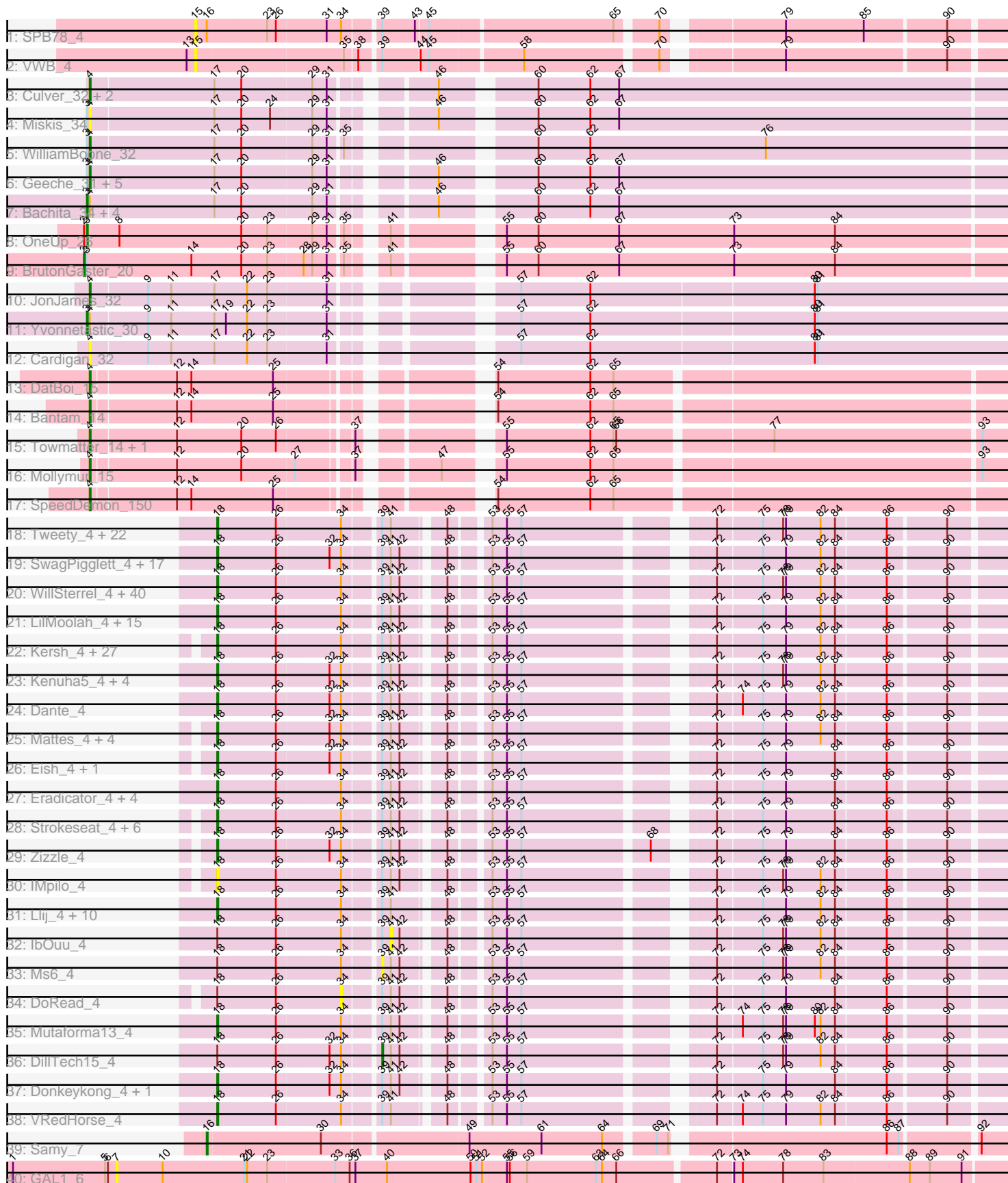


Pham 202686



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 202686 Report

This analysis was run 01/18/25 on database version 583.

WARNING: Pham size does not match number of genes in report. Either unphamerated genes have been added (by you) or starterator has removed genes due to invalid start codon.

Pham number 202686 has 203 members, 18 are drafts.

Phages represented in each track:

- Track 1 : SPB78_4
- Track 2 : VWB_4
- Track 3 : Culver_32, Abscondus_31, Dusty_30
- Track 4 : Miskis_34
- Track 5 : WilliamBoone_32
- Track 6 : Geeche_31, Lozinak_32, Norvs_33, Engineer_33, Aphelion_32, PhinkBoden_32
- Track 7 : Bachita_34, Smoothie_33, Cucurbita_34, Toniann_32, ClubL_32
- Track 8 : OneUp_26
- Track 9 : BrutonGaster_20
- Track 10 : JonJames_32
- Track 11 : Yvonnetastic_30
- Track 12 : Cardigan_32
- Track 13 : DatBoi_15
- Track 14 : Bantam_14
- Track 15 : Towmatter_14, Daredevil_14
- Track 16 : Mollymur_15
- Track 17 : SpeedDemon_150
- Track 18 : Tweety_4, BodEinwohner17_4, Scottish_4, Nimbo_4, KingMidas_4, RedBird_4, PHappiness_4, JoeyJr_4, Dorothy_4, Geralt_4, Radiance_4, OldBen_4, Inventum_4, Daenerys_4, BlueCrab_4, Sassafras_4, Doomphist_4, Pacc40_4, DaddyRickover_4, RitaG_4, Poenanya_4, Polka14_4, Deb65_4
- Track 19 : SwagPiggett_4, MisterCuddles_4, Burwell21_4, Philus_4, ByChance_4, Che8_4, Lizziana_4, MadMen_4, ShiLan_4, Zerg_4, Girr_4, Guppsters_4, Gandalph_4, ShowerHandel_4, Yorick_4, Ruby_4, Jarcob_4, Martik_4
- Track 20 : WillSterrel_4, DotProduct_4, PopTart_4, QuickMath_4, Firehouse51_4, Aubs_4, Phatniss_4, DeadP_4, Ovechkin_4, PhesterPhotato_4, Hamulus_4, Bipolar_4, KristaRAM_5, Melissauren88_4, Empress_4, Taj_4, MilleniumForce_5, ShroomBoi_4, Emma_4, Spartacus_4, XFactor_4, StAnnes_4, IrishSherpFalk_4, Ardmore_4, Fruitloop_4, SassyB_4, Wee_4, MinionDave_5, Batiatus_4, Chuckly_4, SG4_4, DLane_4, Shauna1_4, Phanphagia_4, Whatsapiecost_4, Phalconet_4, Royals2015_4, EleanorGeorge_4, SiSi_4, Rita_4, CaptainTrips_5

- Track 21 : LilMoolah_4, Fancypants_4, Sandalphon_4, Chevrolet_4, Estave1_4, Krakatau_5, Veteran_4, Phasih_4, Minnie_4, Blexus_4, Florinda_4, GUmBie_4, Vivum_4, ArcusAngelus_4, Priscilla_4, FreddyB_4
- Track 22 : Kersh_4, Leperchaun_4, Ochi17_4, Galactic_4, LunaBlu_4, Harley_4, Karhdo_4, Wachhund_4, Seabastian_4, Brocalys_4, Gorge_4, Ibhubesi_4, Saal_4, Juniper1_4, Llama_4, AlpineSix_4, Grimmer_5, Modragons_4, Latretium_4, Sabbb_4, Maravista_4, OfUltron_4, Nitzel_5, Fastidio_4, Byougenkin_4, Jinglebell_4, Hades_4, Whouxphf_4
- Track 23 : Kenuha5_4, Akhila_5, SuperGrey_4, MilanaBonita_5, Filuzino_4
- Track 24 : Dante_4
- Track 25 : Mattes_4, BobaPhett_4, James_4, LastJedi_4, Cabrinians_4
- Track 26 : Eish_4, Mahavrat_4
- Track 27 : Eradicator_4, Koella_4, Crumble_4, OlympiaSaint_4, Nivrat_4
- Track 28 : Strokeseat_4, Clifton_4, Hlubikazi_4, Mandlovu_4, NormanBulbieJr_4, MulchSalad_4, Pippy_4
- Track 29 : Zizzle_4
- Track 30 : IMpilo_4
- Track 31 : Llij_4, GigiOuiOui_4, Doug_4, Spoonbill_4, Sparkdehlily_4, TDanisky_4, Rockne_4, DRBy19_4, Mantra_4, Moonbeam_4, PMC_4
- Track 32 : IbOuu_4
- Track 33 : Ms6_4
- Track 34 : DoRead_4
- Track 35 : Mutaforma13_4
- Track 36 : DillTech15_4
- Track 37 : Donkeykong_4, Bubbles123_4
- Track 38 : VRedHorse_4
- Track 39 : Samy_7
- Track 40 : GAL1_6

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

The start number called the most often in the published annotations is 18, it was called in 162 of the 185 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Akhila_5, AlpineSix_4, ArcusAngelus_4, Ardmore_4, Aubs_4, Batiatus_4, Bipolar_4, Blexus_4, BlueCrab_4, BobaPhett_4, BodEinwohner17_4, Brocalys_4, Bubbles123_4, Burwell21_4, ByChance_4, Byougenkin_4, Cabrinians_4, CaptainTrips_5, Che8_4, Chevrolet_4, Chuckly_4, Clifton_4, Crumble_4, DLane_4, DRBy19_4, DaddyRickover_4, Daenerys_4, Dante_4, DeadP_4, Deb65_4, Donkeykong_4, Doomphist_4, Dorothy_4, DotProduct_4, Doug_4, Eish_4, EleanorGeorge_4, Emma_4, Empress_4, Eradicator_4, Estave1_4, Fancypants_4, Fastidio_4, Filuzino_4, Firehouse51_4, Florinda_4, FreddyB_4, Fruitloop_4, GUmBie_4, Galactic_4, Gandalph_4, Geralt_4, GigiOuiOui_4, Girr_4, Gorge_4, Grimmer_5, Guppsters_4, Hades_4, Hamulus_4, Harley_4, Hlubikazi_4, IMpilo_4, Ibhubesi_4, Inventum_4, IrishSherpFalk_4, James_4, Jarcob_4, Jinglebell_4, JoeyJr_4, Juniper1_4, Karhdo_4, Kenuha5_4, Kersh_4, KingMidas_4, Koella_4, Krakatau_5, KristaRAM_5, LastJedi_4, Latretium_4, Leperchaun_4, LilMoolah_4, Lizziana_4, Llama_4, Llij_4, LunaBlu_4, MadMen_4, Mahavrat_4, Mandlovu_4, Mantra_4, Maravista_4, Martik_4, Mattes_4, Melissauren88_4, MilanaBonita_5,

MilleniumForce_5, MinionDave_5, Minnie_4, MisterCuddles_4, Modragons_4, Moonbeam_4, MulchSalad_4, Mutaforma13_4, Nimbo_4, Nitzel_5, Nivrat_4, NormanBulbieJr_4, Ochi17_4, OfUltron_4, OldBen_4, OlympiaSaint_4, Ovechkin_4, PHappiness_4, PMC_4, Pacc40_4, Phalconet_4, Phanphagia_4, Phasih_4, Phatniss_4, PhesterPhotato_4, Philus_4, Pippy_4, Poenanya_4, Polka14_4, PopTart_4, Priscilla_4, QuickMath_4, Radiance_4, RedBird_4, RitaG_4, Rita_4, Rockne_4, Royals2015_4, Ruby_4, SG4_4, Saal_4, Sabbb_4, Sandalphon_4, Sassafras_4, SassyB_4, Scottish_4, Seabastian_4, Shauna1_4, ShiLan_4, ShowerHandel_4, ShroomBoi_4, SiSi_4, Sparkdehlily_4, Spartacus_4, Spoonbill_4, StAnnes_4, Strokeseat_4, SuperGrey_4, SwagPiggett_4, TDanisky_4, Taj_4, Tweety_4, VRedHorse_4, Veteran_4, Vivum_4, Wachhund_4, Wee_4, Whatsapiecost_4, Whouxphf_4, WillSterrel_4, XFactor_4, Yorick_4, Zerg_4, Zizzle_4,

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

- DillTech15_4, DoRead_4, IbOuu_4, Ms6_4,

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

- Abscondus_31, Aphelion_32, Bachita_34, Bantam_14, BrutonGaster_20, Cardigan_32, ClubL_32, Cucurbita_34, Culver_32, Daredevil_14, DatBoi_15, Dusty_30, Engineer_33, GAL1_6, Geeche_31, JonJames_32, Lozinak_32, Miskis_34, Mollymur_15, Norvs_33, OneUp_26, PhinkBoden_32, SPB78_4, Samy_7, Smoothie_33, SpeedDemon_150, Toniann_32, Towmatter_14, VWB_4, WilliamBoone_32, Yvonnetastic_30,

Summary by start number:

Start 2:

- Found in 2 of 203 (1.0%) of genes in pham
- Manual Annotations of this start: 1 of 185
- Called 50.0% of time when present
- Phage (with cluster) where this start called: BrutonGaster_20 (CQ2),

Start 3:

- Found in 16 of 203 (7.9%) of genes in pham
- Manual Annotations of this start: 7 of 185
- Called 43.8% of time when present
- Phage (with cluster) where this start called: Bachita_34 (CQ1), ClubL_32 (CQ1), Cucurbita_34 (CQ1), OneUp_26 (CQ2), Smoothie_33 (CQ1), Toniann_32 (CQ1), Yvonnetastic_30 (DD),

Start 4:

- Found in 25 of 203 (12.3%) of genes in pham
- Manual Annotations of this start: 13 of 185
- Called 76.0% of time when present
- Phage (with cluster) where this start called: Abscondus_31 (CQ1), Aphelion_32 (CQ1), Bantam_14 (DL), Cardigan_32 (DD), Culver_32 (CQ1), Daredevil_14 (DL), DatBoi_15 (DL), Dusty_30 (CQ1), Engineer_33 (CQ1), Geeche_31 (CQ1), JonJames_32 (DD), Lozinak_32 (CQ1), Miskis_34 (CQ1), Mollymur_15 (DL), Norvs_33 (CQ1), PhinkBoden_32 (CQ1), SpeedDemon_150 (DL), Towmatter_14 (DL), WilliamBoone_32 (CQ1),

Start 7:

- Found in 1 of 203 (0.5%) of genes in pham

- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GAL1_6 (singleton),

Start 15:

- Found in 2 of 203 (1.0%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: SPB78_4 (BA), VWB_4 (BA),

Start 16:

- Found in 2 of 203 (1.0%) of genes in pham
- Manual Annotations of this start: 1 of 185
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Samy_7 (singleton),

Start 18:

- Found in 172 of 203 (84.7%) of genes in pham
- Manual Annotations of this start: 162 of 185
- Called 97.7% of time when present
- Phage (with cluster) where this start called: Akhila_5 (F1), AlpineSix_4 (F1), ArcusAngelus_4 (F1), Ardmore_4 (F1), Aubs_4 (F1), Batiatus_4 (F1), Bipolar_4 (F1), Blexus_4 (F1), BlueCrab_4 (F1), BobaPhett_4 (F1), BodEinwohner17_4 (F1), Brocalys_4 (F1), Bubbles123_4 (F1), Burwell21_4 (F1), ByChance_4 (F1), Byougenkin_4 (F1), Cabrinians_4 (F1), CaptainTrips_5 (F1), Che8_4 (F1), Chevrolet_4 (F1), Chuckly_4 (F1), Clifton_4 (F1), Crumble_4 (F1), DLane_4 (F1), DRBy19_4 (F1), DaddyRickover_4 (F1), Daenerys_4 (F1), Dante_4 (F1), DeadP_4 (F1), Deb65_4 (F1), Donkeykong_4 (F1), Doomphist_4 (F1), Dorothy_4 (F1), DotProduct_4 (F1), Doug_4 (F1), Eish_4 (F1), EleanorGeorge_4 (F1), Emma_4 (F1), Empress_4 (F1), Eradicator_4 (F1), Estave1_4 (F1), Fancypants_4 (F1), Fastidio_4 (F1), Filuzino_4 (F1), Firehouse51_4 (F1), Florinda_4 (F1), FreddyB_4 (F1), Fruitloop_4 (F1), GUmbie_4 (F1), Galactic_4 (F1), Gandolph_4 (F1), Geralt_4 (F1), GigiOuiOui_4 (F1), Girr_4 (F1), Gorge_4 (F1), Grimmer_5 (F1), Guppsters_4 (F1), Hades_4 (F1), Hamulus_4 (F1), Harley_4 (F1), Hlubikazi_4 (F1), IMpilo_4 (F1), Ibhubesi_4 (F1), Inventum_4 (F1), IrishSherpFalk_4 (F1), James_4 (F1), Jarcob_4 (F1), Jinglebell_4 (F1), JoeyJr_4 (F1), Juniper1_4 (F1), Karhdo_4 (F1), Kenuha5_4 (F1), Kersh_4 (F1), KingMidas_4 (F1), Koella_4 (F1), Krakatau_5 (F1), KristaRAM_5 (F1), LastJedi_4 (F1), Latretium_4 (F1), Leperchaun_4 (F1), LilMoolah_4 (F1), Lizziana_4 (F1), Llama_4 (F1), Llij_4 (F1), LunaBlu_4 (F1), MadMen_4 (F1), Mahavrat_4 (F1), Mandlovu_4 (F1), Mantra_4 (F1), Maravista_4 (F1), Martik_4 (F1), Mattes_4 (F1), Melissauren88_4 (F1), MilanaBonita_5 (F1), MilleniumForce_5 (F1), MinionDave_5 (F1), Minnie_4 (F1), MisterCuddles_4 (F1), Modragons_4 (F1), Moonbeam_4 (F1), MulchSalad_4 (F), Mutaforma13_4 (F1), Nimbo_4 (F1), Nitzel_5 (F1), Nivrat_4 (F1), NormanBulbieJr_4 (F1), Ochi17_4 (F1), OfUltron_4 (F1), OldBen_4 (F1), OlympiaSaint_4 (F1), Ovechkin_4 (F1), PHappiness_4 (F1), PMC_4 (F1), Pacc40_4 (F1), Phalconet_4 (F1), Phanphagia_4 (F1), Phasih_4 (F1), Phatniss_4 (F1), PhesterPhotato_4 (F1), Philus_4 (F1), Pippy_4 (F1), Poenanya_4 (F1), Polka14_4 (F1), PopTart_4 (F1), Priscilla_4 (F1), QuickMath_4 (F1), Radiance_4 (F1), RedBird_4 (F1), RitaG_4 (F1), Rita_4 (F1), Rockne_4 (F1), Royals2015_4 (F1), Ruby_4 (F1), SG4_4 (F1), Saal_4 (F1), Sabb_4 (F1), Sandalphon_4 (F1), Sassafras_4 (F1), SassyB_4 (F1), Scottish_4 (F1), Seabastian_4 (F1), Shauna1_4 (F1), ShiLan_4 (F1), ShowerHandel_4 (F1), ShroomBoi_4 (F1), SiSi_4 (F1), Sparkdehlily_4 (F1), Spartacus_4 (F1), Spoonbill_4 (F1), StAnnes_4

(F1), Strokeseat_4 (F1), SuperGrey_4 (F1), SwagPiggett_4 (F1), TDanisky_4 (F1), Taj_4 (F1), Tweety_4 (F1), VRedHorse_4 (F1), Veteran_4 (F1), Vivum_4 (F1), Wachhund_4 (F1), Wee_4 (F1), Whatsapiecost_4 (F1), Whouxphf_4 (F1), WillSterrel_4 (F1), XFactor_4 (F1), Yorick_4 (F1), Zerg_4 (F1), Zizzle_4 (F1),

Start 34:

- Found in 173 of 203 (85.2%) of genes in pham
- No Manual Annotations of this start.
- Called 0.6% of time when present
- Phage (with cluster) where this start called: DoRead_4 (F1),

Start 39:

- Found in 174 of 203 (85.7%) of genes in pham
- Manual Annotations of this start: 1 of 185
- Called 1.1% of time when present
- Phage (with cluster) where this start called: DillTech15_4 (F1), Ms6_4 (F1),

Start 41:

- Found in 174 of 203 (85.7%) of genes in pham
- No Manual Annotations of this start.
- Called 0.6% of time when present
- Phage (with cluster) where this start called: IbOuu_4 (F1),

Summary by clusters:

There are 8 clusters represented in this pham: F1, DL, BA, F, DD, singleton, CQ2, CQ1,

Info for manual annotations of cluster CQ1:

- Start number 3 was manually annotated 5 times for cluster CQ1.
- Start number 4 was manually annotated 7 times for cluster CQ1.

Info for manual annotations of cluster CQ2:

- Start number 2 was manually annotated 1 time for cluster CQ2.
- Start number 3 was manually annotated 1 time for cluster CQ2.

Info for manual annotations of cluster DD:

- Start number 3 was manually annotated 1 time for cluster DD.
- Start number 4 was manually annotated 1 time for cluster DD.

Info for manual annotations of cluster DL:

- Start number 4 was manually annotated 5 times for cluster DL.

Info for manual annotations of cluster F1:

- Start number 18 was manually annotated 162 times for cluster F1.
- Start number 39 was manually annotated 1 time for cluster F1.

Gene Information:

Gene: Abscondus_31 Start: 11810, Stop: 12727, Start Num: 4

Candidate Starts for Abscondus_31:

(Start: 4 @11810 has 13 MA's), (17, 11936), (20, 11963), (29, 12035), (31, 12050), (46, 12131), (60, 12212), (62, 12266), (67, 12296),

Gene: Akhila_5 Start: 4260, Stop: 5015, Start Num: 18

Candidate Starts for Akhila_5:

(Start: 18 @4260 has 162 MA's), (26, 4320), (32, 4371), (34, 4383), (Start: 39 @4416 has 1 MA's), (41, 4425), (42, 4434), (48, 4467), (53, 4500), (55, 4515), (57, 4530), (72, 4698), (75, 4743), (78, 4764), (79, 4767), (82, 4803), (84, 4818), (86, 4869), (90, 4926),

Gene: AlpineSix_4 Start: 3594, Stop: 4349, Start Num: 18

Candidate Starts for AlpineSix_4:

(Start: 18 @3594 has 162 MA's), (26, 3654), (34, 3717), (Start: 39 @3750 has 1 MA's), (41, 3759), (42, 3768), (48, 3801), (53, 3834), (55, 3849), (57, 3864), (72, 4032), (75, 4077), (79, 4101), (82, 4137), (84, 4152), (86, 4203), (90, 4260),

Gene: Aphelion_32 Start: 12057, Stop: 12974, Start Num: 4

Candidate Starts for Aphelion_32:

(Start: 3 @12054 has 7 MA's), (Start: 4 @12057 has 13 MA's), (17, 12183), (20, 12210), (29, 12282), (31, 12297), (46, 12378), (60, 12459), (62, 12513), (67, 12543),

Gene: ArcusAngelus_4 Start: 3598, Stop: 4353, Start Num: 18

Candidate Starts for ArcusAngelus_4:

(Start: 18 @3598 has 162 MA's), (26, 3658), (34, 3721), (Start: 39 @3754 has 1 MA's), (41, 3763), (42, 3772), (48, 3805), (53, 3838), (55, 3853), (57, 3868), (72, 4036), (75, 4081), (79, 4105), (82, 4141), (84, 4156), (86, 4207), (90, 4264),

Gene: Ardmore_4 Start: 3612, Stop: 4367, Start Num: 18

Candidate Starts for Ardmore_4:

(Start: 18 @3612 has 162 MA's), (26, 3672), (34, 3735), (Start: 39 @3768 has 1 MA's), (41, 3777), (42, 3786), (48, 3819), (53, 3852), (55, 3867), (57, 3882), (72, 4050), (75, 4095), (78, 4116), (79, 4119), (82, 4155), (84, 4170), (86, 4221), (90, 4278),

Gene: Aubs_4 Start: 3612, Stop: 4367, Start Num: 18

Candidate Starts for Aubs_4:

(Start: 18 @3612 has 162 MA's), (26, 3672), (34, 3735), (Start: 39 @3768 has 1 MA's), (41, 3777), (42, 3786), (48, 3819), (53, 3852), (55, 3867), (57, 3882), (72, 4050), (75, 4095), (78, 4116), (79, 4119), (82, 4155), (84, 4170), (86, 4221), (90, 4278),

Gene: Bachita_34 Start: 12487, Stop: 13407, Start Num: 3

Candidate Starts for Bachita_34:

(Start: 3 @12487 has 7 MA's), (Start: 4 @12490 has 13 MA's), (17, 12616), (20, 12643), (29, 12715), (31, 12730), (46, 12811), (60, 12892), (62, 12946), (67, 12976),

Gene: Bantam_14 Start: 9393, Stop: 10283, Start Num: 4

Candidate Starts for Bantam_14:

(Start: 4 @9393 has 13 MA's), (12, 9477), (14, 9492), (25, 9576), (54, 9747), (62, 9843), (65, 9867),

Gene: Batiatus_4 Start: 3612, Stop: 4367, Start Num: 18

Candidate Starts for Batiatus_4:

(Start: 18 @3612 has 162 MA's), (26, 3672), (34, 3735), (Start: 39 @3768 has 1 MA's), (41, 3777), (42, 3786), (48, 3819), (53, 3852), (55, 3867), (57, 3882), (72, 4050), (75, 4095), (78, 4116), (79, 4119), (82,

4155), (84, 4170), (86, 4221), (90, 4278),

Gene: Bipolar_4 Start: 3612, Stop: 4367, Start Num: 18

Candidate Starts for Bipolar_4:

(Start: 18 @3612 has 162 MA's), (26, 3672), (34, 3735), (Start: 39 @3768 has 1 MA's), (41, 3777), (42, 3786), (48, 3819), (53, 3852), (55, 3867), (57, 3882), (72, 4050), (75, 4095), (78, 4116), (79, 4119), (82, 4155), (84, 4170), (86, 4221), (90, 4278),

Gene: Blexus_4 Start: 3612, Stop: 4367, Start Num: 18

Candidate Starts for Blexus_4:

(Start: 18 @3612 has 162 MA's), (26, 3672), (34, 3735), (Start: 39 @3768 has 1 MA's), (41, 3777), (42, 3786), (48, 3819), (53, 3852), (55, 3867), (57, 3882), (72, 4050), (75, 4095), (79, 4119), (82, 4155), (84, 4170), (86, 4221), (90, 4278),

Gene: BlueCrab_4 Start: 3596, Stop: 4351, Start Num: 18

Candidate Starts for BlueCrab_4:

(Start: 18 @3596 has 162 MA's), (26, 3656), (34, 3719), (Start: 39 @3752 has 1 MA's), (41, 3761), (48, 3803), (53, 3836), (55, 3851), (57, 3866), (72, 4034), (75, 4079), (78, 4100), (79, 4103), (82, 4139), (84, 4154), (86, 4205), (90, 4262),

Gene: BobaPhett_4 Start: 3585, Stop: 4340, Start Num: 18

Candidate Starts for BobaPhett_4:

(Start: 18 @3585 has 162 MA's), (26, 3645), (32, 3696), (34, 3708), (Start: 39 @3741 has 1 MA's), (41, 3750), (42, 3759), (48, 3792), (53, 3825), (55, 3840), (57, 3855), (72, 4023), (75, 4068), (79, 4092), (82, 4128), (84, 4143), (86, 4194), (90, 4251),

Gene: BodEinwohner17_4 Start: 3596, Stop: 4351, Start Num: 18

Candidate Starts for BodEinwohner17_4:

(Start: 18 @3596 has 162 MA's), (26, 3656), (34, 3719), (Start: 39 @3752 has 1 MA's), (41, 3761), (48, 3803), (53, 3836), (55, 3851), (57, 3866), (72, 4034), (75, 4079), (78, 4100), (79, 4103), (82, 4139), (84, 4154), (86, 4205), (90, 4262),

Gene: Brocalys_4 Start: 3585, Stop: 4340, Start Num: 18

Candidate Starts for Brocalys_4:

(Start: 18 @3585 has 162 MA's), (26, 3645), (34, 3708), (Start: 39 @3741 has 1 MA's), (41, 3750), (42, 3759), (48, 3792), (53, 3825), (55, 3840), (57, 3855), (72, 4023), (75, 4068), (79, 4092), (82, 4128), (84, 4143), (86, 4194), (90, 4251),

Gene: BrutonGaster_20 Start: 8770, Stop: 9699, Start Num: 2

Candidate Starts for BrutonGaster_20:

(Start: 2 @8770 has 1 MA's), (Start: 3 @8773 has 7 MA's), (14, 8881), (20, 8932), (23, 8959), (28, 8995), (29, 9004), (31, 9019), (35, 9031), (41, 9058), (55, 9148), (60, 9181), (67, 9265), (73, 9385), (84, 9490),

Gene: Bubbles123_4 Start: 3612, Stop: 4367, Start Num: 18

Candidate Starts for Bubbles123_4:

(Start: 18 @3612 has 162 MA's), (26, 3672), (32, 3723), (34, 3735), (Start: 39 @3768 has 1 MA's), (41, 3777), (42, 3786), (48, 3819), (53, 3852), (55, 3867), (57, 3882), (72, 4050), (75, 4095), (79, 4119), (84, 4170), (86, 4221), (90, 4278),

Gene: Burwell21_4 Start: 3596, Stop: 4351, Start Num: 18

Candidate Starts for Burwell21_4:

(Start: 18 @3596 has 162 MA's), (26, 3656), (32, 3707), (34, 3719), (Start: 39 @3752 has 1 MA's), (41, 3761), (42, 3770), (48, 3803), (53, 3836), (55, 3851), (57, 3866), (72, 4034), (75, 4079), (79, 4103), (82, 4139), (84, 4154), (86, 4205), (90, 4262),

Gene: ByChance_4 Start: 3598, Stop: 4353, Start Num: 18

Candidate Starts for ByChance_4:

(Start: 18 @3598 has 162 MA's), (26, 3658), (32, 3709), (34, 3721), (Start: 39 @3754 has 1 MA's), (41, 3763), (42, 3772), (48, 3805), (53, 3838), (55, 3853), (57, 3868), (72, 4036), (75, 4081), (79, 4105), (82, 4141), (84, 4156), (86, 4207), (90, 4264),

Gene: Byougenkin_4 Start: 3585, Stop: 4340, Start Num: 18

Candidate Starts for Byougenkin_4:

(Start: 18 @3585 has 162 MA's), (26, 3645), (34, 3708), (Start: 39 @3741 has 1 MA's), (41, 3750), (42, 3759), (48, 3792), (53, 3825), (55, 3840), (57, 3855), (72, 4023), (75, 4068), (79, 4092), (82, 4128), (84, 4143), (86, 4194), (90, 4251),

Gene: Cabrinians_4 Start: 3585, Stop: 4340, Start Num: 18

Candidate Starts for Cabrinians_4:

(Start: 18 @3585 has 162 MA's), (26, 3645), (32, 3696), (34, 3708), (Start: 39 @3741 has 1 MA's), (41, 3750), (42, 3759), (48, 3792), (53, 3825), (55, 3840), (57, 3855), (72, 4023), (75, 4068), (79, 4092), (82, 4128), (84, 4143), (86, 4194), (90, 4251),

Gene: CaptainTrips_5 Start: 4260, Stop: 5015, Start Num: 18

Candidate Starts for CaptainTrips_5:

(Start: 18 @4260 has 162 MA's), (26, 4320), (34, 4383), (Start: 39 @4416 has 1 MA's), (41, 4425), (42, 4434), (48, 4467), (53, 4500), (55, 4515), (57, 4530), (72, 4698), (75, 4743), (78, 4764), (79, 4767), (82, 4803), (84, 4818), (86, 4869), (90, 4926),

Gene: Cardigan_32 Start: 13987, Stop: 14907, Start Num: 4

Candidate Starts for Cardigan_32:

(Start: 4 @13987 has 13 MA's), (9, 14044), (11, 14068), (17, 14113), (22, 14146), (23, 14167), (31, 14227), (57, 14368), (62, 14440), (80, 14668), (81, 14671),

Gene: Che8_4 Start: 3596, Stop: 4351, Start Num: 18

Candidate Starts for Che8_4:

(Start: 18 @3596 has 162 MA's), (26, 3656), (32, 3707), (34, 3719), (Start: 39 @3752 has 1 MA's), (41, 3761), (42, 3770), (48, 3803), (53, 3836), (55, 3851), (57, 3866), (72, 4034), (75, 4079), (79, 4103), (82, 4139), (84, 4154), (86, 4205), (90, 4262),

Gene: Chevrolet_4 Start: 3598, Stop: 4353, Start Num: 18

Candidate Starts for Chevrolet_4:

(Start: 18 @3598 has 162 MA's), (26, 3658), (34, 3721), (Start: 39 @3754 has 1 MA's), (41, 3763), (42, 3772), (48, 3805), (53, 3838), (55, 3853), (57, 3868), (72, 4036), (75, 4081), (79, 4105), (82, 4141), (84, 4156), (86, 4207), (90, 4264),

Gene: Chuckly_4 Start: 3612, Stop: 4367, Start Num: 18

Candidate Starts for Chuckly_4:

(Start: 18 @3612 has 162 MA's), (26, 3672), (34, 3735), (Start: 39 @3768 has 1 MA's), (41, 3777), (42, 3786), (48, 3819), (53, 3852), (55, 3867), (57, 3882), (72, 4050), (75, 4095), (78, 4116), (79, 4119), (82, 4155), (84, 4170), (86, 4221), (90, 4278),

Gene: Clifton_4 Start: 3585, Stop: 4340, Start Num: 18

Candidate Starts for Clifton_4:

(Start: 18 @3585 has 162 MA's), (26, 3645), (34, 3708), (Start: 39 @3741 has 1 MA's), (41, 3750), (42, 3759), (48, 3792), (53, 3825), (55, 3840), (57, 3855), (72, 4023), (75, 4068), (79, 4092), (84, 4143), (86, 4194), (90, 4251),

Gene: ClubL_32 Start: 11988, Stop: 12908, Start Num: 3

Candidate Starts for ClubL_32:

(Start: 3 @11988 has 7 MA's), (Start: 4 @11991 has 13 MA's), (17, 12117), (20, 12144), (29, 12216), (31, 12231), (46, 12312), (60, 12393), (62, 12447), (67, 12477),

Gene: Crumble_4 Start: 3598, Stop: 4353, Start Num: 18

Candidate Starts for Crumble_4:

(Start: 18 @3598 has 162 MA's), (26, 3658), (34, 3721), (Start: 39 @3754 has 1 MA's), (41, 3763), (42, 3772), (48, 3805), (53, 3838), (55, 3853), (57, 3868), (72, 4036), (75, 4081), (79, 4105), (84, 4156), (86, 4207), (90, 4264),

Gene: Cucurbita_34 Start: 13346, Stop: 14266, Start Num: 3

Candidate Starts for Cucurbita_34:

(Start: 3 @13346 has 7 MA's), (Start: 4 @13349 has 13 MA's), (17, 13475), (20, 13502), (29, 13574), (31, 13589), (46, 13670), (60, 13751), (62, 13805), (67, 13835),

Gene: Culver_32 Start: 11810, Stop: 12727, Start Num: 4

Candidate Starts for Culver_32:

(Start: 4 @11810 has 13 MA's), (17, 11936), (20, 11963), (29, 12035), (31, 12050), (46, 12131), (60, 12212), (62, 12266), (67, 12296),

Gene: DLane_4 Start: 3612, Stop: 4367, Start Num: 18

Candidate Starts for DLane_4:

(Start: 18 @3612 has 162 MA's), (26, 3672), (34, 3735), (Start: 39 @3768 has 1 MA's), (41, 3777), (42, 3786), (48, 3819), (53, 3852), (55, 3867), (57, 3882), (72, 4050), (75, 4095), (78, 4116), (79, 4119), (82, 4155), (84, 4170), (86, 4221), (90, 4278),

Gene: DRBy19_4 Start: 3613, Stop: 4368, Start Num: 18

Candidate Starts for DRBy19_4:

(Start: 18 @3613 has 162 MA's), (26, 3673), (34, 3736), (Start: 39 @3769 has 1 MA's), (41, 3778), (48, 3820), (53, 3853), (55, 3868), (57, 3883), (72, 4051), (75, 4096), (79, 4120), (82, 4156), (84, 4171), (86, 4222), (90, 4279),

Gene: DaddyRickover_4 Start: 3596, Stop: 4351, Start Num: 18

Candidate Starts for DaddyRickover_4:

(Start: 18 @3596 has 162 MA's), (26, 3656), (34, 3719), (Start: 39 @3752 has 1 MA's), (41, 3761), (48, 3803), (53, 3836), (55, 3851), (57, 3866), (72, 4034), (75, 4079), (78, 4100), (79, 4103), (82, 4139), (84, 4154), (86, 4205), (90, 4262),

Gene: Daenerys_4 Start: 3596, Stop: 4351, Start Num: 18

Candidate Starts for Daenerys_4:

(Start: 18 @3596 has 162 MA's), (26, 3656), (34, 3719), (Start: 39 @3752 has 1 MA's), (41, 3761), (48, 3803), (53, 3836), (55, 3851), (57, 3866), (72, 4034), (75, 4079), (78, 4100), (79, 4103), (82, 4139), (84, 4154), (86, 4205), (90, 4262),

Gene: Dante_4 Start: 3612, Stop: 4367, Start Num: 18

Candidate Starts for Dante_4:

(Start: 18 @3612 has 162 MA's), (26, 3672), (32, 3723), (34, 3735), (Start: 39 @3768 has 1 MA's), (41, 3777), (42, 3786), (48, 3819), (53, 3852), (55, 3867), (57, 3882), (72, 4050), (74, 4074), (75, 4095), (79,

4119), (82, 4155), (84, 4170), (86, 4221), (90, 4278),

Gene: Daredevil_14 Start: 8310, Stop: 9206, Start Num: 4

Candidate Starts for Daredevil_14:

(Start: 4 @8310 has 13 MA's), (12, 8397), (20, 8463), (26, 8499), (37, 8568), (55, 8676), (62, 8763), (65, 8787), (66, 8790), (77, 8940), (93, 9150),

Gene: DatBoi_15 Start: 10218, Stop: 11108, Start Num: 4

Candidate Starts for DatBoi_15:

(Start: 4 @10218 has 13 MA's), (12, 10302), (14, 10317), (25, 10401), (54, 10572), (62, 10668), (65, 10692),

Gene: DeadP_4 Start: 3612, Stop: 4367, Start Num: 18

Candidate Starts for DeadP_4:

(Start: 18 @3612 has 162 MA's), (26, 3672), (34, 3735), (Start: 39 @3768 has 1 MA's), (41, 3777), (42, 3786), (48, 3819), (53, 3852), (55, 3867), (57, 3882), (72, 4050), (75, 4095), (78, 4116), (79, 4119), (82, 4155), (84, 4170), (86, 4221), (90, 4278),

Gene: Deb65_4 Start: 3596, Stop: 4351, Start Num: 18

Candidate Starts for Deb65_4:

(Start: 18 @3596 has 162 MA's), (26, 3656), (34, 3719), (Start: 39 @3752 has 1 MA's), (41, 3761), (48, 3803), (53, 3836), (55, 3851), (57, 3866), (72, 4034), (75, 4079), (78, 4100), (79, 4103), (82, 4139), (84, 4154), (86, 4205), (90, 4262),

Gene: DillTech15_4 Start: 3768, Stop: 4367, Start Num: 39

Candidate Starts for DillTech15_4:

(Start: 18 @3612 has 162 MA's), (26, 3672), (32, 3723), (34, 3735), (Start: 39 @3768 has 1 MA's), (41, 3777), (42, 3786), (48, 3819), (53, 3852), (55, 3867), (57, 3882), (72, 4050), (75, 4095), (78, 4116), (79, 4119), (82, 4155), (84, 4170), (86, 4221), (90, 4278),

Gene: DoRead_4 Start: 3723, Stop: 4355, Start Num: 34

Candidate Starts for DoRead_4:

(Start: 18 @3600 has 162 MA's), (26, 3660), (34, 3723), (Start: 39 @3756 has 1 MA's), (41, 3765), (42, 3774), (48, 3807), (53, 3840), (55, 3855), (57, 3870), (72, 4038), (75, 4083), (79, 4107), (84, 4158), (86, 4209), (90, 4266),

Gene: Donkeykong_4 Start: 3612, Stop: 4367, Start Num: 18

Candidate Starts for Donkeykong_4:

(Start: 18 @3612 has 162 MA's), (26, 3672), (32, 3723), (34, 3735), (Start: 39 @3768 has 1 MA's), (41, 3777), (42, 3786), (48, 3819), (53, 3852), (55, 3867), (57, 3882), (72, 4050), (75, 4095), (79, 4119), (84, 4170), (86, 4221), (90, 4278),

Gene: Doomphist_4 Start: 3596, Stop: 4351, Start Num: 18

Candidate Starts for Doomphist_4:

(Start: 18 @3596 has 162 MA's), (26, 3656), (34, 3719), (Start: 39 @3752 has 1 MA's), (41, 3761), (48, 3803), (53, 3836), (55, 3851), (57, 3866), (72, 4034), (75, 4079), (78, 4100), (79, 4103), (82, 4139), (84, 4154), (86, 4205), (90, 4262),

Gene: Dorothy_4 Start: 3596, Stop: 4351, Start Num: 18

Candidate Starts for Dorothy_4:

(Start: 18 @3596 has 162 MA's), (26, 3656), (34, 3719), (Start: 39 @3752 has 1 MA's), (41, 3761), (48, 3803), (53, 3836), (55, 3851), (57, 3866), (72, 4034), (75, 4079), (78, 4100), (79, 4103), (82, 4139), (84, 4154), (86, 4205), (90, 4262),

Gene: DotProduct_4 Start: 3613, Stop: 4368, Start Num: 18

Candidate Starts for DotProduct_4:

(Start: 18 @3613 has 162 MA's), (26, 3673), (34, 3736), (Start: 39 @3769 has 1 MA's), (41, 3778), (42, 3787), (48, 3820), (53, 3853), (55, 3868), (57, 3883), (72, 4051), (75, 4096), (78, 4117), (79, 4120), (82, 4156), (84, 4171), (86, 4222), (90, 4279),

Gene: Doug_4 Start: 3597, Stop: 4352, Start Num: 18

Candidate Starts for Doug_4:

(Start: 18 @3597 has 162 MA's), (26, 3657), (34, 3720), (Start: 39 @3753 has 1 MA's), (41, 3762), (48, 3804), (53, 3837), (55, 3852), (57, 3867), (72, 4035), (75, 4080), (79, 4104), (82, 4140), (84, 4155), (86, 4206), (90, 4263),

Gene: Dusty_30 Start: 11810, Stop: 12727, Start Num: 4

Candidate Starts for Dusty_30:

(Start: 4 @11810 has 13 MA's), (17, 11936), (20, 11963), (29, 12035), (31, 12050), (46, 12131), (60, 12212), (62, 12266), (67, 12296),

Gene: Eish_4 Start: 3585, Stop: 4340, Start Num: 18

Candidate Starts for Eish_4:

(Start: 18 @3585 has 162 MA's), (26, 3645), (32, 3696), (34, 3708), (Start: 39 @3741 has 1 MA's), (41, 3750), (42, 3759), (48, 3792), (53, 3825), (55, 3840), (57, 3855), (72, 4023), (75, 4068), (79, 4092), (84, 4143), (86, 4194), (90, 4251),

Gene: EleanorGeorge_4 Start: 3612, Stop: 4367, Start Num: 18

Candidate Starts for EleanorGeorge_4:

(Start: 18 @3612 has 162 MA's), (26, 3672), (34, 3735), (Start: 39 @3768 has 1 MA's), (41, 3777), (42, 3786), (48, 3819), (53, 3852), (55, 3867), (57, 3882), (72, 4050), (75, 4095), (78, 4116), (79, 4119), (82, 4155), (84, 4170), (86, 4221), (90, 4278),

Gene: Emma_4 Start: 3612, Stop: 4367, Start Num: 18

Candidate Starts for Emma_4:

(Start: 18 @3612 has 162 MA's), (26, 3672), (34, 3735), (Start: 39 @3768 has 1 MA's), (41, 3777), (42, 3786), (48, 3819), (53, 3852), (55, 3867), (57, 3882), (72, 4050), (75, 4095), (78, 4116), (79, 4119), (82, 4155), (84, 4170), (86, 4221), (90, 4278),

Gene: Empress_4 Start: 3596, Stop: 4351, Start Num: 18

Candidate Starts for Empress_4:

(Start: 18 @3596 has 162 MA's), (26, 3656), (34, 3719), (Start: 39 @3752 has 1 MA's), (41, 3761), (42, 3770), (48, 3803), (53, 3836), (55, 3851), (57, 3866), (72, 4034), (75, 4079), (78, 4100), (79, 4103), (82, 4139), (84, 4154), (86, 4205), (90, 4262),

Gene: Engineer_33 Start: 12005, Stop: 12922, Start Num: 4

Candidate Starts for Engineer_33:

(Start: 3 @12002 has 7 MA's), (Start: 4 @12005 has 13 MA's), (17, 12131), (20, 12158), (29, 12230), (31, 12245), (46, 12326), (60, 12407), (62, 12461), (67, 12491),

Gene: Eradicator_4 Start: 3597, Stop: 4352, Start Num: 18

Candidate Starts for Eradicator_4:

(Start: 18 @3597 has 162 MA's), (26, 3657), (34, 3720), (Start: 39 @3753 has 1 MA's), (41, 3762), (42, 3771), (48, 3804), (53, 3837), (55, 3852), (57, 3867), (72, 4035), (75, 4080), (79, 4104), (84, 4155), (86, 4206), (90, 4263),

Gene: Estave1_4 Start: 3597, Stop: 4352, Start Num: 18

Candidate Starts for Estave1_4:

(Start: 18 @3597 has 162 MA's), (26, 3657), (34, 3720), (Start: 39 @3753 has 1 MA's), (41, 3762), (42, 3771), (48, 3804), (53, 3837), (55, 3852), (57, 3867), (72, 4035), (75, 4080), (79, 4104), (82, 4140), (84, 4155), (86, 4206), (90, 4263),

Gene: Fancypants_4 Start: 3597, Stop: 4352, Start Num: 18

Candidate Starts for Fancypants_4:

(Start: 18 @3597 has 162 MA's), (26, 3657), (34, 3720), (Start: 39 @3753 has 1 MA's), (41, 3762), (42, 3771), (48, 3804), (53, 3837), (55, 3852), (57, 3867), (72, 4035), (75, 4080), (79, 4104), (82, 4140), (84, 4155), (86, 4206), (90, 4263),

Gene: Fastidio_4 Start: 3600, Stop: 4355, Start Num: 18

Candidate Starts for Fastidio_4:

(Start: 18 @3600 has 162 MA's), (26, 3660), (34, 3723), (Start: 39 @3756 has 1 MA's), (41, 3765), (42, 3774), (48, 3807), (53, 3840), (55, 3855), (57, 3870), (72, 4038), (75, 4083), (79, 4107), (82, 4143), (84, 4158), (86, 4209), (90, 4266),

Gene: Filuzino_4 Start: 3613, Stop: 4368, Start Num: 18

Candidate Starts for Filuzino_4:

(Start: 18 @3613 has 162 MA's), (26, 3673), (32, 3724), (34, 3736), (Start: 39 @3769 has 1 MA's), (41, 3778), (42, 3787), (48, 3820), (53, 3853), (55, 3868), (57, 3883), (72, 4051), (75, 4096), (78, 4117), (79, 4120), (82, 4156), (84, 4171), (86, 4222), (90, 4279),

Gene: Firehouse51_4 Start: 3612, Stop: 4367, Start Num: 18

Candidate Starts for Firehouse51_4:

(Start: 18 @3612 has 162 MA's), (26, 3672), (34, 3735), (Start: 39 @3768 has 1 MA's), (41, 3777), (42, 3786), (48, 3819), (53, 3852), (55, 3867), (57, 3882), (72, 4050), (75, 4095), (78, 4116), (79, 4119), (82, 4155), (84, 4170), (86, 4221), (90, 4278),

Gene: Florinda_4 Start: 3615, Stop: 4370, Start Num: 18

Candidate Starts for Florinda_4:

(Start: 18 @3615 has 162 MA's), (26, 3675), (34, 3738), (Start: 39 @3771 has 1 MA's), (41, 3780), (42, 3789), (48, 3822), (53, 3855), (55, 3870), (57, 3885), (72, 4053), (75, 4098), (79, 4122), (82, 4158), (84, 4173), (86, 4224), (90, 4281),

Gene: FreddyB_4 Start: 3597, Stop: 4352, Start Num: 18

Candidate Starts for FreddyB_4:

(Start: 18 @3597 has 162 MA's), (26, 3657), (34, 3720), (Start: 39 @3753 has 1 MA's), (41, 3762), (42, 3771), (48, 3804), (53, 3837), (55, 3852), (57, 3867), (72, 4035), (75, 4080), (79, 4104), (82, 4140), (84, 4155), (86, 4206), (90, 4263),

Gene: Fruitloop_4 Start: 3612, Stop: 4367, Start Num: 18

Candidate Starts for Fruitloop_4:

(Start: 18 @3612 has 162 MA's), (26, 3672), (34, 3735), (Start: 39 @3768 has 1 MA's), (41, 3777), (42, 3786), (48, 3819), (53, 3852), (55, 3867), (57, 3882), (72, 4050), (75, 4095), (78, 4116), (79, 4119), (82, 4155), (84, 4170), (86, 4221), (90, 4278),

Gene: GAL1_6 Start: 4710, Stop: 5651, Start Num: 7

Candidate Starts for GAL1_6:

(1, 4602), (5, 4698), (6, 4701), (7, 4710), (10, 4758), (21, 4842), (22, 4845), (23, 4866), (33, 4935), (36, 4950), (37, 4956), (40, 4989), (50, 5076), (51, 5082), (52, 5088), (55, 5112), (56, 5115), (59, 5133), (63, 5205), (64, 5211), (66, 5226), (72, 5322), (73, 5337), (74, 5346), (78, 5388), (83, 5430), (88, 5517), (89,

5538), (91, 5571),

Gene: GUmbie_4 Start: 3613, Stop: 4368, Start Num: 18

Candidate Starts for GUmbie_4:

(Start: 18 @3613 has 162 MA's), (26, 3673), (34, 3736), (Start: 39 @3769 has 1 MA's), (41, 3778), (42, 3787), (48, 3820), (53, 3853), (55, 3868), (57, 3883), (72, 4051), (75, 4096), (79, 4120), (82, 4156), (84, 4171), (86, 4222), (90, 4279),

Gene: Galactic_4 Start: 3584, Stop: 4339, Start Num: 18

Candidate Starts for Galactic_4:

(Start: 18 @3584 has 162 MA's), (26, 3644), (34, 3707), (Start: 39 @3740 has 1 MA's), (41, 3749), (42, 3758), (48, 3791), (53, 3824), (55, 3839), (57, 3854), (72, 4022), (75, 4067), (79, 4091), (82, 4127), (84, 4142), (86, 4193), (90, 4250),

Gene: Gandalph_4 Start: 3612, Stop: 4367, Start Num: 18

Candidate Starts for Gandalph_4:

(Start: 18 @3612 has 162 MA's), (26, 3672), (32, 3723), (34, 3735), (Start: 39 @3768 has 1 MA's), (41, 3777), (42, 3786), (48, 3819), (53, 3852), (55, 3867), (57, 3882), (72, 4050), (75, 4095), (79, 4119), (82, 4155), (84, 4170), (86, 4221), (90, 4278),

Gene: Geeche_31 Start: 11879, Stop: 12796, Start Num: 4

Candidate Starts for Geeche_31:

(Start: 3 @11876 has 7 MA's), (Start: 4 @11879 has 13 MA's), (17, 12005), (20, 12032), (29, 12104), (31, 12119), (46, 12200), (60, 12281), (62, 12335), (67, 12365),

Gene: Geralt_4 Start: 3596, Stop: 4351, Start Num: 18

Candidate Starts for Geralt_4:

(Start: 18 @3596 has 162 MA's), (26, 3656), (34, 3719), (Start: 39 @3752 has 1 MA's), (41, 3761), (48, 3803), (53, 3836), (55, 3851), (57, 3866), (72, 4034), (75, 4079), (78, 4100), (79, 4103), (82, 4139), (84, 4154), (86, 4205), (90, 4262),

Gene: GigiOuiOui_4 Start: 3612, Stop: 4367, Start Num: 18

Candidate Starts for GigiOuiOui_4:

(Start: 18 @3612 has 162 MA's), (26, 3672), (34, 3735), (Start: 39 @3768 has 1 MA's), (41, 3777), (48, 3819), (53, 3852), (55, 3867), (57, 3882), (72, 4050), (75, 4095), (79, 4119), (82, 4155), (84, 4170), (86, 4221), (90, 4278),

Gene: Girr_4 Start: 3598, Stop: 4353, Start Num: 18

Candidate Starts for Girr_4:

(Start: 18 @3598 has 162 MA's), (26, 3658), (32, 3709), (34, 3721), (Start: 39 @3754 has 1 MA's), (41, 3763), (42, 3772), (48, 3805), (53, 3838), (55, 3853), (57, 3868), (72, 4036), (75, 4081), (79, 4105), (82, 4141), (84, 4156), (86, 4207), (90, 4264),

Gene: Gorge_4 Start: 3585, Stop: 4340, Start Num: 18

Candidate Starts for Gorge_4:

(Start: 18 @3585 has 162 MA's), (26, 3645), (34, 3708), (Start: 39 @3741 has 1 MA's), (41, 3750), (42, 3759), (48, 3792), (53, 3825), (55, 3840), (57, 3855), (72, 4023), (75, 4068), (79, 4092), (82, 4128), (84, 4143), (86, 4194), (90, 4251),

Gene: Grimmer_5 Start: 4248, Stop: 5003, Start Num: 18

Candidate Starts for Grimmer_5:

(Start: 18 @4248 has 162 MA's), (26, 4308), (34, 4371), (Start: 39 @4404 has 1 MA's), (41, 4413), (42, 4422), (48, 4455), (53, 4488), (55, 4503), (57, 4518), (72, 4686), (75, 4731), (79, 4755), (82, 4791), (84,

4806), (86, 4857), (90, 4914),

Gene: Guppsters_4 Start: 3612, Stop: 4367, Start Num: 18

Candidate Starts for Guppsters_4:

(Start: 18 @3612 has 162 MA's), (26, 3672), (32, 3723), (34, 3735), (Start: 39 @3768 has 1 MA's), (41, 3777), (42, 3786), (48, 3819), (53, 3852), (55, 3867), (57, 3882), (72, 4050), (75, 4095), (79, 4119), (82, 4155), (84, 4170), (86, 4221), (90, 4278),

Gene: Hades_4 Start: 3600, Stop: 4355, Start Num: 18

Candidate Starts for Hades_4:

(Start: 18 @3600 has 162 MA's), (26, 3660), (34, 3723), (Start: 39 @3756 has 1 MA's), (41, 3765), (42, 3774), (48, 3807), (53, 3840), (55, 3855), (57, 3870), (72, 4038), (75, 4083), (79, 4107), (82, 4143), (84, 4158), (86, 4209), (90, 4266),

Gene: Hamulus_4 Start: 3613, Stop: 4368, Start Num: 18

Candidate Starts for Hamulus_4:

(Start: 18 @3613 has 162 MA's), (26, 3673), (34, 3736), (Start: 39 @3769 has 1 MA's), (41, 3778), (42, 3787), (48, 3820), (53, 3853), (55, 3868), (57, 3883), (72, 4051), (75, 4096), (78, 4117), (79, 4120), (82, 4156), (84, 4171), (86, 4222), (90, 4279),

Gene: Harley_4 Start: 3585, Stop: 4340, Start Num: 18

Candidate Starts for Harley_4:

(Start: 18 @3585 has 162 MA's), (26, 3645), (34, 3708), (Start: 39 @3741 has 1 MA's), (41, 3750), (42, 3759), (48, 3792), (53, 3825), (55, 3840), (57, 3855), (72, 4023), (75, 4068), (79, 4092), (82, 4128), (84, 4143), (86, 4194), (90, 4251),

Gene: Hlubikazi_4 Start: 3585, Stop: 4340, Start Num: 18

Candidate Starts for Hlubikazi_4:

(Start: 18 @3585 has 162 MA's), (26, 3645), (34, 3708), (Start: 39 @3741 has 1 MA's), (41, 3750), (42, 3759), (48, 3792), (53, 3825), (55, 3840), (57, 3855), (72, 4023), (75, 4068), (79, 4092), (84, 4143), (86, 4194), (90, 4251),

Gene: IMpilo_4 Start: 3601, Stop: 4356, Start Num: 18

Candidate Starts for IMpilo_4:

(Start: 18 @3601 has 162 MA's), (26, 3661), (34, 3724), (Start: 39 @3757 has 1 MA's), (41, 3766), (42, 3775), (48, 3808), (53, 3841), (55, 3856), (57, 3871), (72, 4039), (75, 4084), (78, 4105), (79, 4108), (82, 4144), (84, 4159), (86, 4210), (90, 4267),

Gene: lbOuu_4 Start: 3761, Stop: 4351, Start Num: 41

Candidate Starts for lbOuu_4:

(Start: 18 @3596 has 162 MA's), (26, 3656), (34, 3719), (Start: 39 @3752 has 1 MA's), (41, 3761), (42, 3770), (48, 3803), (53, 3836), (55, 3851), (57, 3866), (72, 4034), (75, 4079), (78, 4100), (79, 4103), (82, 4139), (84, 4154), (86, 4205), (90, 4262),

Gene: lbhubesi_4 Start: 3585, Stop: 4340, Start Num: 18

Candidate Starts for lbhubesi_4:

(Start: 18 @3585 has 162 MA's), (26, 3645), (34, 3708), (Start: 39 @3741 has 1 MA's), (41, 3750), (42, 3759), (48, 3792), (53, 3825), (55, 3840), (57, 3855), (72, 4023), (75, 4068), (79, 4092), (82, 4128), (84, 4143), (86, 4194), (90, 4251),

Gene: Inventum_4 Start: 3596, Stop: 4351, Start Num: 18

Candidate Starts for Inventum_4:

(Start: 18 @3596 has 162 MA's), (26, 3656), (34, 3719), (Start: 39 @3752 has 1 MA's), (41, 3761), (48, 3803), (53, 3836), (55, 3851), (57, 3866), (72, 4034), (75, 4079), (78, 4100), (79, 4103), (82, 4139), (84, 4154), (86, 4205), (90, 4262),

Gene: IrishSherpFalk_4 Start: 3600, Stop: 4355, Start Num: 18

Candidate Starts for IrishSherpFalk_4:

(Start: 18 @3600 has 162 MA's), (26, 3660), (34, 3723), (Start: 39 @3756 has 1 MA's), (41, 3765), (42, 3774), (48, 3807), (53, 3840), (55, 3855), (57, 3870), (72, 4038), (75, 4083), (78, 4104), (79, 4107), (82, 4143), (84, 4158), (86, 4209), (90, 4266),

Gene: James_4 Start: 3585, Stop: 4340, Start Num: 18

Candidate Starts for James_4:

(Start: 18 @3585 has 162 MA's), (26, 3645), (32, 3696), (34, 3708), (Start: 39 @3741 has 1 MA's), (41, 3750), (42, 3759), (48, 3792), (53, 3825), (55, 3840), (57, 3855), (72, 4023), (75, 4068), (79, 4092), (82, 4128), (84, 4143), (86, 4194), (90, 4251),

Gene: Jarcob_4 Start: 3597, Stop: 4352, Start Num: 18

Candidate Starts for Jarcob_4:

(Start: 18 @3597 has 162 MA's), (26, 3657), (32, 3708), (34, 3720), (Start: 39 @3753 has 1 MA's), (41, 3762), (42, 3771), (48, 3804), (53, 3837), (55, 3852), (57, 3867), (72, 4035), (75, 4080), (79, 4104), (82, 4140), (84, 4155), (86, 4206), (90, 4263),

Gene: Jinglebell_4 Start: 3594, Stop: 4349, Start Num: 18

Candidate Starts for Jinglebell_4:

(Start: 18 @3594 has 162 MA's), (26, 3654), (34, 3717), (Start: 39 @3750 has 1 MA's), (41, 3759), (42, 3768), (48, 3801), (53, 3834), (55, 3849), (57, 3864), (72, 4032), (75, 4077), (79, 4101), (82, 4137), (84, 4152), (86, 4203), (90, 4260),

Gene: JoeyJr_4 Start: 3596, Stop: 4351, Start Num: 18

Candidate Starts for JoeyJr_4:

(Start: 18 @3596 has 162 MA's), (26, 3656), (34, 3719), (Start: 39 @3752 has 1 MA's), (41, 3761), (48, 3803), (53, 3836), (55, 3851), (57, 3866), (72, 4034), (75, 4079), (78, 4100), (79, 4103), (82, 4139), (84, 4154), (86, 4205), (90, 4262),

Gene: JonJames_32 Start: 16202, Stop: 17122, Start Num: 4

Candidate Starts for JonJames_32:

(Start: 4 @16202 has 13 MA's), (9, 16259), (11, 16283), (17, 16328), (22, 16361), (23, 16382), (31, 16442), (57, 16583), (62, 16655), (80, 16883), (81, 16886),

Gene: Juniper1_4 Start: 3584, Stop: 4339, Start Num: 18

Candidate Starts for Juniper1_4:

(Start: 18 @3584 has 162 MA's), (26, 3644), (34, 3707), (Start: 39 @3740 has 1 MA's), (41, 3749), (42, 3758), (48, 3791), (53, 3824), (55, 3839), (57, 3854), (72, 4022), (75, 4067), (79, 4091), (82, 4127), (84, 4142), (86, 4193), (90, 4250),

Gene: Karhdo_4 Start: 3601, Stop: 4356, Start Num: 18

Candidate Starts for Karhdo_4:

(Start: 18 @3601 has 162 MA's), (26, 3661), (34, 3724), (Start: 39 @3757 has 1 MA's), (41, 3766), (42, 3775), (48, 3808), (53, 3841), (55, 3856), (57, 3871), (72, 4039), (75, 4084), (79, 4108), (82, 4144), (84, 4159), (86, 4210), (90, 4267),

Gene: Kenuha5_4 Start: 3612, Stop: 4367, Start Num: 18

Candidate Starts for Kenuha5_4:

(Start: 18 @3612 has 162 MA's), (26, 3672), (32, 3723), (34, 3735), (Start: 39 @3768 has 1 MA's), (41, 3777), (42, 3786), (48, 3819), (53, 3852), (55, 3867), (57, 3882), (72, 4050), (75, 4095), (78, 4116), (79, 4119), (82, 4155), (84, 4170), (86, 4221), (90, 4278),

Gene: Kersh_4 Start: 3588, Stop: 4343, Start Num: 18

Candidate Starts for Kersh_4:

(Start: 18 @3588 has 162 MA's), (26, 3648), (34, 3711), (Start: 39 @3744 has 1 MA's), (41, 3753), (42, 3762), (48, 3795), (53, 3828), (55, 3843), (57, 3858), (72, 4026), (75, 4071), (79, 4095), (82, 4131), (84, 4146), (86, 4197), (90, 4254),

Gene: KingMidas_4 Start: 3596, Stop: 4351, Start Num: 18

Candidate Starts for KingMidas_4:

(Start: 18 @3596 has 162 MA's), (26, 3656), (34, 3719), (Start: 39 @3752 has 1 MA's), (41, 3761), (48, 3803), (53, 3836), (55, 3851), (57, 3866), (72, 4034), (75, 4079), (78, 4100), (79, 4103), (82, 4139), (84, 4154), (86, 4205), (90, 4262),

Gene: Koella_4 Start: 3597, Stop: 4352, Start Num: 18

Candidate Starts for Koella_4:

(Start: 18 @3597 has 162 MA's), (26, 3657), (34, 3720), (Start: 39 @3753 has 1 MA's), (41, 3762), (42, 3771), (48, 3804), (53, 3837), (55, 3852), (57, 3867), (72, 4035), (75, 4080), (79, 4104), (84, 4155), (86, 4206), (90, 4263),

Gene: Krakatau_5 Start: 4260, Stop: 5015, Start Num: 18

Candidate Starts for Krakatau_5:

(Start: 18 @4260 has 162 MA's), (26, 4320), (34, 4383), (Start: 39 @4416 has 1 MA's), (41, 4425), (42, 4434), (48, 4467), (53, 4500), (55, 4515), (57, 4530), (72, 4698), (75, 4743), (79, 4767), (82, 4803), (84, 4818), (86, 4869), (90, 4926),

Gene: KristaRAM_5 Start: 4260, Stop: 5015, Start Num: 18

Candidate Starts for KristaRAM_5:

(Start: 18 @4260 has 162 MA's), (26, 4320), (34, 4383), (Start: 39 @4416 has 1 MA's), (41, 4425), (42, 4434), (48, 4467), (53, 4500), (55, 4515), (57, 4530), (72, 4698), (75, 4743), (78, 4764), (79, 4767), (82, 4803), (84, 4818), (86, 4869), (90, 4926),

Gene: LastJedi_4 Start: 3585, Stop: 4340, Start Num: 18

Candidate Starts for LastJedi_4:

(Start: 18 @3585 has 162 MA's), (26, 3645), (32, 3696), (34, 3708), (Start: 39 @3741 has 1 MA's), (41, 3750), (42, 3759), (48, 3792), (53, 3825), (55, 3840), (57, 3855), (72, 4023), (75, 4068), (79, 4092), (82, 4128), (84, 4143), (86, 4194), (90, 4251),

Gene: Latretium_4 Start: 3584, Stop: 4339, Start Num: 18

Candidate Starts for Latretium_4:

(Start: 18 @3584 has 162 MA's), (26, 3644), (34, 3707), (Start: 39 @3740 has 1 MA's), (41, 3749), (42, 3758), (48, 3791), (53, 3824), (55, 3839), (57, 3854), (72, 4022), (75, 4067), (79, 4091), (82, 4127), (84, 4142), (86, 4193), (90, 4250),

Gene: Leperchaun_4 Start: 3585, Stop: 4340, Start Num: 18

Candidate Starts for Leperchaun_4:

(Start: 18 @3585 has 162 MA's), (26, 3645), (34, 3708), (Start: 39 @3741 has 1 MA's), (41, 3750), (42, 3759), (48, 3792), (53, 3825), (55, 3840), (57, 3855), (72, 4023), (75, 4068), (79, 4092), (82, 4128), (84, 4143), (86, 4194), (90, 4251),

Gene: LilMoolah_4 Start: 3597, Stop: 4352, Start Num: 18

Candidate Starts for LilMoolah_4:

(Start: 18 @3597 has 162 MA's), (26, 3657), (34, 3720), (Start: 39 @3753 has 1 MA's), (41, 3762), (42, 3771), (48, 3804), (53, 3837), (55, 3852), (57, 3867), (72, 4035), (75, 4080), (79, 4104), (82, 4140), (84, 4155), (86, 4206), (90, 4263),

Gene: Lizziana_4 Start: 3598, Stop: 4353, Start Num: 18

Candidate Starts for Lizziana_4:

(Start: 18 @3598 has 162 MA's), (26, 3658), (32, 3709), (34, 3721), (Start: 39 @3754 has 1 MA's), (41, 3763), (42, 3772), (48, 3805), (53, 3838), (55, 3853), (57, 3868), (72, 4036), (75, 4081), (79, 4105), (82, 4141), (84, 4156), (86, 4207), (90, 4264),

Gene: Llama_4 Start: 3594, Stop: 4349, Start Num: 18

Candidate Starts for Llama_4:

(Start: 18 @3594 has 162 MA's), (26, 3654), (34, 3717), (Start: 39 @3750 has 1 MA's), (41, 3759), (42, 3768), (48, 3801), (53, 3834), (55, 3849), (57, 3864), (72, 4032), (75, 4077), (79, 4101), (82, 4137), (84, 4152), (86, 4203), (90, 4260),

Gene: Llij_4 Start: 3612, Stop: 4367, Start Num: 18

Candidate Starts for Llij_4:

(Start: 18 @3612 has 162 MA's), (26, 3672), (34, 3735), (Start: 39 @3768 has 1 MA's), (41, 3777), (48, 3819), (53, 3852), (55, 3867), (57, 3882), (72, 4050), (75, 4095), (79, 4119), (82, 4155), (84, 4170), (86, 4221), (90, 4278),

Gene: Lozinak_32 Start: 12060, Stop: 12977, Start Num: 4

Candidate Starts for Lozinak_32:

(Start: 3 @12057 has 7 MA's), (Start: 4 @12060 has 13 MA's), (17, 12186), (20, 12213), (29, 12285), (31, 12300), (46, 12381), (60, 12462), (62, 12516), (67, 12546),

Gene: LunaBlu_4 Start: 3584, Stop: 4339, Start Num: 18

Candidate Starts for LunaBlu_4:

(Start: 18 @3584 has 162 MA's), (26, 3644), (34, 3707), (Start: 39 @3740 has 1 MA's), (41, 3749), (42, 3758), (48, 3791), (53, 3824), (55, 3839), (57, 3854), (72, 4022), (75, 4067), (79, 4091), (82, 4127), (84, 4142), (86, 4193), (90, 4250),

Gene: MadMen_4 Start: 3612, Stop: 4367, Start Num: 18

Candidate Starts for MadMen_4:

(Start: 18 @3612 has 162 MA's), (26, 3672), (32, 3723), (34, 3735), (Start: 39 @3768 has 1 MA's), (41, 3777), (42, 3786), (48, 3819), (53, 3852), (55, 3867), (57, 3882), (72, 4050), (75, 4095), (79, 4119), (82, 4155), (84, 4170), (86, 4221), (90, 4278),

Gene: Mahavrat_4 Start: 3584, Stop: 4339, Start Num: 18

Candidate Starts for Mahavrat_4:

(Start: 18 @3584 has 162 MA's), (26, 3644), (32, 3695), (34, 3707), (Start: 39 @3740 has 1 MA's), (41, 3749), (42, 3758), (48, 3791), (53, 3824), (55, 3839), (57, 3854), (72, 4022), (75, 4067), (79, 4091), (84, 4142), (86, 4193), (90, 4250),

Gene: Mandlovu_4 Start: 3585, Stop: 4340, Start Num: 18

Candidate Starts for Mandlovu_4:

(Start: 18 @3585 has 162 MA's), (26, 3645), (34, 3708), (Start: 39 @3741 has 1 MA's), (41, 3750), (42, 3759), (48, 3792), (53, 3825), (55, 3840), (57, 3855), (72, 4023), (75, 4068), (79, 4092), (84, 4143), (86, 4194), (90, 4251),

Gene: Mantra_4 Start: 3612, Stop: 4367, Start Num: 18

Candidate Starts for Mantra_4:

(Start: 18 @3612 has 162 MA's), (26, 3672), (34, 3735), (Start: 39 @3768 has 1 MA's), (41, 3777), (48, 3819), (53, 3852), (55, 3867), (57, 3882), (72, 4050), (75, 4095), (79, 4119), (82, 4155), (84, 4170), (86, 4221), (90, 4278),

Gene: Maravista_4 Start: 3585, Stop: 4340, Start Num: 18

Candidate Starts for Maravista_4:

(Start: 18 @3585 has 162 MA's), (26, 3645), (34, 3708), (Start: 39 @3741 has 1 MA's), (41, 3750), (42, 3759), (48, 3792), (53, 3825), (55, 3840), (57, 3855), (72, 4023), (75, 4068), (79, 4092), (82, 4128), (84, 4143), (86, 4194), (90, 4251),

Gene: Martik_4 Start: 3598, Stop: 4353, Start Num: 18

Candidate Starts for Martik_4:

(Start: 18 @3598 has 162 MA's), (26, 3658), (32, 3709), (34, 3721), (Start: 39 @3754 has 1 MA's), (41, 3763), (42, 3772), (48, 3805), (53, 3838), (55, 3853), (57, 3868), (72, 4036), (75, 4081), (79, 4105), (82, 4141), (84, 4156), (86, 4207), (90, 4264),

Gene: Mattes_4 Start: 3585, Stop: 4340, Start Num: 18

Candidate Starts for Mattes_4:

(Start: 18 @3585 has 162 MA's), (26, 3645), (32, 3696), (34, 3708), (Start: 39 @3741 has 1 MA's), (41, 3750), (42, 3759), (48, 3792), (53, 3825), (55, 3840), (57, 3855), (72, 4023), (75, 4068), (79, 4092), (82, 4128), (84, 4143), (86, 4194), (90, 4251),

Gene: Melissauren88_4 Start: 3612, Stop: 4367, Start Num: 18

Candidate Starts for Melissauren88_4:

(Start: 18 @3612 has 162 MA's), (26, 3672), (34, 3735), (Start: 39 @3768 has 1 MA's), (41, 3777), (42, 3786), (48, 3819), (53, 3852), (55, 3867), (57, 3882), (72, 4050), (75, 4095), (78, 4116), (79, 4119), (82, 4155), (84, 4170), (86, 4221), (90, 4278),

Gene: MilanaBonita_5 Start: 4260, Stop: 5015, Start Num: 18

Candidate Starts for MilanaBonita_5:

(Start: 18 @4260 has 162 MA's), (26, 4320), (32, 4371), (34, 4383), (Start: 39 @4416 has 1 MA's), (41, 4425), (42, 4434), (48, 4467), (53, 4500), (55, 4515), (57, 4530), (72, 4698), (75, 4743), (78, 4764), (79, 4767), (82, 4803), (84, 4818), (86, 4869), (90, 4926),

Gene: MilleniumForce_5 Start: 4260, Stop: 5015, Start Num: 18

Candidate Starts for MilleniumForce_5:

(Start: 18 @4260 has 162 MA's), (26, 4320), (34, 4383), (Start: 39 @4416 has 1 MA's), (41, 4425), (42, 4434), (48, 4467), (53, 4500), (55, 4515), (57, 4530), (72, 4698), (75, 4743), (78, 4764), (79, 4767), (82, 4803), (84, 4818), (86, 4869), (90, 4926),

Gene: MinionDave_5 Start: 4260, Stop: 5015, Start Num: 18

Candidate Starts for MinionDave_5:

(Start: 18 @4260 has 162 MA's), (26, 4320), (34, 4383), (Start: 39 @4416 has 1 MA's), (41, 4425), (42, 4434), (48, 4467), (53, 4500), (55, 4515), (57, 4530), (72, 4698), (75, 4743), (78, 4764), (79, 4767), (82, 4803), (84, 4818), (86, 4869), (90, 4926),

Gene: Minnie_4 Start: 3612, Stop: 4367, Start Num: 18

Candidate Starts for Minnie_4:

(Start: 18 @3612 has 162 MA's), (26, 3672), (34, 3735), (Start: 39 @3768 has 1 MA's), (41, 3777), (42, 3786), (48, 3819), (53, 3852), (55, 3867), (57, 3882), (72, 4050), (75, 4095), (79, 4119), (82, 4155), (84, 4170), (86, 4221), (90, 4278),

Gene: Miskis_34 Start: 11835, Stop: 12752, Start Num: 4

Candidate Starts for Miskis_34:

(Start: 3 @11832 has 7 MA's), (Start: 4 @11835 has 13 MA's), (17, 11961), (20, 11988), (24, 12018), (29, 12060), (31, 12075), (46, 12156), (60, 12237), (62, 12291), (67, 12321),

Gene: MisterCuddles_4 Start: 3598, Stop: 4353, Start Num: 18

Candidate Starts for MisterCuddles_4:

(Start: 18 @3598 has 162 MA's), (26, 3658), (32, 3709), (34, 3721), (Start: 39 @3754 has 1 MA's), (41, 3763), (42, 3772), (48, 3805), (53, 3838), (55, 3853), (57, 3868), (72, 4036), (75, 4081), (79, 4105), (82, 4141), (84, 4156), (86, 4207), (90, 4264),

Gene: Modragons_4 Start: 3594, Stop: 4349, Start Num: 18

Candidate Starts for Modragons_4:

(Start: 18 @3594 has 162 MA's), (26, 3654), (34, 3717), (Start: 39 @3750 has 1 MA's), (41, 3759), (42, 3768), (48, 3801), (53, 3834), (55, 3849), (57, 3864), (72, 4032), (75, 4077), (79, 4101), (82, 4137), (84, 4152), (86, 4203), (90, 4260),

Gene: Mollymur_15 Start: 10309, Stop: 11199, Start Num: 4

Candidate Starts for Mollymur_15:

(Start: 4 @10309 has 13 MA's), (12, 10393), (20, 10459), (27, 10513), (37, 10564), (47, 10627), (55, 10672), (62, 10759), (65, 10783), (93, 11146),

Gene: Moonbeam_4 Start: 3597, Stop: 4352, Start Num: 18

Candidate Starts for Moonbeam_4:

(Start: 18 @3597 has 162 MA's), (26, 3657), (34, 3720), (Start: 39 @3753 has 1 MA's), (41, 3762), (48, 3804), (53, 3837), (55, 3852), (57, 3867), (72, 4035), (75, 4080), (79, 4104), (82, 4140), (84, 4155), (86, 4206), (90, 4263),

Gene: Ms6_4 Start: 3768, Stop: 4367, Start Num: 39

Candidate Starts for Ms6_4:

(Start: 18 @3612 has 162 MA's), (26, 3672), (34, 3735), (Start: 39 @3768 has 1 MA's), (41, 3777), (42, 3786), (48, 3819), (53, 3852), (55, 3867), (57, 3882), (72, 4050), (75, 4095), (78, 4116), (79, 4119), (82, 4155), (84, 4170), (86, 4221), (90, 4278),

Gene: MulchSalad_4 Start: 3599, Stop: 4354, Start Num: 18

Candidate Starts for MulchSalad_4:

(Start: 18 @3599 has 162 MA's), (26, 3659), (34, 3722), (Start: 39 @3755 has 1 MA's), (41, 3764), (42, 3773), (48, 3806), (53, 3839), (55, 3854), (57, 3869), (72, 4037), (75, 4082), (79, 4106), (84, 4157), (86, 4208), (90, 4265),

Gene: Mutaforma13_4 Start: 3612, Stop: 4367, Start Num: 18

Candidate Starts for Mutaforma13_4:

(Start: 18 @3612 has 162 MA's), (26, 3672), (34, 3735), (Start: 39 @3768 has 1 MA's), (41, 3777), (42, 3786), (48, 3819), (53, 3852), (55, 3867), (57, 3882), (72, 4050), (74, 4074), (75, 4095), (78, 4116), (79, 4119), (80, 4149), (82, 4155), (84, 4170), (86, 4221), (90, 4278),

Gene: Nimbo_4 Start: 3596, Stop: 4351, Start Num: 18

Candidate Starts for Nimbo_4:

(Start: 18 @3596 has 162 MA's), (26, 3656), (34, 3719), (Start: 39 @3752 has 1 MA's), (41, 3761), (48, 3803), (53, 3836), (55, 3851), (57, 3866), (72, 4034), (75, 4079), (78, 4100), (79, 4103), (82, 4139), (84, 4154), (86, 4205), (90, 4262),

Gene: Nitzel_5 Start: 4248, Stop: 5003, Start Num: 18

Candidate Starts for Nitzel_5:

(Start: 18 @4248 has 162 MA's), (26, 4308), (34, 4371), (Start: 39 @4404 has 1 MA's), (41, 4413), (42, 4422), (48, 4455), (53, 4488), (55, 4503), (57, 4518), (72, 4686), (75, 4731), (79, 4755), (82, 4791), (84, 4806), (86, 4857), (90, 4914),

Gene: Nivrat_4 Start: 3597, Stop: 4352, Start Num: 18

Candidate Starts for Nivrat_4:

(Start: 18 @3597 has 162 MA's), (26, 3657), (34, 3720), (Start: 39 @3753 has 1 MA's), (41, 3762), (42, 3771), (48, 3804), (53, 3837), (55, 3852), (57, 3867), (72, 4035), (75, 4080), (79, 4104), (84, 4155), (86, 4206), (90, 4263),

Gene: NormanBulbieJr_4 Start: 3585, Stop: 4340, Start Num: 18

Candidate Starts for NormanBulbieJr_4:

(Start: 18 @3585 has 162 MA's), (26, 3645), (34, 3708), (Start: 39 @3741 has 1 MA's), (41, 3750), (42, 3759), (48, 3792), (53, 3825), (55, 3840), (57, 3855), (72, 4023), (75, 4068), (79, 4092), (84, 4143), (86, 4194), (90, 4251),

Gene: Norvs_33 Start: 12062, Stop: 12979, Start Num: 4

Candidate Starts for Norvs_33:

(Start: 3 @12059 has 7 MA's), (Start: 4 @12062 has 13 MA's), (17, 12188), (20, 12215), (29, 12287), (31, 12302), (46, 12383), (60, 12464), (62, 12518), (67, 12548),

Gene: Ochi17_4 Start: 3594, Stop: 4349, Start Num: 18

Candidate Starts for Ochi17_4:

(Start: 18 @3594 has 162 MA's), (26, 3654), (34, 3717), (Start: 39 @3750 has 1 MA's), (41, 3759), (42, 3768), (48, 3801), (53, 3834), (55, 3849), (57, 3864), (72, 4032), (75, 4077), (79, 4101), (82, 4137), (84, 4152), (86, 4203), (90, 4260),

Gene: OfUltron_4 Start: 3594, Stop: 4349, Start Num: 18

Candidate Starts for OfUltron_4:

(Start: 18 @3594 has 162 MA's), (26, 3654), (34, 3717), (Start: 39 @3750 has 1 MA's), (41, 3759), (42, 3768), (48, 3801), (53, 3834), (55, 3849), (57, 3864), (72, 4032), (75, 4077), (79, 4101), (82, 4137), (84, 4152), (86, 4203), (90, 4260),

Gene: OldBen_4 Start: 3596, Stop: 4351, Start Num: 18

Candidate Starts for OldBen_4:

(Start: 18 @3596 has 162 MA's), (26, 3656), (34, 3719), (Start: 39 @3752 has 1 MA's), (41, 3761), (48, 3803), (53, 3836), (55, 3851), (57, 3866), (72, 4034), (75, 4079), (78, 4100), (79, 4103), (82, 4139), (84, 4154), (86, 4205), (90, 4262),

Gene: OlympiaSaint_4 Start: 3597, Stop: 4352, Start Num: 18

Candidate Starts for OlympiaSaint_4:

(Start: 18 @3597 has 162 MA's), (26, 3657), (34, 3720), (Start: 39 @3753 has 1 MA's), (41, 3762), (42, 3771), (48, 3804), (53, 3837), (55, 3852), (57, 3867), (72, 4035), (75, 4080), (79, 4104), (84, 4155), (86, 4206), (90, 4263),

Gene: OneUp_26 Start: 9868, Stop: 10794, Start Num: 3

Candidate Starts for OneUp_26:

(Start: 2 @9865 has 1 MA's), (Start: 3 @9868 has 7 MA's), (8, 9901), (20, 10027), (23, 10054), (29, 10099), (31, 10114), (35, 10126), (41, 10153), (55, 10243), (60, 10276), (67, 10360), (73, 10480), (84, 10585),

Gene: Ovechkin_4 Start: 3612, Stop: 4367, Start Num: 18

Candidate Starts for Ovechkin_4:

(Start: 18 @3612 has 162 MA's), (26, 3672), (34, 3735), (Start: 39 @3768 has 1 MA's), (41, 3777), (42, 3786), (48, 3819), (53, 3852), (55, 3867), (57, 3882), (72, 4050), (75, 4095), (78, 4116), (79, 4119), (82, 4155), (84, 4170), (86, 4221), (90, 4278),

Gene: PHappiness_4 Start: 3596, Stop: 4351, Start Num: 18

Candidate Starts for PHappiness_4:

(Start: 18 @3596 has 162 MA's), (26, 3656), (34, 3719), (Start: 39 @3752 has 1 MA's), (41, 3761), (48, 3803), (53, 3836), (55, 3851), (57, 3866), (72, 4034), (75, 4079), (78, 4100), (79, 4103), (82, 4139), (84, 4154), (86, 4205), (90, 4262),

Gene: PMC_4 Start: 3612, Stop: 4367, Start Num: 18

Candidate Starts for PMC_4:

(Start: 18 @3612 has 162 MA's), (26, 3672), (34, 3735), (Start: 39 @3768 has 1 MA's), (41, 3777), (48, 3819), (53, 3852), (55, 3867), (57, 3882), (72, 4050), (75, 4095), (79, 4119), (82, 4155), (84, 4170), (86, 4221), (90, 4278),

Gene: Pacc40_4 Start: 3596, Stop: 4351, Start Num: 18

Candidate Starts for Pacc40_4:

(Start: 18 @3596 has 162 MA's), (26, 3656), (34, 3719), (Start: 39 @3752 has 1 MA's), (41, 3761), (48, 3803), (53, 3836), (55, 3851), (57, 3866), (72, 4034), (75, 4079), (78, 4100), (79, 4103), (82, 4139), (84, 4154), (86, 4205), (90, 4262),

Gene: Phalconet_4 Start: 3612, Stop: 4367, Start Num: 18

Candidate Starts for Phalconet_4:

(Start: 18 @3612 has 162 MA's), (26, 3672), (34, 3735), (Start: 39 @3768 has 1 MA's), (41, 3777), (42, 3786), (48, 3819), (53, 3852), (55, 3867), (57, 3882), (72, 4050), (75, 4095), (78, 4116), (79, 4119), (82, 4155), (84, 4170), (86, 4221), (90, 4278),

Gene: Phanphagia_4 Start: 3612, Stop: 4367, Start Num: 18

Candidate Starts for Phanphagia_4:

(Start: 18 @3612 has 162 MA's), (26, 3672), (34, 3735), (Start: 39 @3768 has 1 MA's), (41, 3777), (42, 3786), (48, 3819), (53, 3852), (55, 3867), (57, 3882), (72, 4050), (75, 4095), (78, 4116), (79, 4119), (82, 4155), (84, 4170), (86, 4221), (90, 4278),

Gene: Phasih_4 Start: 3612, Stop: 4367, Start Num: 18

Candidate Starts for Phasih_4:

(Start: 18 @3612 has 162 MA's), (26, 3672), (34, 3735), (Start: 39 @3768 has 1 MA's), (41, 3777), (42, 3786), (48, 3819), (53, 3852), (55, 3867), (57, 3882), (72, 4050), (75, 4095), (79, 4119), (82, 4155), (84, 4170), (86, 4221), (90, 4278),

Gene: Phatniss_4 Start: 3597, Stop: 4352, Start Num: 18

Candidate Starts for Phatniss_4:

(Start: 18 @3597 has 162 MA's), (26, 3657), (34, 3720), (Start: 39 @3753 has 1 MA's), (41, 3762), (42, 3771), (48, 3804), (53, 3837), (55, 3852), (57, 3867), (72, 4035), (75, 4080), (78, 4101), (79, 4104), (82, 4140), (84, 4155), (86, 4206), (90, 4263),

Gene: PhesterPhotato_4 Start: 3612, Stop: 4367, Start Num: 18

Candidate Starts for PhesterPhotato_4:

(Start: 18 @3612 has 162 MA's), (26, 3672), (34, 3735), (Start: 39 @3768 has 1 MA's), (41, 3777), (42, 3786), (48, 3819), (53, 3852), (55, 3867), (57, 3882), (72, 4050), (75, 4095), (78, 4116), (79, 4119), (82, 4155), (84, 4170), (86, 4221), (90, 4278),

Gene: Philus_4 Start: 3597, Stop: 4352, Start Num: 18

Candidate Starts for Philus_4:

(Start: 18 @3597 has 162 MA's), (26, 3657), (32, 3708), (34, 3720), (Start: 39 @3753 has 1 MA's), (41, 3762), (42, 3771), (48, 3804), (53, 3837), (55, 3852), (57, 3867), (72, 4035), (75, 4080), (79, 4104), (82, 4140), (84, 4155), (86, 4206), (90, 4263),

Gene: PhinkBoden_32 Start: 12443, Stop: 13360, Start Num: 4

Candidate Starts for PhinkBoden_32:

(Start: 3 @12440 has 7 MA's), (Start: 4 @12443 has 13 MA's), (17, 12569), (20, 12596), (29, 12668), (31, 12683), (46, 12764), (60, 12845), (62, 12899), (67, 12929),

Gene: Pippy_4 Start: 3585, Stop: 4340, Start Num: 18

Candidate Starts for Pippy_4:

(Start: 18 @3585 has 162 MA's), (26, 3645), (34, 3708), (Start: 39 @3741 has 1 MA's), (41, 3750), (42, 3759), (48, 3792), (53, 3825), (55, 3840), (57, 3855), (72, 4023), (75, 4068), (79, 4092), (84, 4143), (86, 4194), (90, 4251),

Gene: Poenanya_4 Start: 3596, Stop: 4351, Start Num: 18

Candidate Starts for Poenanya_4:

(Start: 18 @3596 has 162 MA's), (26, 3656), (34, 3719), (Start: 39 @3752 has 1 MA's), (41, 3761), (48, 3803), (53, 3836), (55, 3851), (57, 3866), (72, 4034), (75, 4079), (78, 4100), (79, 4103), (82, 4139), (84, 4154), (86, 4205), (90, 4262),

Gene: Polka14_4 Start: 3597, Stop: 4352, Start Num: 18

Candidate Starts for Polka14_4:

(Start: 18 @3597 has 162 MA's), (26, 3657), (34, 3720), (Start: 39 @3753 has 1 MA's), (41, 3762), (48, 3804), (53, 3837), (55, 3852), (57, 3867), (72, 4035), (75, 4080), (78, 4101), (79, 4104), (82, 4140), (84, 4155), (86, 4206), (90, 4263),

Gene: PopTart_4 Start: 3612, Stop: 4367, Start Num: 18

Candidate Starts for PopTart_4:

(Start: 18 @3612 has 162 MA's), (26, 3672), (34, 3735), (Start: 39 @3768 has 1 MA's), (41, 3777), (42, 3786), (48, 3819), (53, 3852), (55, 3867), (57, 3882), (72, 4050), (75, 4095), (78, 4116), (79, 4119), (82, 4155), (84, 4170), (86, 4221), (90, 4278),

Gene: Priscilla_4 Start: 3597, Stop: 4352, Start Num: 18

Candidate Starts for Priscilla_4:

(Start: 18 @3597 has 162 MA's), (26, 3657), (34, 3720), (Start: 39 @3753 has 1 MA's), (41, 3762), (42, 3771), (48, 3804), (53, 3837), (55, 3852), (57, 3867), (72, 4035), (75, 4080), (79, 4104), (82, 4140), (84, 4155), (86, 4206), (90, 4263),

Gene: QuickMath_4 Start: 3612, Stop: 4367, Start Num: 18

Candidate Starts for QuickMath_4:

(Start: 18 @3612 has 162 MA's), (26, 3672), (34, 3735), (Start: 39 @3768 has 1 MA's), (41, 3777), (42, 3786), (48, 3819), (53, 3852), (55, 3867), (57, 3882), (72, 4050), (75, 4095), (78, 4116), (79, 4119), (82, 4155), (84, 4170), (86, 4221), (90, 4278),

Gene: Radiance_4 Start: 3596, Stop: 4351, Start Num: 18

Candidate Starts for Radiance_4:

(Start: 18 @3596 has 162 MA's), (26, 3656), (34, 3719), (Start: 39 @3752 has 1 MA's), (41, 3761), (48, 3803), (53, 3836), (55, 3851), (57, 3866), (72, 4034), (75, 4079), (78, 4100), (79, 4103), (82, 4139), (84, 4154), (86, 4205), (90, 4262),

Gene: RedBird_4 Start: 3596, Stop: 4351, Start Num: 18

Candidate Starts for RedBird_4:

(Start: 18 @3596 has 162 MA's), (26, 3656), (34, 3719), (Start: 39 @3752 has 1 MA's), (41, 3761), (48, 3803), (53, 3836), (55, 3851), (57, 3866), (72, 4034), (75, 4079), (78, 4100), (79, 4103), (82, 4139), (84, 4154), (86, 4205), (90, 4262),

Gene: Rita_4 Start: 3613, Stop: 4368, Start Num: 18

Candidate Starts for Rita_4:

(Start: 18 @3613 has 162 MA's), (26, 3673), (34, 3736), (Start: 39 @3769 has 1 MA's), (41, 3778), (42, 3787), (48, 3820), (53, 3853), (55, 3868), (57, 3883), (72, 4051), (75, 4096), (78, 4117), (79, 4120), (82, 4156), (84, 4171), (86, 4222), (90, 4279),

Gene: RitaG_4 Start: 3596, Stop: 4351, Start Num: 18

Candidate Starts for RitaG_4:

(Start: 18 @3596 has 162 MA's), (26, 3656), (34, 3719), (Start: 39 @3752 has 1 MA's), (41, 3761), (48, 3803), (53, 3836), (55, 3851), (57, 3866), (72, 4034), (75, 4079), (78, 4100), (79, 4103), (82, 4139), (84, 4154), (86, 4205), (90, 4262),

Gene: Rockne_4 Start: 3612, Stop: 4367, Start Num: 18

Candidate Starts for Rockne_4:

(Start: 18 @3612 has 162 MA's), (26, 3672), (34, 3735), (Start: 39 @3768 has 1 MA's), (41, 3777), (48, 3819), (53, 3852), (55, 3867), (57, 3882), (72, 4050), (75, 4095), (79, 4119), (82, 4155), (84, 4170), (86, 4221), (90, 4278),

Gene: Royals2015_4 Start: 3612, Stop: 4367, Start Num: 18

Candidate Starts for Royals2015_4:

(Start: 18 @3612 has 162 MA's), (26, 3672), (34, 3735), (Start: 39 @3768 has 1 MA's), (41, 3777), (42, 3786), (48, 3819), (53, 3852), (55, 3867), (57, 3882), (72, 4050), (75, 4095), (78, 4116), (79, 4119), (82, 4155), (84, 4170), (86, 4221), (90, 4278),

Gene: Ruby_4 Start: 3598, Stop: 4353, Start Num: 18

Candidate Starts for Ruby_4:

(Start: 18 @3598 has 162 MA's), (26, 3658), (32, 3709), (34, 3721), (Start: 39 @3754 has 1 MA's), (41, 3763), (42, 3772), (48, 3805), (53, 3838), (55, 3853), (57, 3868), (72, 4036), (75, 4081), (79, 4105), (82, 4141), (84, 4156), (86, 4207), (90, 4264),

Gene: SG4_4 Start: 3612, Stop: 4367, Start Num: 18

Candidate Starts for SG4_4:

(Start: 18 @3612 has 162 MA's), (26, 3672), (34, 3735), (Start: 39 @3768 has 1 MA's), (41, 3777), (42, 3786), (48, 3819), (53, 3852), (55, 3867), (57, 3882), (72, 4050), (75, 4095), (78, 4116), (79, 4119), (82, 4155), (84, 4170), (86, 4221), (90, 4278),

Gene: SPB78_4 Start: 3544, Stop: 4344, Start Num: 15

Candidate Starts for SPB78_4:

(15, 3544), (Start: 16 @3556 has 1 MA's), (23, 3616), (26, 3625), (31, 3676), (34, 3691), (Start: 39 @3724 has 1 MA's), (43, 3757), (45, 3769), (65, 3952), (70, 3988), (79, 4093), (85, 4174), (90, 4255),

Gene: Saal_4 Start: 3585, Stop: 4340, Start Num: 18

Candidate Starts for Saal_4:

(Start: 18 @3585 has 162 MA's), (26, 3645), (34, 3708), (Start: 39 @3741 has 1 MA's), (41, 3750), (42, 3759), (48, 3792), (53, 3825), (55, 3840), (57, 3855), (72, 4023), (75, 4068), (79, 4092), (82, 4128), (84, 4143), (86, 4194), (90, 4251),

Gene: Sabbb_4 Start: 3600, Stop: 4355, Start Num: 18

Candidate Starts for Sabbb_4:

(Start: 18 @3600 has 162 MA's), (26, 3660), (34, 3723), (Start: 39 @3756 has 1 MA's), (41, 3765), (42, 3774), (48, 3807), (53, 3840), (55, 3855), (57, 3870), (72, 4038), (75, 4083), (79, 4107), (82, 4143), (84, 4158), (86, 4209), (90, 4266),

Gene: Samy_7 Start: 5022, Stop: 5831, Start Num: 16

Candidate Starts for Samy_7:

(Start: 16 @5022 has 1 MA's), (30, 5139), (49, 5280), (61, 5355), (64, 5418), (69, 5463), (71, 5475), (86, 5679), (87, 5691), (92, 5763),

Gene: Sandalphon_4 Start: 3612, Stop: 4367, Start Num: 18

Candidate Starts for Sandalphon_4:

(Start: 18 @3612 has 162 MA's), (26, 3672), (34, 3735), (Start: 39 @3768 has 1 MA's), (41, 3777), (42, 3786), (48, 3819), (53, 3852), (55, 3867), (57, 3882), (72, 4050), (75, 4095), (79, 4119), (82, 4155), (84, 4170), (86, 4221), (90, 4278),

Gene: Sassafras_4 Start: 3596, Stop: 4351, Start Num: 18

Candidate Starts for Sassafras_4:

(Start: 18 @3596 has 162 MA's), (26, 3656), (34, 3719), (Start: 39 @3752 has 1 MA's), (41, 3761), (48, 3803), (53, 3836), (55, 3851), (57, 3866), (72, 4034), (75, 4079), (78, 4100), (79, 4103), (82, 4139), (84, 4154), (86, 4205), (90, 4262),

Gene: SassyB_4 Start: 3612, Stop: 4367, Start Num: 18

Candidate Starts for SassyB_4:

(Start: 18 @3612 has 162 MA's), (26, 3672), (34, 3735), (Start: 39 @3768 has 1 MA's), (41, 3777), (42, 3786), (48, 3819), (53, 3852), (55, 3867), (57, 3882), (72, 4050), (75, 4095), (78, 4116), (79, 4119), (82, 4155), (84, 4170), (86, 4221), (90, 4278),

Gene: Scottish_4 Start: 3596, Stop: 4351, Start Num: 18

Candidate Starts for Scottish_4:

(Start: 18 @3596 has 162 MA's), (26, 3656), (34, 3719), (Start: 39 @3752 has 1 MA's), (41, 3761), (48, 3803), (53, 3836), (55, 3851), (57, 3866), (72, 4034), (75, 4079), (78, 4100), (79, 4103), (82, 4139), (84, 4154), (86, 4205), (90, 4262),

Gene: Seabastian_4 Start: 3594, Stop: 4349, Start Num: 18

Candidate Starts for Seabastian_4:

(Start: 18 @3594 has 162 MA's), (26, 3654), (34, 3717), (Start: 39 @3750 has 1 MA's), (41, 3759), (42, 3768), (48, 3801), (53, 3834), (55, 3849), (57, 3864), (72, 4032), (75, 4077), (79, 4101), (82, 4137), (84, 4152), (86, 4203), (90, 4260),

Gene: Shauna1_4 Start: 3612, Stop: 4367, Start Num: 18

Candidate Starts for Shauna1_4:

(Start: 18 @3612 has 162 MA's), (26, 3672), (34, 3735), (Start: 39 @3768 has 1 MA's), (41, 3777), (42, 3786), (48, 3819), (53, 3852), (55, 3867), (57, 3882), (72, 4050), (75, 4095), (78, 4116), (79, 4119), (82, 4155), (84, 4170), (86, 4221), (90, 4278),

Gene: ShiLan_4 Start: 3597, Stop: 4352, Start Num: 18

Candidate Starts for ShiLan_4:

(Start: 18 @3597 has 162 MA's), (26, 3657), (32, 3708), (34, 3720), (Start: 39 @3753 has 1 MA's), (41, 3762), (42, 3771), (48, 3804), (53, 3837), (55, 3852), (57, 3867), (72, 4035), (75, 4080), (79, 4104), (82, 4140), (84, 4155), (86, 4206), (90, 4263),

Gene: ShowerHandel_4 Start: 3598, Stop: 4353, Start Num: 18

Candidate Starts for ShowerHandel_4:

(Start: 18 @3598 has 162 MA's), (26, 3658), (32, 3709), (34, 3721), (Start: 39 @3754 has 1 MA's), (41, 3763), (42, 3772), (48, 3805), (53, 3838), (55, 3853), (57, 3868), (72, 4036), (75, 4081), (79, 4105), (82, 4141), (84, 4156), (86, 4207), (90, 4264),

Gene: ShroomBoi_4 Start: 3612, Stop: 4367, Start Num: 18

Candidate Starts for ShroomBoi_4:

(Start: 18 @3612 has 162 MA's), (26, 3672), (34, 3735), (Start: 39 @3768 has 1 MA's), (41, 3777), (42, 3786), (48, 3819), (53, 3852), (55, 3867), (57, 3882), (72, 4050), (75, 4095), (78, 4116), (79, 4119), (82, 4155), (84, 4170), (86, 4221), (90, 4278),

Gene: SiSi_4 Start: 3597, Stop: 4352, Start Num: 18

Candidate Starts for SiSi_4:

(Start: 18 @3597 has 162 MA's), (26, 3657), (34, 3720), (Start: 39 @3753 has 1 MA's), (41, 3762), (42, 3771), (48, 3804), (53, 3837), (55, 3852), (57, 3867), (72, 4035), (75, 4080), (78, 4101), (79, 4104), (82, 4140), (84, 4155), (86, 4206), (90, 4263),

Gene: Smoothie_33 Start: 12057, Stop: 12977, Start Num: 3

Candidate Starts for Smoothie_33:

(Start: 3 @12057 has 7 MA's), (Start: 4 @12060 has 13 MA's), (17, 12186), (20, 12213), (29, 12285), (31, 12300), (46, 12381), (60, 12462), (62, 12516), (67, 12546),

Gene: Sparkdehlily_4 Start: 3613, Stop: 4368, Start Num: 18

Candidate Starts for Sparkdehlily_4:

(Start: 18 @3613 has 162 MA's), (26, 3673), (34, 3736), (Start: 39 @3769 has 1 MA's), (41, 3778), (48, 3820), (53, 3853), (55, 3868), (57, 3883), (72, 4051), (75, 4096), (79, 4120), (82, 4156), (84, 4171), (86, 4222), (90, 4279),

Gene: Spartacus_4 Start: 3600, Stop: 4355, Start Num: 18

Candidate Starts for Spartacus_4:

(Start: 18 @3600 has 162 MA's), (26, 3660), (34, 3723), (Start: 39 @3756 has 1 MA's), (41, 3765), (42, 3774), (48, 3807), (53, 3840), (55, 3855), (57, 3870), (72, 4038), (75, 4083), (78, 4104), (79, 4107), (82, 4143), (84, 4158), (86, 4209), (90, 4266),

Gene: SpeedDemon_150 Start: 9699, Stop: 10589, Start Num: 4

Candidate Starts for SpeedDemon_150:

(Start: 4 @9699 has 13 MA's), (12, 9783), (14, 9798), (25, 9882), (54, 10053), (62, 10149), (65, 10173),

Gene: Spoonbill_4 Start: 3597, Stop: 4352, Start Num: 18

Candidate Starts for Spoonbill_4:

(Start: 18 @3597 has 162 MA's), (26, 3657), (34, 3720), (Start: 39 @3753 has 1 MA's), (41, 3762), (48, 3804), (53, 3837), (55, 3852), (57, 3867), (72, 4035), (75, 4080), (79, 4104), (82, 4140), (84, 4155), (86, 4206), (90, 4263),

Gene: StAnnes_4 Start: 3612, Stop: 4367, Start Num: 18

Candidate Starts for StAnnes_4:

(Start: 18 @3612 has 162 MA's), (26, 3672), (34, 3735), (Start: 39 @3768 has 1 MA's), (41, 3777), (42, 3786), (48, 3819), (53, 3852), (55, 3867), (57, 3882), (72, 4050), (75, 4095), (78, 4116), (79, 4119), (82, 4155), (84, 4170), (86, 4221), (90, 4278),

Gene: Strokeseat_4 Start: 3585, Stop: 4340, Start Num: 18

Candidate Starts for Strokeseat_4:

(Start: 18 @3585 has 162 MA's), (26, 3645), (34, 3708), (Start: 39 @3741 has 1 MA's), (41, 3750), (42, 3759), (48, 3792), (53, 3825), (55, 3840), (57, 3855), (72, 4023), (75, 4068), (79, 4092), (84, 4143), (86, 4194), (90, 4251),

Gene: SuperGrey_4 Start: 3612, Stop: 4367, Start Num: 18

Candidate Starts for SuperGrey_4:

(Start: 18 @3612 has 162 MA's), (26, 3672), (32, 3723), (34, 3735), (Start: 39 @3768 has 1 MA's), (41, 3777), (42, 3786), (48, 3819), (53, 3852), (55, 3867), (57, 3882), (72, 4050), (75, 4095), (78, 4116), (79, 4119), (82, 4155), (84, 4170), (86, 4221), (90, 4278),

Gene: SwagPiggett_4 Start: 3598, Stop: 4353, Start Num: 18

Candidate Starts for SwagPiggett_4:

(Start: 18 @3598 has 162 MA's), (26, 3658), (32, 3709), (34, 3721), (Start: 39 @3754 has 1 MA's), (41, 3763), (42, 3772), (48, 3805), (53, 3838), (55, 3853), (57, 3868), (72, 4036), (75, 4081), (79, 4105), (82, 4141), (84, 4156), (86, 4207), (90, 4264),

Gene: TDanisky_4 Start: 3613, Stop: 4368, Start Num: 18

Candidate Starts for TDanisky_4:

(Start: 18 @3613 has 162 MA's), (26, 3673), (34, 3736), (Start: 39 @3769 has 1 MA's), (41, 3778), (48, 3820), (53, 3853), (55, 3868), (57, 3883), (72, 4051), (75, 4096), (79, 4120), (82, 4156), (84, 4171), (86, 4222), (90, 4279),

Gene: Taj_4 Start: 3612, Stop: 4367, Start Num: 18

Candidate Starts for Taj_4:

(Start: 18 @3612 has 162 MA's), (26, 3672), (34, 3735), (Start: 39 @3768 has 1 MA's), (41, 3777), (42, 3786), (48, 3819), (53, 3852), (55, 3867), (57, 3882), (72, 4050), (75, 4095), (78, 4116), (79, 4119), (82, 4155), (84, 4170), (86, 4221), (90, 4278),

Gene: Toniann_32 Start: 12002, Stop: 12922, Start Num: 3

Candidate Starts for Toniann_32:

(Start: 3 @12002 has 7 MA's), (Start: 4 @12005 has 13 MA's), (17, 12131), (20, 12158), (29, 12230), (31, 12245), (46, 12326), (60, 12407), (62, 12461), (67, 12491),

Gene: Towmatter_14 Start: 8132, Stop: 9028, Start Num: 4

Candidate Starts for Towmatter_14:

(Start: 4 @8132 has 13 MA's), (12, 8219), (20, 8285), (26, 8321), (37, 8390), (55, 8498), (62, 8585), (65, 8609), (66, 8612), (77, 8762), (93, 8972),

Gene: Tweety_4 Start: 3612, Stop: 4367, Start Num: 18

Candidate Starts for Tweety_4:

(Start: 18 @3612 has 162 MA's), (26, 3672), (34, 3735), (Start: 39 @3768 has 1 MA's), (41, 3777), (48, 3819), (53, 3852), (55, 3867), (57, 3882), (72, 4050), (75, 4095), (78, 4116), (79, 4119), (82, 4155), (84, 4170), (86, 4221), (90, 4278),

Gene: VRedHorse_4 Start: 3597, Stop: 4352, Start Num: 18

Candidate Starts for VRedHorse_4:

(Start: 18 @3597 has 162 MA's), (26, 3657), (34, 3720), (Start: 39 @3753 has 1 MA's), (41, 3762), (48, 3804), (53, 3837), (55, 3852), (57, 3867), (72, 4035), (74, 4059), (75, 4080), (79, 4104), (82, 4140), (84, 4155), (86, 4206), (90, 4263),

Gene: VWB_4 Start: 3615, Stop: 4418, Start Num: 15

Candidate Starts for VWB_4:

(13, 3606), (15, 3615), (35, 3765), (38, 3777), (Start: 39 @3795 has 1 MA's), (44, 3831), (45, 3840), (58, 3930), (70, 4059), (79, 4164), (90, 4326),

Gene: Veteran_4 Start: 3613, Stop: 4368, Start Num: 18

Candidate Starts for Veteran_4:

(Start: 18 @3613 has 162 MA's), (26, 3673), (34, 3736), (Start: 39 @3769 has 1 MA's), (41, 3778), (42, 3787), (48, 3820), (53, 3853), (55, 3868), (57, 3883), (72, 4051), (75, 4096), (79, 4120), (82, 4156), (84, 4171), (86, 4222), (90, 4279),

Gene: Vivum_4 Start: 3597, Stop: 4352, Start Num: 18

Candidate Starts for Vivum_4:

(Start: 18 @3597 has 162 MA's), (26, 3657), (34, 3720), (Start: 39 @3753 has 1 MA's), (41, 3762), (42, 3771), (48, 3804), (53, 3837), (55, 3852), (57, 3867), (72, 4035), (75, 4080), (79, 4104), (82, 4140), (84, 4155), (86, 4206), (90, 4263),

Gene: Wachhund_4 Start: 3585, Stop: 4340, Start Num: 18

Candidate Starts for Wachhund_4:

(Start: 18 @3585 has 162 MA's), (26, 3645), (34, 3708), (Start: 39 @3741 has 1 MA's), (41, 3750), (42, 3759), (48, 3792), (53, 3825), (55, 3840), (57, 3855), (72, 4023), (75, 4068), (79, 4092), (82, 4128), (84, 4143), (86, 4194), (90, 4251),

Gene: Wee_4 Start: 3612, Stop: 4367, Start Num: 18

Candidate Starts for Wee_4:

(Start: 18 @3612 has 162 MA's), (26, 3672), (34, 3735), (Start: 39 @3768 has 1 MA's), (41, 3777), (42, 3786), (48, 3819), (53, 3852), (55, 3867), (57, 3882), (72, 4050), (75, 4095), (78, 4116), (79, 4119), (82, 4155), (84, 4170), (86, 4221), (90, 4278),

Gene: Whatsapiecost_4 Start: 3612, Stop: 4367, Start Num: 18

Candidate Starts for Whatsapiecost_4:

(Start: 18 @3612 has 162 MA's), (26, 3672), (34, 3735), (Start: 39 @3768 has 1 MA's), (41, 3777), (42, 3786), (48, 3819), (53, 3852), (55, 3867), (57, 3882), (72, 4050), (75, 4095), (78, 4116), (79, 4119), (82, 4155), (84, 4170), (86, 4221), (90, 4278),

Gene: Whouxphf_4 Start: 3585, Stop: 4340, Start Num: 18

Candidate Starts for Whouxphf_4:

(Start: 18 @3585 has 162 MA's), (26, 3645), (34, 3708), (Start: 39 @3741 has 1 MA's), (41, 3750), (42, 3759), (48, 3792), (53, 3825), (55, 3840), (57, 3855), (72, 4023), (75, 4068), (79, 4092), (82, 4128), (84, 4143), (86, 4194), (90, 4251),

Gene: WillSterrel_4 Start: 3600, Stop: 4355, Start Num: 18

Candidate Starts for WillSterrel_4:

(Start: 18 @3600 has 162 MA's), (26, 3660), (34, 3723), (Start: 39 @3756 has 1 MA's), (41, 3765), (42, 3774), (48, 3807), (53, 3840), (55, 3855), (57, 3870), (72, 4038), (75, 4083), (78, 4104), (79, 4107), (82, 4143), (84, 4158), (86, 4209), (90, 4266),

Gene: WilliamBoone_32 Start: 11401, Stop: 12318, Start Num: 4

Candidate Starts for WilliamBoone_32:

(Start: 3 @11398 has 7 MA's), (Start: 4 @11401 has 13 MA's), (17, 11527), (20, 11554), (29, 11626), (31, 11641), (35, 11653), (60, 11803), (62, 11857), (76, 12040),

Gene: XFactor_4 Start: 3612, Stop: 4367, Start Num: 18

Candidate Starts for XFactor_4:

(Start: 18 @3612 has 162 MA's), (26, 3672), (34, 3735), (Start: 39 @3768 has 1 MA's), (41, 3777), (42, 3786), (48, 3819), (53, 3852), (55, 3867), (57, 3882), (72, 4050), (75, 4095), (78, 4116), (79, 4119), (82, 4155), (84, 4170), (86, 4221), (90, 4278),

Gene: Yorick_4 Start: 3596, Stop: 4351, Start Num: 18

Candidate Starts for Yorick_4:

(Start: 18 @3596 has 162 MA's), (26, 3656), (32, 3707), (34, 3719), (Start: 39 @3752 has 1 MA's), (41, 3761), (42, 3770), (48, 3803), (53, 3836), (55, 3851), (57, 3866), (72, 4034), (75, 4079), (79, 4103), (82, 4139), (84, 4154), (86, 4205), (90, 4262),

Gene: Yvonnetastic_30 Start: 13748, Stop: 14671, Start Num: 3

Candidate Starts for Yvonnetastic_30:

(Start: 3 @13748 has 7 MA's), (Start: 4 @13751 has 13 MA's), (9, 13808), (11, 13832), (17, 13877), (19, 13889), (22, 13910), (23, 13931), (31, 13991), (57, 14132), (62, 14204), (80, 14432), (81, 14435),

Gene: Zerg_4 Start: 3597, Stop: 4352, Start Num: 18

Candidate Starts for Zerg_4:

(Start: 18 @3597 has 162 MA's), (26, 3657), (32, 3708), (34, 3720), (Start: 39 @3753 has 1 MA's), (41, 3762), (42, 3771), (48, 3804), (53, 3837), (55, 3852), (57, 3867), (72, 4035), (75, 4080), (79, 4104), (82, 4140), (84, 4155), (86, 4206), (90, 4263),

Gene: Zizzle_4 Start: 3600, Stop: 4355, Start Num: 18

Candidate Starts for Zizzle_4:

(Start: 18 @3600 has 162 MA's), (26, 3660), (32, 3711), (34, 3723), (Start: 39 @3756 has 1 MA's), (41, 3765), (42, 3774), (48, 3807), (53, 3840), (55, 3855), (57, 3870), (68, 3993), (72, 4038), (75, 4083), (79, 4107), (84, 4158), (86, 4209), (90, 4266),