586 has 20 MA's), (Start: 9 @34568 has 33 MA's), (Start: 11 @34538 has 2 MA's), (13, 34319), (16, 34148),

Gene: NormanBulbieJr_47 Start: 35899, Stop: 35297, Start Num: 9

Candidate Starts for NormanBulbieJr_47:

(Start: 1 @36043 has 2 MA's), (Start: 2 @36037 has 30 MA's), (Start: 4 @35968 has 15 MA's), (Start: 8 @35917 has 20 MA's), (Start: 9 @35899 has 33 MA's), (Start: 11 @35869 has 2 MA's), (13, 35650), (16, 35479),

Gene: OfUltron_47 Start: 35851, Stop: 35231, Start Num: 8

Candidate Starts for OfUltron_47:

(Start: 1 @35977 has 2 MA's), (Start: 2 @35971 has 30 MA's), (Start: 4 @35902 has 15 MA's), (Start: 8 @35851 has 20 MA's), (Start: 9 @35833 has 33 MA's), (Start: 11 @35803 has 2 MA's), (13, 35584), (16, 35413),

Gene: Ogopogo_46 Start: 34219, Stop: 33620, Start Num: 9

Candidate Starts for Ogopogo_46:

(Start: 4 @34288 has 15 MA's), (Start: 7 @34240 has 4 MA's), (Start: 9 @34219 has 33 MA's), (Start: 11 @34189 has 2 MA's), (Start: 12 @34033 has 2 MA's), (13, 33970), (14, 33937), (16, 33799),

Gene: OlympiaSaint_45 Start: 34760, Stop: 34140, Start Num: 8

Candidate Starts for OlympiaSaint_45:

(Start: 1 @34886 has 2 MA's), (Start: 2 @34880 has 30 MA's), (Start: 4 @34811 has 15 MA's), (Start: 8 @34760 has 20 MA's), (Start: 9 @34742 has 33 MA's), (Start: 11 @34712 has 2 MA's), (13, 34493), (16, 34322),

Gene: Ovechkin_43 Start: 35449, Stop: 34850, Start Num: 9

Candidate Starts for Ovechkin_43:

(Start: 4 @35518 has 15 MA's), (Start: 9 @35449 has 33 MA's), (Start: 11 @35419 has 2 MA's), (Start: 12 @35263 has 2 MA's), (13, 35200), (14, 35167), (16, 35029),

Gene: PHappiness_43 Start: 34377, Stop: 33637, Start Num: 2

Candidate Starts for PHappiness_43:

(Start: 1 @34383 has 2 MA's), (Start: 2 @34377 has 30 MA's), (Start: 4 @34308 has 15 MA's), (Start: 6 @34263 has 2 MA's), (Start: 8 @34257 has 20 MA's), (Start: 9 @34239 has 33 MA's), (Start: 11 @34209 has 2 MA's), (13, 33990), (16, 33819),

Gene: PMC_40 Start: 34183, Stop: 33512, Start Num: 4

Candidate Starts for PMC_40:

(Start: 1 @34258 has 2 MA's), (Start: 2 @34252 has 30 MA's), (Start: 4 @34183 has 15 MA's), (Start: 8 @34132 has 20 MA's), (Start: 9 @34114 has 33 MA's), (Start: 11 @34084 has 2 MA's), (13, 33865), (16, 33694),

Gene: Pacc40_42 Start: 34451, Stop: 33711, Start Num: 2

Candidate Starts for Pacc40_42:

(Start: 1 @34457 has 2 MA's), (Start: 2 @34451 has 30 MA's), (Start: 4 @34382 has 15 MA's), (Start: 6 @34337 has 2 MA's), (Start: 8 @34331 has 20 MA's), (Start: 9 @34313 has 33 MA's), (Start: 11 @34283 has 2 MA's), (13, 34064), (16, 33893),

Gene: PatoPoderoso_43 Start: 34988, Stop: 34320, Start Num: 4

Candidate Starts for PatoPoderoso_43:

(Start: 4 @34988 has 15 MA's), (Start: 7 @34940 has 4 MA's), (Start: 9 @34919 has 33 MA's), (Start: 11 @34889 has 2 MA's), (Start: 12 @34733 has 2 MA's), (13, 34670), (14, 34637), (16, 34499),

Gene: Peridot_49 Start: 36069, Stop: 35332, Start Num: 2

Candidate Starts for Peridot_49:

(Start: 1 @36075 has 2 MA's), (Start: 2 @36069 has 30 MA's), (Start: 4 @36000 has 15 MA's), (Start: 8 @35949 has 20 MA's), (Start: 9 @35931 has 33 MA's), (Start: 11 @35901 has 2 MA's), (13, 35682), (16, 35511),

Gene: Phalconet_44 Start: 34467, Stop: 33847, Start Num: 7

Candidate Starts for Phalconet_44:

(Start: 4 @34515 has 15 MA's), (Start: 7 @34467 has 4 MA's), (Start: 9 @34446 has 33 MA's), (Start: 11 @34416 has 2 MA's), (Start: 12 @34260 has 2 MA's), (13, 34197), (14, 34164), (16, 34026),

Gene: Phasih_43 Start: 34796, Stop: 34056, Start Num: 2

Candidate Starts for Phasih_43:

(Start: 1 @34802 has 2 MA's), (Start: 2 @34796 has 30 MA's), (Start: 3 @34781 has 3 MA's), (Start: 4 @34727 has 15 MA's), (Start: 8 @34676 has 20 MA's), (Start: 9 @34658 has 33 MA's), (Start: 11 @34628 has 2 MA's), (13, 34409), (16, 34238),

Gene: Phatniss_43 Start: 34638, Stop: 34018, Start Num: 8

Candidate Starts for Phatniss_43:

(Start: 1 @34764 has 2 MA's), (Start: 2 @34758 has 30 MA's), (Start: 4 @34689 has 15 MA's), (Start: 8 @34638 has 20 MA's), (Start: 9 @34620 has 33 MA's), (Start: 11 @34590 has 2 MA's), (13, 34371),

(16, 34200),

Gene: PhesterPhotato_47 Start: 35401, Stop: 34802, Start Num: 9

Candidate Starts for PhesterPhotato_47:

(Start: 4 @35470 has 15 MA's), (Start: 7 @35422 has 4 MA's), (Start: 9 @35401 has 33 MA's), (Start: 11 @35371 has 2 MA's), (Start: 12 @35215 has 2 MA's), (13, 35152), (14, 35119), (16, 34981),

Gene: Plumbus_45 Start: 34510, Stop: 33764, Start Num: 1

Candidate Starts for Plumbus_45:

(Start: 1 @34510 has 2 MA's), (Start: 2 @34504 has 30 MA's), (Start: 4 @34435 has 15 MA's), (Start: 8 @34384 has 20 MA's), (Start: 9 @34366 has 33 MA's), (Start: 11 @34336 has 2 MA's), (13, 34117), (16, 33946),

Gene: Polka14_44 Start: 35054, Stop: 34314, Start Num: 2

Candidate Starts for Polka14_44:

(Start: 1 @35060 has 2 MA's), (Start: 2 @35054 has 30 MA's), (Start: 4 @34985 has 15 MA's), (Start: 6 @34940 has 2 MA's), (Start: 8 @34934 has 20 MA's), (Start: 9 @34916 has 33 MA's), (Start: 11 @34886 has 2 MA's), (13, 34667), (16, 34496),

Gene: PopTart_41 Start: 34264, Stop: 33524, Start Num: 2

Candidate Starts for PopTart_41:

(Start: 1 @34270 has 2 MA's), (Start: 2 @34264 has 30 MA's), (Start: 8 @34144 has 20 MA's), (Start: 9 @34126 has 33 MA's), (Start: 11 @34096 has 2 MA's), (13, 33877), (16, 33706),

Gene: Priscilla_46 Start: 36136, Stop: 35396, Start Num: 2

Candidate Starts for Priscilla_46:

(Start: 1 @36142 has 2 MA's), (Start: 2 @36136 has 30 MA's), (Start: 4 @36067 has 15 MA's), (Start: 8 @36016 has 20 MA's), (Start: 9 @35998 has 33 MA's), (Start: 11 @35968 has 2 MA's), (13, 35749), (16, 35578),

Gene: Rita_46 Start: 34488, Stop: 33871, Start Num: 8

Candidate Starts for Rita_46:

(Start: 1 @34614 has 2 MA's), (Start: 2 @34608 has 30 MA's), (Start: 4 @34539 has 15 MA's), (Start: 8 @34488 has 20 MA's), (Start: 9 @34470 has 33 MA's), (Start: 11 @34440 has 2 MA's), (Start: 12 @34284 has 2 MA's), (13, 34221), (14, 34188), (16, 34050),

Gene: RitaG_43 Start: 34608, Stop: 33982, Start Num: 6

Candidate Starts for RitaG_43:

(Start: 1 @34728 has 2 MA's), (Start: 2 @34722 has 30 MA's), (Start: 4 @34653 has 15 MA's), (Start: 6 @34608 has 2 MA's), (Start: 8 @34602 has 20 MA's), (Start: 9 @34584 has 33 MA's), (Start: 11 @34554 has 2 MA's), (13, 34335), (16, 34164),

Gene: Rockne_43 Start: 34183, Stop: 33512, Start Num: 4

Candidate Starts for Rockne_43:

(Start: 1 @34258 has 2 MA's), (Start: 2 @34252 has 30 MA's), (Start: 4 @34183 has 15 MA's), (Start: 8 @34132 has 20 MA's), (Start: 9 @34114 has 33 MA's), (Start: 11 @34084 has 2 MA's), (13, 33865), (16, 33694),

Gene: RockyHorror_46 Start: 34639, Stop: 33914, Start Num: 3

Candidate Starts for RockyHorror_46:

(Start: 1 @34660 has 2 MA's), (Start: 2 @34654 has 30 MA's), (Start: 3 @34639 has 3 MA's), (Start: 4 @34585 has 15 MA's), (Start: 8 @34534 has 20 MA's), (Start: 9 @34516 has 33 MA's), (Start: 11 @34486 has 2 MA's), (13, 34267), (16, 34096),

Gene: Ruby_44 Start: 35364, Stop: 34702, Start Num: 5

Candidate Starts for Ruby_44:

(Start: 5 @35364 has 1 MA's), (10, 35295), (Start: 11 @35274 has 2 MA's), (13, 35055), (16, 34884),

Gene: SG4_44 Start: 34827, Stop: 34228, Start Num: 9

Candidate Starts for SG4_44:

(Start: 4 @34896 has 15 MA's), (Start: 7 @34848 has 4 MA's), (Start: 9 @34827 has 33 MA's), (Start: 11 @34797 has 2 MA's), (Start: 12 @34641 has 2 MA's), (13, 34578), (14, 34545), (16, 34407),

Gene: SassyB_41 Start: 34264, Stop: 33524, Start Num: 2

Candidate Starts for SassyB_41:

(Start: 1 @34270 has 2 MA's), (Start: 2 @34264 has 30 MA's), (Start: 8 @34144 has 20 MA's), (Start: 9 @34126 has 33 MA's), (Start: 11 @34096 has 2 MA's), (13, 33877), (16, 33706),

Gene: Scottish_46 Start: 35596, Stop: 34994, Start Num: 9

Candidate Starts for Scottish_46:

(Start: 1 @35740 has 2 MA's), (Start: 2 @35734 has 30 MA's), (Start: 4 @35665 has 15 MA's), (Start: 6 @35620 has 2 MA's), (Start: 8 @35614 has 20 MA's), (Start: 9 @35596 has 33 MA's), (Start: 11 @35566 has 2 MA's), (13, 35347), (16, 35176),

Gene: Seabastian_47 Start: 35833, Stop: 35231, Start Num: 9

Candidate Starts for Seabastian_47:

(Start: 1 @35977 has 2 MA's), (Start: 2 @35971 has 30 MA's), (Start: 4 @35902 has 15 MA's), (Start: 8 @35851 has 20 MA's), (Start: 9 @35833 has 33 MA's), (Start: 11 @35803 has 2 MA's), (13, 35584), (16, 35413),

Gene: Seagreen_46 Start: 34859, Stop: 34257, Start Num: 9

Candidate Starts for Seagreen_46:

(Start: 9 @34859 has 33 MA's), (Start: 11 @34829 has 2 MA's), (13, 34610), (16, 34439),

Gene: Shauna1_40 Start: 33581, Stop: 32982, Start Num: 9

Candidate Starts for Shauna1_40:

(Start: 1 @33725 has 2 MA's), (Start: 2 @33719 has 30 MA's), (Start: 4 @33650 has 15 MA's), (Start: 8 @33599 has 20 MA's), (Start: 9 @33581 has 33 MA's), (Start: 11 @33551 has 2 MA's), (Start: 12 @33395 has 2 MA's), (13, 33332), (14, 33299), (16, 33161),

Gene: ShiLan_46 Start: 35945, Stop: 35343, Start Num: 9

Candidate Starts for ShiLan_46:

(Start: 1 @36089 has 2 MA's), (Start: 2 @36083 has 30 MA's), (Start: 4 @36014 has 15 MA's), (Start: 8 @35963 has 20 MA's), (Start: 9 @35945 has 33 MA's), (Start: 11 @35915 has 2 MA's), (13, 35696), (16, 35525),

Gene: ShowerHandel_48 Start: 35912, Stop: 35310, Start Num: 9

Candidate Starts for ShowerHandel_48:

(Start: 1 @36056 has 2 MA's), (Start: 2 @36050 has 30 MA's), (Start: 4 @35981 has 15 MA's), (Start: 8 @35930 has 20 MA's), (Start: 9 @35912 has 33 MA's), (Start: 11 @35882 has 2 MA's), (13, 35663), (16, 35492),

Gene: ShroomBoi_45 Start: 34851, Stop: 34183, Start Num: 4

Candidate Starts for ShroomBoi_45:

(Start: 4 @34851 has 15 MA's), (Start: 9 @34782 has 33 MA's), (Start: 11 @34752 has 2 MA's), (Start: 12 @34596 has 2 MA's), (13, 34533), (14, 34500), (16, 34362),

Gene: SilverChicken_55 Start: 35426, Stop: 34758, Start Num: 4

Candidate Starts for SilverChicken_55:

(Start: 4 @35426 has 15 MA's), (Start: 9 @35357 has 33 MA's), (Start: 11 @35327 has 2 MA's), (Start: 12 @35171 has 2 MA's), (13, 35108), (14, 35075), (16, 34937),

Gene: SimranZ1_45 Start: 34125, Stop: 33523, Start Num: 9

Candidate Starts for SimranZ1_45:

(Start: 1 @34269 has 2 MA's), (Start: 2 @34263 has 30 MA's), (Start: 4 @34194 has 15 MA's), (Start: 8 @34143 has 20 MA's), (Start: 9 @34125 has 33 MA's), (Start: 11 @34095 has 2 MA's), (13, 33876), (15, 33726), (16, 33705),

Gene: Sparkdehlily_48 Start: 35654, Stop: 34914, Start Num: 2

Candidate Starts for Sparkdehlily_48:

(Start: 1 @35660 has 2 MA's), (Start: 2 @35654 has 30 MA's), (Start: 4 @35585 has 15 MA's), (Start: 8 @35534 has 20 MA's), (Start: 9 @35516 has 33 MA's), (Start: 11 @35486 has 2 MA's), (13, 35267), (16, 35096),

Gene: Spoonbill_45 Start: 34607, Stop: 33936, Start Num: 4

Candidate Starts for Spoonbill_45:

(Start: 1 @34682 has 2 MA's), (Start: 2 @34676 has 30 MA's), (Start: 4 @34607 has 15 MA's), (Start: 6 @34562 has 2 MA's), (Start: 8 @34556 has 20 MA's), (Start: 9 @34538 has 33 MA's), (Start: 11 @34508 has 2 MA's), (13, 34289), (16, 34118),

Gene: StAnnes_45 Start: 36046, Stop: 35447, Start Num: 9

Candidate Starts for StAnnes_45:

(Start: 4 @36115 has 15 MA's), (Start: 9 @36046 has 33 MA's), (Start: 11 @36016 has 2 MA's), (Start: 12 @35860 has 2 MA's), (13, 35797), (14, 35764), (16, 35626),

Gene: Stap_44 Start: 34554, Stop: 33814, Start Num: 2

Candidate Starts for Stap_44:

(Start: 1 @34560 has 2 MA's), (Start: 2 @34554 has 30 MA's), (Start: 3 @34539 has 3 MA's), (Start: 4 @34485 has 15 MA's), (Start: 8 @34434 has 20 MA's), (Start: 9 @34416 has 33 MA's), (Start: 11 @34386 has 2 MA's), (13, 34167), (16, 33996),

Gene: SuperGrey_46 Start: 35564, Stop: 35151, Start Num: 12

Candidate Starts for SuperGrey_46:

(Start: 4 @35819 has 15 MA's), (Start: 9 @35750 has 33 MA's), (Start: 11 @35720 has 2 MA's), (Start: 12 @35564 has 2 MA's), (13, 35501), (14, 35468), (16, 35330),

Gene: TDanisky_48 Start: 35534, Stop: 34914, Start Num: 8

Candidate Starts for TDanisky_48:

(Start: 1 @35660 has 2 MA's), (Start: 2 @35654 has 30 MA's), (Start: 4 @35585 has 15 MA's), (Start: 8 @35534 has 20 MA's), (Start: 9 @35516 has 33 MA's), (Start: 11 @35486 has 2 MA's), (13, 35267), (16, 35096),

Gene: Taj_47 Start: 35103, Stop: 34483, Start Num: 8

Candidate Starts for Taj_47:

(Start: 1 @35229 has 2 MA's), (Start: 2 @35223 has 30 MA's), (Start: 4 @35154 has 15 MA's), (Start: 8 @35103 has 20 MA's), (Start: 9 @35085 has 33 MA's), (Start: 11 @35055 has 2 MA's), (13, 34836), (16, 34665),

Gene: Tchotchke_46 Start: 34433, Stop: 33813, Start Num: 8

Candidate Starts for Tchotchke_46:

(Start: 1 @34559 has 2 MA's), (Start: 2 @34553 has 30 MA's), (Start: 4 @34484 has 15 MA's), (Start: 8 @34433 has 20 MA's), (Start: 9 @34415 has 33 MA's), (Start: 11 @34385 has 2 MA's), (13, 34166), (16, 33995),

Gene: Tootsieroll_47 Start: 34724, Stop: 34104, Start Num: 8

Candidate Starts for Tootsieroll_47:

(Start: 1 @34850 has 2 MA's), (Start: 2 @34844 has 30 MA's), (Start: 4 @34775 has 15 MA's), (Start: 8 @34724 has 20 MA's), (Start: 9 @34706 has 33 MA's), (Start: 11 @34676 has 2 MA's), (13, 34457), (16, 34286),

Gene: Topiatin_50 Start: 36322, Stop: 35582, Start Num: 2

Candidate Starts for Topiatin_50:

(Start: 1 @36328 has 2 MA's), (Start: 2 @36322 has 30 MA's), (Start: 4 @36253 has 15 MA's), (Start: 8 @36202 has 20 MA's), (Start: 9 @36184 has 33 MA's), (Start: 11 @36154 has 2 MA's), (13, 35935), (16, 35764),

Gene: VRedHorse_46 Start: 35313, Stop: 34693, Start Num: 7

Candidate Starts for VRedHorse_46:

(Start: 4 @35361 has 15 MA's), (Start: 7 @35313 has 4 MA's), (Start: 9 @35292 has 33 MA's), (Start: 11 @35262 has 2 MA's), (Start: 12 @35106 has 2 MA's), (13, 35043), (14, 35010), (16, 34872),

Gene: XFactor_44 Start: 34845, Stop: 34177, Start Num: 4

Candidate Starts for XFactor_44:

(Start: 4 @34845 has 15 MA's), (Start: 9 @34776 has 33 MA's), (Start: 11 @34746 has 2 MA's), (Start: 12 @34590 has 2 MA's), (13, 34527), (16, 34356),

Gene: Yorick_43 Start: 34763, Stop: 34023, Start Num: 2

Candidate Starts for Yorick_43:

(Start: 1 @34769 has 2 MA's), (Start: 2 @34763 has 30 MA's), (Start: 4 @34694 has 15 MA's), (Start: 8 @34643 has 20 MA's), (Start: 9 @34625 has 33 MA's), (Start: 11 @34595 has 2 MA's), (13, 34376), (16, 34205),

Gene: Zerg_44 Start: 34625, Stop: 34023, Start Num: 9

Candidate Starts for Zerg_44:

(Start: 1 @34769 has 2 MA's), (Start: 2 @34763 has 30 MA's), (Start: 3 @34748 has 3 MA's), (Start: 4 @34694 has 15 MA's), (Start: 8 @34643 has 20 MA's), (Start: 9 @34625 has 33 MA's), (Start: 11 @34595 has 2 MA's), (13, 34376), (16, 34205),