

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 157683 Report

This analysis was run 04/13/24 on database version 558.

Pham number 157683 has 131 members, 10 are drafts.

Phages represented in each track:

- Track 1 : Whatsapiecost_63, Melissauren88_61, Phanphagia_59, Hamulus_63, Jabbawokkie_77, Girafales_71, Akhila_54, Fruitloop_59, Zapner_76, DotProduct_58, Florinda_74, Blarby_75, Quico_71, MilanaBonita_53
- Track 2 : SassyB_57, Juice456_64, Taj_67, Plumbus_65, Strokeseat_59, Kenuha5_60, Wee_67, DeadP_69, Phalconet_61, Totinger_65, Leozinho_62, Mozy_72, Spikelee_70, VRedHorse_63, Mantra_59, DillTech15_60, LittleShirley_63, Hlubikazi_59, SuperGrey_66, Batiatus_61, CaptainTrips_60, Shauna1_61, MilleniumForce_66, ShroomBoi_65, StAnnes_61, PopTart_57, Mandlovu_59, Hades_64, JalFarm20_76
- Track 3 : Scottish_61, Blexus_61, Stap_60, Polka14_61, OldBen_60
- Track 4 : Llij_59, Donkeykong_66, Ramsey_62, SG4_60, UncleRicky_62, Doomphist_63, Poenanya_63, XFactor_61, DirtMcgirt_62, Radiance_62, Krakatau_60, Alexphander_67, Enby_64, Dante_64, Lorde_63, Phatniss_61, PMC_60, Rockne_64, Drago_60, OwlsT2W_63
- Track 5 : Beakin_64
- Track 6 : Rita_64
- Track 7 : SiSi_61
- Track 8 : Ovechkin_63, Ms6_59, Bipolar_62
- Track 9 : Wachhund_64
- Track 10 : Ardmore_55
- Track 11 : TDanisky_70
- Track 12 : Byougenkin_62, Moonbeam_62, Emma_65
- Track 13 : DLane_58, Ogopogo_68
- Track 14 : KristaRAM_66, PhesterPhotato_64
- Track 15 : WillSterrel_64, Spartacus_65, IrishSherpFalk_64
- Track 16 : DosHalletts_69, Bobi_67
- Track 17 : ArcusAngelus_65, LunaStella_58, Chevrolet_71, Sparkdehlily_70, TChen_64
- Track 18 : Flathead_64
- Track 19 : Seagreen_62
- Track 20 : Bubbles123_59
- Track 21 : Filuzino_61
- Track 22 : Boomer_68
- Track 23 : Tweety_63
- Track 24 : Veteran_60, Starcevich_63
- Track 25 : Chuckly_66
- Track 26 : Squirty_65

- Track 27 : Zelink_75, Kalah2_72, Redno2_74, Ejimix_77, Yeet_73, Dallas_76, ThreeRngTarjay_75, HokkenD_70, Halley_79, Lucky2013_75, Schatzie_73
- Track 28 : Superphikiman_75, DmpstrDiver_78, Squint_78, Phoebus_80, Beem_77, Porcelain_77, NihilNomen_78, JuicyJay_76, EricMillard_77, MiaZeal_78, Ariel_77, Hughesyang_77
- Track 29 : Odette_76
- Track 30 : Nebkiss_148
- Track 31 : Nebkiss_152
- Track 32 : Gaia_156

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

The start number called the most often in the published annotations is 6, it was called in 83 of the 121 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Akhila_54, Alexphander_67, ArcusAngelus_65, Batiatus_61, Beakin_64, Blarby_75, Blexus_61, Bubbles123_59, CaptainTrips_60, Chevrolet_71, Dante_64, DeadP_69, DillTech15_60, DirtMcgirt_62, Donkeykong_66, Doomphist_63, DotProduct_58, Drago_60, Enby_64, Filuzino_61, Florinda_74, Fruitloop_59, Girafales_71, Hades_64, Hamulus_63, Hlubikazi_59, IrishSherpFalk_64, Jabbawokkie_77, JalFarm20_76, Juice456_64, Kenuha5_60, Krakatau_60, KristaRAM_66, Leozinho_62, LittleShirley_63, Llij_59, Lorde_63, LunaStella_58, Mandlovu_59, Mantra_59, Meliss Lauren88_61, MilanaBonita_53, MilleniumForce_66, Mozy_72, OldBen_60, OwlsT2W_63, PMC_60, Phalconet_61, Phanphagia_59, Phatniss_61, PhesterPhotato_64, Plumbus_65, Poenanya_63, Polka14_61, PopTart_57, Quico_71, Radiance_62, Ramsey_62, Rita_64, Rockne_64, SG4_60, SassyB_57, Scottish_61, Seagreen_62, Shauna1_61, ShroomBoi_65, SiSi_61, Sparkdehlily_70, Spartacus_65, Spikelee_70, Squirty_65, StAnnes_61, Stap_60, Starcevich_63, Strokeseat_59, SuperGrey_66, TChen_64, Taj_67, Totinger_65, Tweety_63, UncleRicky_62, VRedHorse_63, Veteran_60, Wachhund_64, Wee_67, Whatsapiecost_63, WillSterrel_64, XFactor_61, Zapner_76,

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

- Ardmore_55, Bipolar_62, Bobi_67, Boomer_68, Byougenkin_62, Chuckly_66, DLane_58, DosHalletts_69, Emma_65, Flathead_64, Moonbeam_62, Ms6_59, Ogopogo_68, Ovechkin_63, TDanisky_70,

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

- Ariel_77, Beem_77, Dallas_76, DmpstrDiver_78, Ejimix_77, EricMillard_77, Gaia_156, Halley_79, HokkenD_70, Hughesyang_77, JuicyJay_76, Kalah2_72, Lucky2013_75, MiaZeal_78, Nebkiss_148, Nebkiss_152, NihilNomen_78, Odette_76, Phoebus_80, Porcelain_77, Redno2_74, Schatzie_73, Squint_78, Superphikiman_75, ThreeRngTarjay_75, Yeet_73, Zelink_75,

Summary by start number:

Start 3:

- Found in 9 of 131 (6.9%) of genes in pham
- Manual Annotations of this start: 7 of 121

- Called 88.9% of time when present
- Phage (with cluster) where this start called: Bipolar_62 (F1), Byougenkin_62 (F1), Chuckly_66 (F1), Emma_65 (F1), Flathead_64 (F1), Moonbeam_62 (F1), Ms6_59 (F1), Ovechkin_63 (F1),

Start 5:

- Found in 95 of 131 (72.5%) of genes in pham
- Manual Annotations of this start: 5 of 121
- Called 7.4% of time when present
- Phage (with cluster) where this start called: Ardmore_55 (F1), Bobi_67 (F1), Boomer_68 (F1), DLane_58 (F1), DosHalletts_69 (F1), Ogopogo_68 (F1), TDanisky_70 (F1),

Start 6:

- Found in 104 of 131 (79.4%) of genes in pham
- Manual Annotations of this start: 83 of 121
- Called 85.6% of time when present
- Phage (with cluster) where this start called: Akhila_54 (F1), Alexphander_67 (F1), ArcusAngelus_65 (F1), Batiatus_61 (F1), Beakin_64 (F1), Blarby_75 (F), Blexus_61 (F1), Bubbles123_59 (F1), CaptainTrips_60 (F1), Chevrolet_71 (F1), Dante_64 (F1), DeadP_69 (F1), DillTech15_60 (F1), DirtMcgirt_62 (F1), Donkeykong_66 (F1), Doomphist_63 (F1), DotProduct_58 (F1), Drago_60 (F1), Enby_64 (F1), Filuzino_61 (F1), Florinda_74 (F1), Fruitloop_59 (F1), Girafales_71 (F1), Hades_64 (F1), Hamulus_63 (F1), Hlubikazi_59 (F1), IrishSherpFalk_64 (F1), Jabbawokkie_77 (F2), JalFarm20_76 (F1), Juice456_64 (F1), Kenuha5_60 (F1), Krakatau_60 (F1), KristaRAM_66 (F1), Leozinho_62 (F1), LittleShirley_63 (F1), Llij_59 (F1), Lorde_63 (F1), LunaStella_58 (F4), Mandlovu_59 (F1), Mantra_59 (F1), Melissauren88_61 (F1), MilanaBonita_53 (F1), MilleniumForce_66 (F1), Mozy_72 (F1), OldBen_60 (F1), OwlsT2W_63 (F1), PMC_60 (F1), Phalconet_61 (F1), Phanphagia_59 (F1), Phatniss_61 (F1), PhesterPhotato_64 (F1), Plumbus_65 (F1), Poenanya_63 (F1), Polka14_61 (F1), PopTart_57 (F1), Quico_71 (F1), Radiance_62 (F1), Ramsey_62 (F1), Rita_64 (F1), Rockne_64 (F1), SG4_60 (F1), SassyB_57 (F1), Scottish_61 (F1), Seagreen_62 (F1), Shauna1_61 (F1), ShroomBoi_65 (F1), SiSi_61 (F1), Sparkdehlily_70 (F1), Spartacus_65 (F1), Spikelee_70 (F1), Squirty_65 (F3), StAnnes_61 (F1), Stap_60 (F1), Starcevic_63 (F1), Strokeseat_59 (F1), SuperGrey_66 (F1), TChen_64 (F4), Taj_67 (F1), Totinger_65 (F1), Tweety_63 (F1), UncleRicky_62 (F1), VRedHorse_63 (F1), Veteran_60 (F1), Wachhund_64 (F1), Wee_67 (F1), Whatsapiecost_63 (F1), WillSterrel_64 (F1), XFactor_61 (F1), Zapner_76 (F2),

Start 7:

- Found in 24 of 131 (18.3%) of genes in pham
- No Manual Annotations of this start.
- Called 4.2% of time when present
- Phage (with cluster) where this start called: Odette_76 (J),

Start 10:

- Found in 24 of 131 (18.3%) of genes in pham
- Manual Annotations of this start: 11 of 121
- Called 45.8% of time when present
- Phage (with cluster) where this start called: Dallas_76 (J), Ejimix_77 (J), Halley_79 (J), HokkenD_70 (J), Kalah2_72 (J), Lucky2013_75 (J), Redno2_74 (J), Schatzie_73 (J), ThreeRngTarjay_75 (J), Yeet_73 (J), Zelink_75 (J),

Start 11:

- Found in 24 of 131 (18.3%) of genes in pham
- Manual Annotations of this start: 12 of 121
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Ariel_77 (J), Beem_77 (J), DmpstrDiver_78 (J), EricMillard_77 (J), Hughesyang_77 (J), JuicyJay_76 (J), MiaZeal_78 (J), NihilNomen_78 (J), Phoebus_80 (J), Porcelain_77 (J), Squint_78 (J), Superphikiman_75 (J),

Start 12:

- Found in 3 of 131 (2.3%) of genes in pham
- Manual Annotations of this start: 3 of 121
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gaia_156 (X), Nebkiss_148 (X), Nebkiss_152 (X),

Summary by clusters:

There are 7 clusters represented in this pham: F1, F2, F3, F4, F, J, X,

Info for manual annotations of cluster F1:

- Start number 3 was manually annotated 7 times for cluster F1.
- Start number 5 was manually annotated 5 times for cluster F1.
- Start number 6 was manually annotated 79 times for cluster F1.

Info for manual annotations of cluster F2:

- Start number 6 was manually annotated 2 times for cluster F2.

Info for manual annotations of cluster F3:

- Start number 6 was manually annotated 1 time for cluster F3.

Info for manual annotations of cluster F4:

- Start number 6 was manually annotated 1 time for cluster F4.

Info for manual annotations of cluster J:

- Start number 10 was manually annotated 11 times for cluster J.
- Start number 11 was manually annotated 12 times for cluster J.

Info for manual annotations of cluster X:

- Start number 12 was manually annotated 3 times for cluster X.

Gene Information:

Gene: Akhila_54 Start: 37131, Stop: 37376, Start Num: 6

Candidate Starts for Akhila_54:

(Start: 5 @37122 has 5 MA's), (Start: 6 @37131 has 83 MA's), (14, 37248), (17, 37299), (19, 37323), (21, 37335), (26, 37365),

Gene: Alexphander_67 Start: 41450, Stop: 41710, Start Num: 6

Candidate Starts for Alexphander_67:

(Start: 5 @41441 has 5 MA's), (Start: 6 @41450 has 83 MA's), (14, 41567), (17, 41618), (19, 41642), (21, 41654),

Gene: ArcusAngelus_65 Start: 41801, Stop: 42043, Start Num: 6

Candidate Starts for ArcusAngelus_65:

(Start: 5 @41792 has 5 MA's), (Start: 6 @41801 has 83 MA's), (14, 41918), (17, 41969), (19, 41993), (21, 42005), (26, 42032),

Gene: Ardmore_55 Start: 39208, Stop: 39477, Start Num: 5

Candidate Starts for Ardmore_55:

(Start: 5 @39208 has 5 MA's), (Start: 6 @39217 has 83 MA's), (14, 39334), (17, 39385), (19, 39409),

Gene: Ariel_77 Start: 48076, Stop: 47840, Start Num: 11

Candidate Starts for Ariel_77:

(4, 48124), (7, 48091), (Start: 10 @48079 has 11 MA's), (Start: 11 @48076 has 12 MA's), (14, 47980), (15, 47956), (17, 47929), (19, 47905), (21, 47893), (23, 47866),

Gene: Batiatus_61 Start: 41091, Stop: 41336, Start Num: 6

Candidate Starts for Batiatus_61:

(Start: 5 @41082 has 5 MA's), (Start: 6 @41091 has 83 MA's), (14, 41208), (17, 41259), (19, 41283), (21, 41295), (26, 41325),

Gene: Beakin_64 Start: 40412, Stop: 40657, Start Num: 6

Candidate Starts for Beakin_64:

(Start: 5 @40403 has 5 MA's), (Start: 6 @40412 has 83 MA's), (14, 40529), (17, 40580), (19, 40604), (21, 40616), (26, 40646),

Gene: Beem_77 Start: 52353, Stop: 52117, Start Num: 11

Candidate Starts for Beem_77:

(4, 52401), (7, 52368), (Start: 10 @52356 has 11 MA's), (Start: 11 @52353 has 12 MA's), (14, 52257), (15, 52233), (17, 52206), (19, 52182), (21, 52170), (23, 52143),

Gene: Bipolar_62 Start: 40980, Stop: 41258, Start Num: 3

Candidate Starts for Bipolar_62:

(1, 40953), (Start: 3 @40980 has 7 MA's), (Start: 6 @41013 has 83 MA's), (14, 41130), (17, 41181), (19, 41205), (21, 41217), (25, 41247),

Gene: Blarby_75 Start: 42860, Stop: 43105, Start Num: 6

Candidate Starts for Blarby_75:

(Start: 5 @42851 has 5 MA's), (Start: 6 @42860 has 83 MA's), (14, 42977), (17, 43028), (19, 43052), (21, 43064), (26, 43094),

Gene: Blexus_61 Start: 41606, Stop: 41848, Start Num: 6

Candidate Starts for Blexus_61:

(Start: 5 @41597 has 5 MA's), (Start: 6 @41606 has 83 MA's), (14, 41723), (15, 41747), (17, 41774), (19, 41798), (21, 41810), (26, 41837),

Gene: Bobi_67 Start: 42685, Stop: 42939, Start Num: 5

Candidate Starts for Bobi_67:

(Start: 5 @42685 has 5 MA's), (Start: 6 @42694 has 83 MA's), (14, 42811), (17, 42862), (19, 42886), (21, 42898), (26, 42928),

Gene: Boomer_68 Start: 43345, Stop: 43614, Start Num: 5

Candidate Starts for Boomer_68:

(Start: 5 @43345 has 5 MA's), (Start: 6 @43354 has 83 MA's), (14, 43471), (17, 43522), (19, 43546), (21, 43558),

Gene: Bubbles123_59 Start: 41000, Stop: 41260, Start Num: 6

Candidate Starts for Bubbles123_59:

(Start: 5 @40991 has 5 MA's), (Start: 6 @41000 has 83 MA's), (14, 41117), (17, 41168), (19, 41192), (21, 41204),

Gene: Byougenkin_62 Start: 40862, Stop: 41137, Start Num: 3

Candidate Starts for Byougenkin_62:

(1, 40835), (Start: 3 @40862 has 7 MA's), (Start: 6 @40895 has 83 MA's), (14, 41012), (15, 41036), (17, 41063), (19, 41087), (21, 41099), (25, 41126),

Gene: CaptainTrips_60 Start: 40536, Stop: 40778, Start Num: 6

Candidate Starts for CaptainTrips_60:

(Start: 5 @40527 has 5 MA's), (Start: 6 @40536 has 83 MA's), (14, 40653), (17, 40704), (19, 40728), (21, 40740), (26, 40767),

Gene: Chevrolet_71 Start: 41802, Stop: 42044, Start Num: 6

Candidate Starts for Chevrolet_71:

(Start: 5 @41793 has 5 MA's), (Start: 6 @41802 has 83 MA's), (14, 41919), (17, 41970), (19, 41994), (21, 42006), (26, 42033),

Gene: Chuckly_66 Start: 41790, Stop: 42083, Start Num: 3

Candidate Starts for Chuckly_66:

(2, 41781), (Start: 3 @41790 has 7 MA's), (Start: 6 @41823 has 83 MA's), (14, 41940), (17, 41991), (19, 42015), (21, 42027),

Gene: DLane_58 Start: 39732, Stop: 39983, Start Num: 5

Candidate Starts for DLane_58:

(Start: 5 @39732 has 5 MA's), (Start: 6 @39741 has 83 MA's), (14, 39858), (17, 39909), (19, 39933), (21, 39945), (26, 39972),

Gene: Dallas_76 Start: 51277, Stop: 51038, Start Num: 10

Candidate Starts for Dallas_76:

(4, 51322), (7, 51289), (Start: 10 @51277 has 11 MA's), (Start: 11 @51274 has 12 MA's), (14, 51178), (15, 51154), (17, 51127), (19, 51103), (21, 51091), (23, 51064),

Gene: Dante_64 Start: 40964, Stop: 41224, Start Num: 6

Candidate Starts for Dante_64:

(Start: 5 @40955 has 5 MA's), (Start: 6 @40964 has 83 MA's), (14, 41081), (17, 41132), (19, 41156), (21, 41168),

Gene: DeadP_69 Start: 43608, Stop: 43850, Start Num: 6

Candidate Starts for DeadP_69:

(Start: 5 @43599 has 5 MA's), (Start: 6 @43608 has 83 MA's), (14, 43725), (17, 43776), (19, 43800), (21, 43812), (26, 43839),

Gene: DillTech15_60 Start: 39620, Stop: 39865, Start Num: 6

Candidate Starts for DillTech15_60:

(Start: 5 @39611 has 5 MA's), (Start: 6 @39620 has 83 MA's), (14, 39737), (17, 39788), (19, 39812), (21, 39824), (26, 39854),

Gene: DirtMcgirt_62 Start: 39701, Stop: 39982, Start Num: 6

Candidate Starts for DirtMcgirt_62:

(Start: 5 @39692 has 5 MA's), (Start: 6 @39701 has 83 MA's), (14, 39839), (17, 39890), (19, 39914), (21, 39926),

Gene: DmpstrDiver_78 Start: 51700, Stop: 51464, Start Num: 11

Candidate Starts for DmpstrDiver_78:

(4, 51748), (7, 51715), (Start: 10 @51703 has 11 MA's), (Start: 11 @51700 has 12 MA's), (14, 51604), (15, 51580), (17, 51553), (19, 51529), (21, 51517), (23, 51490),

Gene: Donkeykong_66 Start: 43636, Stop: 43896, Start Num: 6

Candidate Starts for Donkeykong_66:

(Start: 5 @43627 has 5 MA's), (Start: 6 @43636 has 83 MA's), (14, 43753), (17, 43804), (19, 43828), (21, 43840),

Gene: Doomphist_63 Start: 42131, Stop: 42391, Start Num: 6

Candidate Starts for Doomphist_63:

(Start: 5 @42122 has 5 MA's), (Start: 6 @42131 has 83 MA's), (14, 42248), (17, 42299), (19, 42323), (21, 42335),

Gene: DosHalletts_69 Start: 42480, Stop: 42731, Start Num: 5

Candidate Starts for DosHalletts_69:

(Start: 5 @42480 has 5 MA's), (Start: 6 @42489 has 83 MA's), (14, 42606), (17, 42657), (19, 42681), (21, 42693), (26, 42720),

Gene: DotProduct_58 Start: 39968, Stop: 40213, Start Num: 6

Candidate Starts for DotProduct_58:

(Start: 5 @39959 has 5 MA's), (Start: 6 @39968 has 83 MA's), (14, 40085), (17, 40136), (19, 40160), (21, 40172), (26, 40202),

Gene: Drago_60 Start: 39704, Stop: 39985, Start Num: 6

Candidate Starts for Drago_60:

(Start: 5 @39695 has 5 MA's), (Start: 6 @39704 has 83 MA's), (14, 39842), (17, 39893), (19, 39917), (21, 39929),

Gene: Ejimix_77 Start: 53145, Stop: 52906, Start Num: 10

Candidate Starts for Ejimix_77:

(4, 53190), (7, 53157), (Start: 10 @53145 has 11 MA's), (Start: 11 @53142 has 12 MA's), (14, 53046), (15, 53022), (17, 52995), (19, 52971), (21, 52959), (23, 52932),

Gene: Emma_65 Start: 40892, Stop: 41170, Start Num: 3

Candidate Starts for Emma_65:

(1, 40865), (Start: 3 @40892 has 7 MA's), (Start: 6 @40925 has 83 MA's), (14, 41042), (15, 41066), (17, 41093), (19, 41117), (21, 41129), (25, 41159),

Gene: Enby_64 Start: 39980, Stop: 40261, Start Num: 6

Candidate Starts for Enby_64:

(Start: 5 @39971 has 5 MA's), (Start: 6 @39980 has 83 MA's), (14, 40118), (17, 40169), (19, 40193), (21, 40205),

Gene: EricMillard_77 Start: 52345, Stop: 52109, Start Num: 11
Candidate Starts for EricMillard_77:
(4, 52393), (7, 52360), (Start: 10 @52348 has 11 MA's), (Start: 11 @52345 has 12 MA's), (14, 52249),
(15, 52225), (17, 52198), (19, 52174), (21, 52162), (23, 52135),

Gene: Filuzino_61 Start: 40043, Stop: 40288, Start Num: 6
Candidate Starts for Filuzino_61:
(Start: 5 @40034 has 5 MA's), (Start: 6 @40043 has 83 MA's), (14, 40160), (15, 40184), (17, 40211),
(19, 40235), (21, 40247), (26, 40277),

Gene: Flathead_64 Start: 41649, Stop: 41942, Start Num: 3
Candidate Starts for Flathead_64:
(1, 41622), (Start: 3 @41649 has 7 MA's), (Start: 6 @41682 has 83 MA's), (14, 41799), (17, 41850),
(19, 41874), (21, 41886),

Gene: Florinda_74 Start: 43140, Stop: 43385, Start Num: 6
Candidate Starts for Florinda_74:
(Start: 5 @43131 has 5 MA's), (Start: 6 @43140 has 83 MA's), (14, 43257), (17, 43308), (19, 43332),
(21, 43344), (26, 43374),

Gene: Fruitloop_59 Start: 41357, Stop: 41602, Start Num: 6
Candidate Starts for Fruitloop_59:
(Start: 5 @41348 has 5 MA's), (Start: 6 @41357 has 83 MA's), (14, 41474), (17, 41525), (19, 41549),
(21, 41561), (26, 41591),

Gene: Gaia_156 Start: 80770, Stop: 80540, Start Num: 12
Candidate Starts for Gaia_156:
(8, 80782), (Start: 12 @80770 has 3 MA's), (24, 80554), (27, 80548),

Gene: Girafales_71 Start: 42931, Stop: 43176, Start Num: 6
Candidate Starts for Girafales_71:
(Start: 5 @42922 has 5 MA's), (Start: 6 @42931 has 83 MA's), (14, 43048), (17, 43099), (19, 43123),
(21, 43135), (26, 43165),

Gene: Hades_64 Start: 41858, Stop: 42103, Start Num: 6
Candidate Starts for Hades_64:
(Start: 5 @41849 has 5 MA's), (Start: 6 @41858 has 83 MA's), (14, 41975), (17, 42026), (19, 42050),
(21, 42062), (26, 42092),

Gene: Halley_79 Start: 52356, Stop: 52117, Start Num: 10
Candidate Starts for Halley_79:
(4, 52401), (7, 52368), (Start: 10 @52356 has 11 MA's), (Start: 11 @52353 has 12 MA's), (14, 52257),
(15, 52233), (17, 52206), (19, 52182), (21, 52170), (23, 52143),

Gene: Hamulus_63 Start: 41500, Stop: 41745, Start Num: 6
Candidate Starts for Hamulus_63:
(Start: 5 @41491 has 5 MA's), (Start: 6 @41500 has 83 MA's), (14, 41617), (17, 41668), (19, 41692),
(21, 41704), (26, 41734),

Gene: Hlubikazi_59 Start: 39078, Stop: 39323, Start Num: 6
Candidate Starts for Hlubikazi_59:
(Start: 5 @39069 has 5 MA's), (Start: 6 @39078 has 83 MA's), (14, 39195), (17, 39246), (19, 39270),
(21, 39282), (26, 39312),

Gene: HokkenD_70 Start: 50625, Stop: 50386, Start Num: 10

Candidate Starts for HokkenD_70:

(4, 50670), (7, 50637), (Start: 10 @50625 has 11 MA's), (Start: 11 @50622 has 12 MA's), (14, 50526), (15, 50502), (17, 50475), (19, 50451), (21, 50439), (23, 50412),

Gene: Hughesyang_77 Start: 52311, Stop: 52075, Start Num: 11

Candidate Starts for Hughesyang_77:

(4, 52359), (7, 52326), (Start: 10 @52314 has 11 MA's), (Start: 11 @52311 has 12 MA's), (14, 52215), (15, 52191), (17, 52164), (19, 52140), (21, 52128), (23, 52101),

Gene: IrishSherpFalk_64 Start: 42715, Stop: 42975, Start Num: 6

Candidate Starts for IrishSherpFalk_64:

(Start: 5 @42706 has 5 MA's), (Start: 6 @42715 has 83 MA's), (14, 42832), (15, 42856), (17, 42883), (19, 42907), (21, 42919),

Gene: Jabbawokkie_77 Start: 42780, Stop: 43025, Start Num: 6

Candidate Starts for Jabbawokkie_77:

(Start: 5 @42771 has 5 MA's), (Start: 6 @42780 has 83 MA's), (14, 42897), (17, 42948), (19, 42972), (21, 42984), (26, 43014),

Gene: JalFarm20_76 Start: 45182, Stop: 45427, Start Num: 6

Candidate Starts for JalFarm20_76:

(Start: 5 @45173 has 5 MA's), (Start: 6 @45182 has 83 MA's), (14, 45299), (17, 45350), (19, 45374), (21, 45386), (26, 45416),

Gene: Juice456_64 Start: 43138, Stop: 43383, Start Num: 6

Candidate Starts for Juice456_64:

(Start: 5 @43129 has 5 MA's), (Start: 6 @43138 has 83 MA's), (14, 43255), (17, 43306), (19, 43330), (21, 43342), (26, 43372),

Gene: JuicyJay_76 Start: 53487, Stop: 53251, Start Num: 11

Candidate Starts for JuicyJay_76:

(4, 53535), (7, 53502), (Start: 10 @53490 has 11 MA's), (Start: 11 @53487 has 12 MA's), (14, 53391), (15, 53367), (17, 53340), (19, 53316), (21, 53304), (23, 53277),

Gene: Kalah2_72 Start: 51649, Stop: 51410, Start Num: 10

Candidate Starts for Kalah2_72:

(4, 51694), (7, 51661), (Start: 10 @51649 has 11 MA's), (Start: 11 @51646 has 12 MA's), (14, 51550), (15, 51526), (17, 51499), (19, 51475), (21, 51463), (23, 51436),

Gene: Kenuha5_60 Start: 39618, Stop: 39863, Start Num: 6

Candidate Starts for Kenuha5_60:

(Start: 5 @39609 has 5 MA's), (Start: 6 @39618 has 83 MA's), (14, 39735), (17, 39786), (19, 39810), (21, 39822), (26, 39852),

Gene: Krakatau_60 Start: 40313, Stop: 40573, Start Num: 6

Candidate Starts for Krakatau_60:

(Start: 5 @40304 has 5 MA's), (Start: 6 @40313 has 83 MA's), (14, 40430), (17, 40481), (19, 40505), (21, 40517),

Gene: KristaRAM_66 Start: 43507, Stop: 43752, Start Num: 6

Candidate Starts for KristaRAM_66:

(Start: 5 @43498 has 5 MA's), (Start: 6 @43507 has 83 MA's), (14, 43624), (15, 43648), (17, 43675), (19, 43699), (21, 43711), (26, 43741),

Gene: Leozinho_62 Start: 40337, Stop: 40579, Start Num: 6

Candidate Starts for Leozinho_62:

(Start: 5 @40328 has 5 MA's), (Start: 6 @40337 has 83 MA's), (14, 40454), (17, 40505), (19, 40529), (21, 40541), (26, 40568),

Gene: LittleShirley_63 Start: 41497, Stop: 41742, Start Num: 6

Candidate Starts for LittleShirley_63:

(Start: 5 @41488 has 5 MA's), (Start: 6 @41497 has 83 MA's), (14, 41614), (17, 41665), (19, 41689), (21, 41701), (26, 41731),

Gene: Llij_59 Start: 39858, Stop: 40139, Start Num: 6

Candidate Starts for Llij_59:

(Start: 5 @39849 has 5 MA's), (Start: 6 @39858 has 83 MA's), (14, 39996), (17, 40047), (19, 40071), (21, 40083),

Gene: Lorde_63 Start: 39145, Stop: 39426, Start Num: 6

Candidate Starts for Lorde_63:

(Start: 5 @39136 has 5 MA's), (Start: 6 @39145 has 83 MA's), (14, 39283), (17, 39334), (19, 39358), (21, 39370),

Gene: Lucky2013_75 Start: 48095, Stop: 47856, Start Num: 10

Candidate Starts for Lucky2013_75:

(4, 48140), (7, 48107), (Start: 10 @48095 has 11 MA's), (Start: 11 @48092 has 12 MA's), (14, 47996), (15, 47972), (17, 47945), (19, 47921), (21, 47909), (23, 47882),

Gene: LunaStella_58 Start: 40537, Stop: 40782, Start Num: 6

Candidate Starts for LunaStella_58:

(Start: 5 @40528 has 5 MA's), (Start: 6 @40537 has 83 MA's), (14, 40654), (17, 40705), (19, 40729), (21, 40741), (26, 40771),

Gene: Mandlovu_59 Start: 39020, Stop: 39265, Start Num: 6

Candidate Starts for Mandlovu_59:

(Start: 5 @39011 has 5 MA's), (Start: 6 @39020 has 83 MA's), (14, 39137), (17, 39188), (19, 39212), (21, 39224), (26, 39254),

Gene: Mantra_59 Start: 39905, Stop: 40150, Start Num: 6

Candidate Starts for Mantra_59:

(Start: 5 @39896 has 5 MA's), (Start: 6 @39905 has 83 MA's), (14, 40022), (17, 40073), (19, 40097), (21, 40109), (26, 40139),

Gene: Melissauren88_61 Start: 40538, Stop: 40783, Start Num: 6

Candidate Starts for Melissauren88_61:

(Start: 5 @40529 has 5 MA's), (Start: 6 @40538 has 83 MA's), (14, 40655), (17, 40706), (19, 40730), (21, 40742), (26, 40772),

Gene: MiaZeal_78 Start: 48748, Stop: 48512, Start Num: 11

Candidate Starts for MiaZeal_78:

(4, 48796), (7, 48763), (Start: 10 @48751 has 11 MA's), (Start: 11 @48748 has 12 MA's), (14, 48652), (15, 48628), (17, 48601), (19, 48577), (21, 48565), (23, 48538),

Gene: MilanaBonita_53 Start: 37131, Stop: 37376, Start Num: 6
Candidate Starts for MilanaBonita_53:
(Start: 5 @37122 has 5 MA's), (Start: 6 @37131 has 83 MA's), (14, 37248), (17, 37299), (19, 37323),
(21, 37335), (26, 37365),

Gene: MilleniumForce_66 Start: 43226, Stop: 43471, Start Num: 6
Candidate Starts for MilleniumForce_66:
(Start: 5 @43217 has 5 MA's), (Start: 6 @43226 has 83 MA's), (14, 43343), (17, 43394), (19, 43418),
(21, 43430), (26, 43460),

Gene: Moonbeam_62 Start: 40821, Stop: 41099, Start Num: 3
Candidate Starts for Moonbeam_62:
(1, 40794), (Start: 3 @40821 has 7 MA's), (Start: 6 @40854 has 83 MA's), (14, 40971), (15, 40995),
(17, 41022), (19, 41046), (21, 41058), (25, 41088),

Gene: Mozy_72 Start: 43539, Stop: 43784, Start Num: 6
Candidate Starts for Mozy_72:
(Start: 5 @43530 has 5 MA's), (Start: 6 @43539 has 83 MA's), (14, 43656), (17, 43707), (19, 43731),
(21, 43743), (26, 43773),

Gene: Ms6_59 Start: 36408, Stop: 36686, Start Num: 3
Candidate Starts for Ms6_59:
(1, 36381), (Start: 3 @36408 has 7 MA's), (Start: 6 @36441 has 83 MA's), (14, 36558), (17, 36609),
(19, 36633), (21, 36645), (25, 36675),

Gene: Nebkiss_148 Start: 74972, Stop: 74739, Start Num: 12
Candidate Starts for Nebkiss_148:
(9, 74981), (Start: 12 @74972 has 3 MA's), (13, 74891), (16, 74837), (20, 74801), (22, 74780), (27,
74759),

Gene: Nebkiss_152 Start: 75886, Stop: 75656, Start Num: 12
Candidate Starts for Nebkiss_152:
(Start: 12 @75886 has 3 MA's), (24, 75670), (27, 75664),

Gene: NihilNomen_78 Start: 52440, Stop: 52204, Start Num: 11
Candidate Starts for NihilNomen_78:
(4, 52488), (7, 52455), (Start: 10 @52443 has 11 MA's), (Start: 11 @52440 has 12 MA's), (14, 52344),
(15, 52320), (17, 52293), (19, 52269), (21, 52257), (23, 52230),

Gene: Odette_76 Start: 51497, Stop: 51246, Start Num: 7
Candidate Starts for Odette_76:
(4, 51530), (7, 51497), (Start: 10 @51485 has 11 MA's), (Start: 11 @51482 has 12 MA's), (14, 51386),
(15, 51362), (17, 51335), (19, 51311), (21, 51299), (23, 51272),

Gene: Ogopogo_68 Start: 41513, Stop: 41767, Start Num: 5
Candidate Starts for Ogopogo_68:
(Start: 5 @41513 has 5 MA's), (Start: 6 @41522 has 83 MA's), (14, 41639), (17, 41690), (19, 41714),
(21, 41726), (26, 41756),

Gene: OldBen_60 Start: 40876, Stop: 41118, Start Num: 6
Candidate Starts for OldBen_60:
(Start: 5 @40867 has 5 MA's), (Start: 6 @40876 has 83 MA's), (14, 40993), (15, 41017), (17, 41044),
(19, 41068), (21, 41080), (26, 41107),

Gene: Ovechkin_63 Start: 41821, Stop: 42099, Start Num: 3

Candidate Starts for Ovechkin_63:

(1, 41794), (Start: 3 @41821 has 7 MA's), (Start: 6 @41854 has 83 MA's), (14, 41971), (17, 42022), (19, 42046), (21, 42058), (25, 42088),

Gene: OwlsT2W_63 Start: 41188, Stop: 41448, Start Num: 6

Candidate Starts for OwlsT2W_63:

(Start: 5 @41179 has 5 MA's), (Start: 6 @41188 has 83 MA's), (14, 41305), (17, 41356), (19, 41380), (21, 41392),

Gene: PMC_60 Start: 41578, Stop: 41838, Start Num: 6

Candidate Starts for PMC_60:

(Start: 5 @41569 has 5 MA's), (Start: 6 @41578 has 83 MA's), (14, 41695), (17, 41746), (19, 41770), (21, 41782),

Gene: Phalconet_61 Start: 39809, Stop: 40051, Start Num: 6

Candidate Starts for Phalconet_61:

(Start: 5 @39800 has 5 MA's), (Start: 6 @39809 has 83 MA's), (14, 39926), (17, 39977), (19, 40001), (21, 40013), (26, 40040),

Gene: Phanphagia_59 Start: 41400, Stop: 41645, Start Num: 6

Candidate Starts for Phanphagia_59:

(Start: 5 @41391 has 5 MA's), (Start: 6 @41400 has 83 MA's), (14, 41517), (17, 41568), (19, 41592), (21, 41604), (26, 41634),

Gene: Phatniss_61 Start: 40953, Stop: 41234, Start Num: 6

Candidate Starts for Phatniss_61:

(Start: 5 @40944 has 5 MA's), (Start: 6 @40953 has 83 MA's), (14, 41091), (17, 41142), (19, 41166), (21, 41178),

Gene: PhesterPhotato_64 Start: 40626, Stop: 40871, Start Num: 6

Candidate Starts for PhesterPhotato_64:

(Start: 5 @40617 has 5 MA's), (Start: 6 @40626 has 83 MA's), (14, 40743), (15, 40767), (17, 40794), (19, 40818), (21, 40830), (26, 40860),

Gene: Phoebus_80 Start: 53622, Stop: 53386, Start Num: 11

Candidate Starts for Phoebus_80:

(4, 53670), (7, 53637), (Start: 10 @53625 has 11 MA's), (Start: 11 @53622 has 12 MA's), (14, 53526), (15, 53502), (17, 53475), (19, 53451), (21, 53439), (23, 53412),

Gene: Plumbus_65 Start: 41277, Stop: 41522, Start Num: 6

Candidate Starts for Plumbus_65:

(Start: 5 @41268 has 5 MA's), (Start: 6 @41277 has 83 MA's), (14, 41394), (17, 41445), (19, 41469), (21, 41481), (26, 41511),

Gene: Poenanya_63 Start: 42131, Stop: 42391, Start Num: 6

Candidate Starts for Poenanya_63:

(Start: 5 @42122 has 5 MA's), (Start: 6 @42131 has 83 MA's), (14, 42248), (17, 42299), (19, 42323), (21, 42335),

Gene: Polka14_61 Start: 40519, Stop: 40761, Start Num: 6

Candidate Starts for Polka14_61:

(Start: 5 @40510 has 5 MA's), (Start: 6 @40519 has 83 MA's), (14, 40636), (15, 40660), (17, 40687), (19, 40711), (21, 40723), (26, 40750),

Gene: PopTart_57 Start: 39434, Stop: 39676, Start Num: 6

Candidate Starts for PopTart_57:

(Start: 5 @39425 has 5 MA's), (Start: 6 @39434 has 83 MA's), (14, 39551), (17, 39602), (19, 39626), (21, 39638), (26, 39665),

Gene: Porcelain_77 Start: 48748, Stop: 48512, Start Num: 11

Candidate Starts for Porcelain_77:

(4, 48796), (7, 48763), (Start: 10 @48751 has 11 MA's), (Start: 11 @48748 has 12 MA's), (14, 48652), (15, 48628), (17, 48601), (19, 48577), (21, 48565), (23, 48538),

Gene: Quico_71 Start: 42960, Stop: 43205, Start Num: 6

Candidate Starts for Quico_71:

(Start: 5 @42951 has 5 MA's), (Start: 6 @42960 has 83 MA's), (14, 43077), (17, 43128), (19, 43152), (21, 43164), (26, 43194),

Gene: Radiance_62 Start: 41069, Stop: 41329, Start Num: 6

Candidate Starts for Radiance_62:

(Start: 5 @41060 has 5 MA's), (Start: 6 @41069 has 83 MA's), (14, 41186), (17, 41237), (19, 41261), (21, 41273),

Gene: Ramsey_62 Start: 41382, Stop: 41642, Start Num: 6

Candidate Starts for Ramsey_62:

(Start: 5 @41373 has 5 MA's), (Start: 6 @41382 has 83 MA's), (14, 41499), (17, 41550), (19, 41574), (21, 41586),

Gene: Redno2_74 Start: 49239, Stop: 49000, Start Num: 10

Candidate Starts for Redno2_74:

(4, 49284), (7, 49251), (Start: 10 @49239 has 11 MA's), (Start: 11 @49236 has 12 MA's), (14, 49140), (15, 49116), (17, 49089), (19, 49065), (21, 49053), (23, 49026),

Gene: Rita_64 Start: 39681, Stop: 39941, Start Num: 6

Candidate Starts for Rita_64:

(Start: 5 @39672 has 5 MA's), (Start: 6 @39681 has 83 MA's), (14, 39798), (17, 39849), (18, 39852), (19, 39873), (21, 39885),

Gene: Rockne_64 Start: 41590, Stop: 41850, Start Num: 6

Candidate Starts for Rockne_64:

(Start: 5 @41581 has 5 MA's), (Start: 6 @41590 has 83 MA's), (14, 41707), (17, 41758), (19, 41782), (21, 41794),

Gene: SG4_60 Start: 40468, Stop: 40728, Start Num: 6

Candidate Starts for SG4_60:

(Start: 5 @40459 has 5 MA's), (Start: 6 @40468 has 83 MA's), (14, 40585), (17, 40636), (19, 40660), (21, 40672),

Gene: SassyB_57 Start: 39434, Stop: 39676, Start Num: 6

Candidate Starts for SassyB_57:

(Start: 5 @39425 has 5 MA's), (Start: 6 @39434 has 83 MA's), (14, 39551), (17, 39602), (19, 39626), (21, 39638), (26, 39665),

Gene: Schatzie_73 Start: 51232, Stop: 50993, Start Num: 10
Candidate Starts for Schatzie_73:
(4, 51277), (7, 51244), (Start: 10 @51232 has 11 MA's), (Start: 11 @51229 has 12 MA's), (14, 51133),
(15, 51109), (17, 51082), (19, 51058), (21, 51046), (23, 51019),

Gene: Scottish_61 Start: 40596, Stop: 40838, Start Num: 6
Candidate Starts for Scottish_61:
(Start: 5 @40587 has 5 MA's), (Start: 6 @40596 has 83 MA's), (14, 40713), (15, 40737), (17, 40764),
(19, 40788), (21, 40800), (26, 40827),

Gene: Seagreen_62 Start: 40771, Stop: 41031, Start Num: 6
Candidate Starts for Seagreen_62:
(Start: 5 @40762 has 5 MA's), (Start: 6 @40771 has 83 MA's), (14, 40888), (17, 40939), (19, 40963),
(21, 40975),

Gene: Shauna1_61 Start: 41309, Stop: 41554, Start Num: 6
Candidate Starts for Shauna1_61:
(Start: 5 @41300 has 5 MA's), (Start: 6 @41309 has 83 MA's), (14, 41426), (17, 41477), (19, 41501),
(21, 41513), (26, 41543),

Gene: ShroomBoi_65 Start: 41918, Stop: 42163, Start Num: 6
Candidate Starts for ShroomBoi_65:
(Start: 5 @41909 has 5 MA's), (Start: 6 @41918 has 83 MA's), (14, 42035), (17, 42086), (19, 42110),
(21, 42122), (26, 42152),

Gene: SiSi_61 Start: 40370, Stop: 40630, Start Num: 6
Candidate Starts for SiSi_61:
(Start: 5 @40361 has 5 MA's), (Start: 6 @40370 has 83 MA's), (17, 40538), (19, 40562), (21, 40574),

Gene: Sparkdehlily_70 Start: 42431, Stop: 42676, Start Num: 6
Candidate Starts for Sparkdehlily_70:
(Start: 5 @42422 has 5 MA's), (Start: 6 @42431 has 83 MA's), (14, 42548), (17, 42599), (19, 42623),
(21, 42635), (26, 42665),

Gene: Spartacus_65 Start: 41631, Stop: 41891, Start Num: 6
Candidate Starts for Spartacus_65:
(Start: 5 @41622 has 5 MA's), (Start: 6 @41631 has 83 MA's), (14, 41748), (15, 41772), (17, 41799),
(19, 41823), (21, 41835),

Gene: Spikelee_70 Start: 43245, Stop: 43490, Start Num: 6
Candidate Starts for Spikelee_70:
(Start: 5 @43236 has 5 MA's), (Start: 6 @43245 has 83 MA's), (14, 43362), (17, 43413), (19, 43437),
(21, 43449), (26, 43479),

Gene: Squint_78 Start: 48867, Stop: 48631, Start Num: 11
Candidate Starts for Squint_78:
(4, 48915), (7, 48882), (Start: 10 @48870 has 11 MA's), (Start: 11 @48867 has 12 MA's), (14, 48771),
(15, 48747), (17, 48720), (19, 48696), (21, 48684), (23, 48657),

Gene: Squirty_65 Start: 42279, Stop: 42521, Start Num: 6
Candidate Starts for Squirty_65:
(Start: 5 @42270 has 5 MA's), (Start: 6 @42279 has 83 MA's), (15, 42420), (17, 42447), (19, 42471),
(21, 42483), (26, 42510),

Gene: StAnnes_61 Start: 41487, Stop: 41732, Start Num: 6

Candidate Starts for StAnnes_61:

(Start: 5 @41478 has 5 MA's), (Start: 6 @41487 has 83 MA's), (14, 41604), (17, 41655), (19, 41679), (21, 41691), (26, 41721),

Gene: Stap_60 Start: 40529, Stop: 40771, Start Num: 6

Candidate Starts for Stap_60:

(Start: 5 @40520 has 5 MA's), (Start: 6 @40529 has 83 MA's), (14, 40646), (15, 40670), (17, 40697), (19, 40721), (21, 40733), (26, 40760),

Gene: Starcevich_63 Start: 41127, Stop: 41372, Start Num: 6

Candidate Starts for Starcevich_63:

(Start: 5 @41118 has 5 MA's), (Start: 6 @41127 has 83 MA's), (17, 41295), (18, 41298), (19, 41319), (21, 41331), (26, 41361),

Gene: Strokeseat_59 Start: 39077, Stop: 39322, Start Num: 6

Candidate Starts for Strokeseat_59:

(Start: 5 @39068 has 5 MA's), (Start: 6 @39077 has 83 MA's), (14, 39194), (17, 39245), (19, 39269), (21, 39281), (26, 39311),

Gene: SuperGrey_66 Start: 42795, Stop: 43040, Start Num: 6

Candidate Starts for SuperGrey_66:

(Start: 5 @42786 has 5 MA's), (Start: 6 @42795 has 83 MA's), (14, 42912), (17, 42963), (19, 42987), (21, 42999), (26, 43029),

Gene: Superphikiman_75 Start: 47958, Stop: 47722, Start Num: 11

Candidate Starts for Superphikiman_75:

(4, 48006), (7, 47973), (Start: 10 @47961 has 11 MA's), (Start: 11 @47958 has 12 MA's), (14, 47862), (15, 47838), (17, 47811), (19, 47787), (21, 47775), (23, 47748),

Gene: TChen_64 Start: 42488, Stop: 42733, Start Num: 6

Candidate Starts for TChen_64:

(Start: 5 @42479 has 5 MA's), (Start: 6 @42488 has 83 MA's), (14, 42605), (17, 42656), (19, 42680), (21, 42692), (26, 42722),

Gene: TDanisky_70 Start: 42422, Stop: 42676, Start Num: 5

Candidate Starts for TDanisky_70:

(Start: 5 @42422 has 5 MA's), (Start: 6 @42431 has 83 MA's), (14, 42548), (17, 42599), (19, 42623), (21, 42635), (26, 42665),

Gene: Taj_67 Start: 42722, Stop: 42964, Start Num: 6

Candidate Starts for Taj_67:

(Start: 5 @42713 has 5 MA's), (Start: 6 @42722 has 83 MA's), (14, 42839), (17, 42890), (19, 42914), (21, 42926), (26, 42953),

Gene: ThreeRngTarjay_75 Start: 52517, Stop: 52278, Start Num: 10

Candidate Starts for ThreeRngTarjay_75:

(4, 52562), (7, 52529), (Start: 10 @52517 has 11 MA's), (Start: 11 @52514 has 12 MA's), (14, 52418), (15, 52394), (17, 52367), (19, 52343), (21, 52331), (23, 52304),

Gene: Totinger_65 Start: 40223, Stop: 40468, Start Num: 6

Candidate Starts for Totinger_65:

(Start: 5 @40214 has 5 MA's), (Start: 6 @40223 has 83 MA's), (14, 40340), (17, 40391), (19, 40415), (21, 40427), (26, 40457),

Gene: Tweety_63 Start: 42283, Stop: 42543, Start Num: 6

Candidate Starts for Tweety_63:

(1, 42223), (Start: 3 @42250 has 7 MA's), (Start: 6 @42283 has 83 MA's), (14, 42400), (17, 42451), (19, 42475), (21, 42487),

Gene: UncleRicky_62 Start: 41201, Stop: 41482, Start Num: 6

Candidate Starts for UncleRicky_62:

(Start: 5 @41192 has 5 MA's), (Start: 6 @41201 has 83 MA's), (14, 41339), (17, 41390), (19, 41414), (21, 41426),

Gene: VRedHorse_63 Start: 40277, Stop: 40522, Start Num: 6

Candidate Starts for VRedHorse_63:

(Start: 5 @40268 has 5 MA's), (Start: 6 @40277 has 83 MA's), (14, 40394), (17, 40445), (19, 40469), (21, 40481), (26, 40511),

Gene: Veteran_60 Start: 39981, Stop: 40226, Start Num: 6

Candidate Starts for Veteran_60:

(Start: 5 @39972 has 5 MA's), (Start: 6 @39981 has 83 MA's), (17, 40149), (18, 40152), (19, 40173), (21, 40185), (26, 40215),

Gene: Wachhund_64 Start: 40911, Stop: 41153, Start Num: 6

Candidate Starts for Wachhund_64:

(Start: 5 @40902 has 5 MA's), (Start: 6 @40911 has 83 MA's), (15, 41052), (17, 41079), (19, 41103), (21, 41115), (26, 41142),

Gene: Wee_67 Start: 42798, Stop: 43040, Start Num: 6

Candidate Starts for Wee_67:

(Start: 5 @42789 has 5 MA's), (Start: 6 @42798 has 83 MA's), (14, 42915), (17, 42966), (19, 42990), (21, 43002), (26, 43029),

Gene: Whatsapiecost_63 Start: 40201, Stop: 40449, Start Num: 6

Candidate Starts for Whatsapiecost_63:

(Start: 5 @40192 has 5 MA's), (Start: 6 @40201 has 83 MA's), (14, 40318), (17, 40369), (19, 40393), (21, 40405), (26, 40438),

Gene: WillSterrel_64 Start: 42748, Stop: 43008, Start Num: 6

Candidate Starts for WillSterrel_64:

(Start: 5 @42739 has 5 MA's), (Start: 6 @42748 has 83 MA's), (14, 42865), (15, 42889), (17, 42916), (19, 42940), (21, 42952),

Gene: XFactor_61 Start: 40000, Stop: 40260, Start Num: 6

Candidate Starts for XFactor_61:

(Start: 5 @39991 has 5 MA's), (Start: 6 @40000 has 83 MA's), (14, 40117), (17, 40168), (19, 40192), (21, 40204),

Gene: Yeet_73 Start: 50734, Stop: 50495, Start Num: 10

Candidate Starts for Yeet_73:

(4, 50779), (7, 50746), (Start: 10 @50734 has 11 MA's), (Start: 11 @50731 has 12 MA's), (14, 50635), (15, 50611), (17, 50584), (19, 50560), (21, 50548), (23, 50521),

Gene: Zapner_76 Start: 42874, Stop: 43119, Start Num: 6

Candidate Starts for Zapner_76:

(Start: 5 @42865 has 5 MA's), (Start: 6 @42874 has 83 MA's), (14, 42991), (17, 43042), (19, 43066), (21, 43078), (26, 43108),

Gene: Zelink_75 Start: 52829, Stop: 52590, Start Num: 10

Candidate Starts for Zelink_75:

(4, 52874), (7, 52841), (Start: 10 @52829 has 11 MA's), (Start: 11 @52826 has 12 MA's), (14, 52730), (15, 52706), (17, 52679), (19, 52655), (21, 52643), (23, 52616),