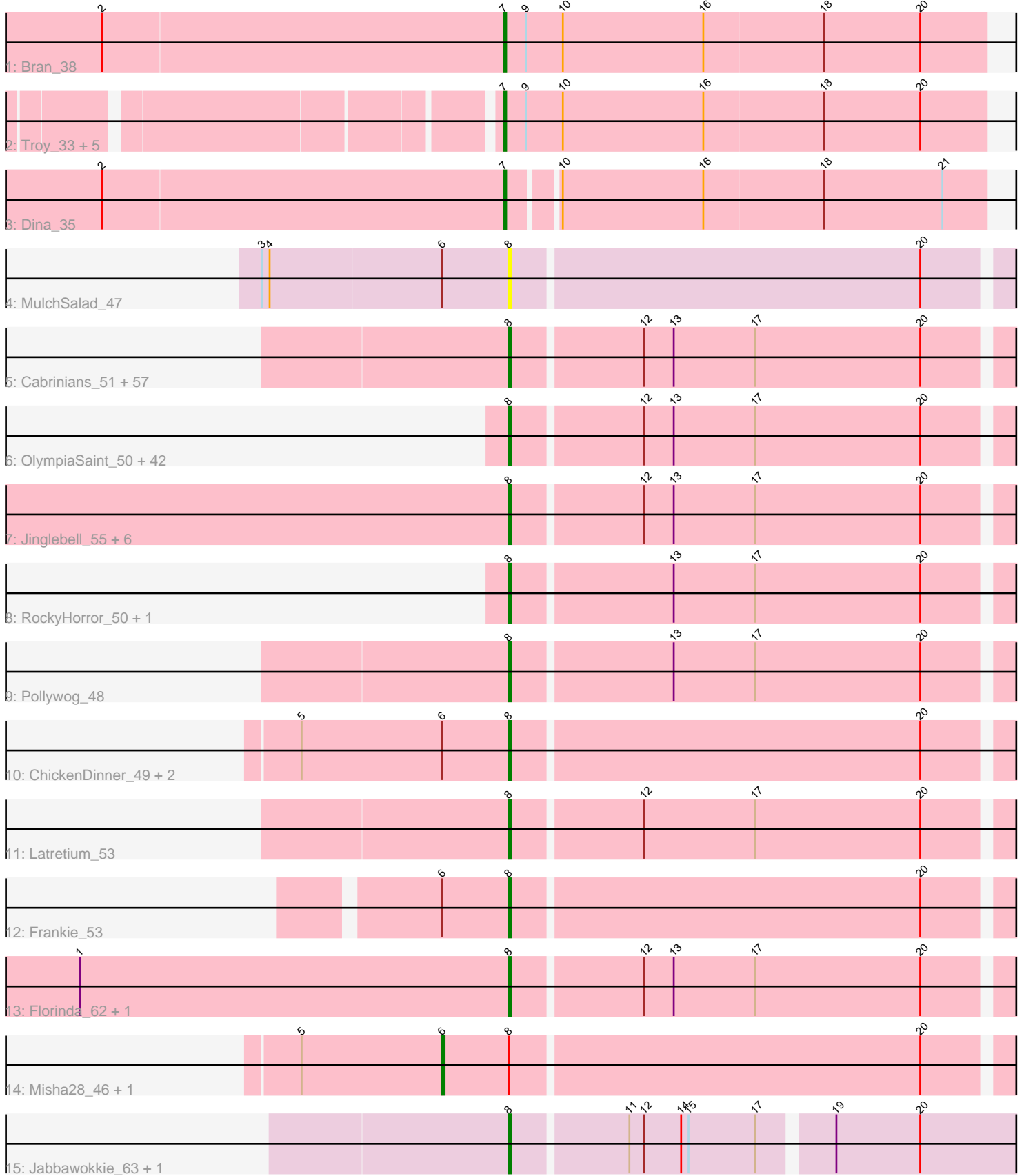


Pham 157681



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 157681 Report

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

Pham number 157681 has 131 members, 10 are drafts.

Phages represented in each track:

- Track 1 : Bran_38
- Track 2 : Troy_33, Adelaide_33, Lederberg_33, SamW_33, StAB_33, Stiles_35
- Track 3 : Dina_35
- Track 4 : MulchSalad_47
- Track 5 : Cabrinians_51, TDanisky_54, Yorick_49, Madiba_46, Jarcob_50, Seagreen_51, Eradicator_43, SassyB_45, Llij_47, Girr_50, LilMoolah_49, Lizziana_56, Doug_52, Leozinho_51, Kimberlium_53, Karhdo_49, Drago_49, QuickMath_52, Martik_50, Starcevich_50, Koella_44, PopTart_45, Avani_58, Chevrolet_59, ShowerHandel_51, Nitzel_45, Maravista_52, DotProduct_46, Priscilla_50, Ibhubesi_49, MadMen_44, Tweety_49, Ruby_48, Royals2015_52, DirtMcgirt_50, ArcusAngelus_53, Sabbb_56, LittleShirley_51, Mahavrat_48, Totinger_53, NormanBulbieJr_50, Bubbles123_47, ShiLan_49, Nivrat_47, JalFarm20_59, GigiOuiOui_47, MisterCuddles_50, Aubs_49, FreddyB_50, UncleRicky_50, Tootsieroll_53, Eish_50, Che8_52, Sparkdehlily_54, Burwell21_48, Phatniss_49, Plumbus_52, Dante_49
- Track 6 : OlympiaSaint_50, BlueCrab_47, Dorothy_47, Gandolph_51, Empress_49, Doomphist_49, Job42_50, Poenanya_49, Harley_52, Cornie_43, Spoonbill_48, Blexus_48, Scottish_49, Leperchaun_43, OwlsT2W_49, Kersh_53, Veteran_47, Daenerys_45, JoeyJr_46, Stap_49, GUmbie_47, Rockne_48, PHappiness_46, Mantra_47, Radiance_50, Boomer_52, Krakatau_48, RitaG_46, DaddyRickover_50, Oksu_54, IbOuu_52, Spikelee_56, Polka14_47, Nimbo_45, Hamulus_51, Ramsey_51, Pacc40_45, SiSi_49, PMC_44, BodEinwohner17_50, RedBird_47, KingMidas_50, BuzzLyseyear_55
- Track 7 : Jinglebell_55, Ochi17_53, Llama_55, Modragons_54, AlpineSix_55, Seabastian_55, OfUltron_55
- Track 8 : RockyHorror_50, Zerg_49
- Track 9 : Pollywog_48
- Track 10 : ChickenDinner_49, Awesomesauce_48, Piper2020_48
- Track 11 : Latretium_53
- Track 12 : Frankie_53
- Track 13 : Florinda_62, Quico_59
- Track 14 : Misha28_46, TootsiePop_46
- Track 15 : Jabbawokkie_63, Zapner_62

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

The start number called the most often in the published annotations is 8, it was called in 111 of the 121 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AlpineSix_55, ArcusAngelus_53, Aubs_49, Avani_58, Awesomesauce_48, Blexus_48, BlueCrab_47, BodEinwohner17_50, Boomer_52, Bubbles123_47, Burwell21_48, BuzzLyseyear_55, Cabrinians_51, Che8_52, Chevrolet_59, ChickenDinner_49, Cornie_43, DaddyRickover_50, Daenerys_45, Dante_49, DirtMcgirt_50, Doomphist_49, Dorothy_47, DotProduct_46, Doug_52, Drago_49, Eish_50, Empress_49, Eradicator_43, Florinda_62, Frankie_53, FreddyB_50, GUMbie_47, Gandolph_51, GigiOuiOui_47, Girr_50, Hamulus_51, Harley_52, IbOuu_52, Ibhubesi_49, Jabbawokkie_63, JalFarm20_59, Jarcob_50, Jinglebell_55, Job42_50, JoeyJr_46, Karhdo_49, Kersh_53, Kimberlium_53, KingMidas_50, Koella_44, Krakatau_48, Latretium_53, Leozinho_51, Leperchaun_43, LilMoolah_49, LittleShirley_51, Lizziana_56, Llama_55, Llij_47, MadMen_44, Madiba_46, Mahavrat_48, Mantra_47, Maravista_52, Martik_50, MisterCuddles_50, Modragons_54, MulchSalad_47, Nimbo_45, Nitzel_45, Nivrat_47, NormanBulbieJr_50, Ochi17_53, OfUltron_55, Oksu_54, OlympiaSaint_50, OwlsT2W_49, PHappiness_46, PMC_44, Pacc40_45, Phatniss_49, Piper2020_48, Plumbus_52, Poenanya_49, Polka14_47, Pollywog_48, PopTart_45, Priscilla_50, QuickMath_52, Quico_59, Radiance_50, Ramsey_51, RedBird_47, RitaG_46, Rockne_48, RockyHorror_50, Royals2015_52, Ruby_48, Sabbb_56, SassyB_45, Scottish_49, Sebastian_55, Seagreen_51, ShiLan_49, ShowerHandel_51, SiSi_49, Sparkdehlily_54, Spikelee_56, Spoonbill_48, Stap_49, Starcevich_50, TDanisky_54, Tootsieroll_53, Totinger_53, Tweety_49, UncleRicky_50, Veteran_47, Yorick_49, Zapner_62, Zerg_49,

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

- Misha28_46, TootsiePop_46,

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

- Adelaide_33, Bran_38, Dina_35, Lederberg_33, SamW_33, StAB_33, Stiles_35, Troy_33,

Summary by start number:

Start 6:

- Found in 7 of 131 (5.3%) of genes in pham
- Manual Annotations of this start: 2 of 121
- Called 28.6% of time when present
- Phage (with cluster) where this start called: Misha28_46 (F1), TootsiePop_46 (F1),

Start 7:

- Found in 8 of 131 (6.1%) of genes in pham
- Manual Annotations of this start: 8 of 121
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Adelaide_33 (EP), Bran_38 (EP), Dina_35 (EP), Lederberg_33 (EP), SamW_33 (EP), StAB_33 (EP), Stiles_35 (EP), Troy_33 (EP),

Start 8:

- Found in 123 of 131 (93.9%) of genes in pham

- Manual Annotations of this start: 111 of 121
- Called 98.4% of time when present
- Phage (with cluster) where this start called: AlpineSix_55 (F1), ArcusAngelus_53 (F1), Aubs_49 (F1), Avani_58 (F2), Awesomesauce_48 (F1), Blexus_48 (F1), BlueCrab_47 (F1), BodEinwohner17_50 (F1), Boomer_52 (F1), Bubbles123_47 (F1), Burwell21_48 (F1), BuzzLyseyear_55 (F1), Cabrinians_51 (F1), Che8_52 (F1), Chevrolet_59 (F1), ChickenDinner_49 (F1), Cornie_43 (F5), DaddyRickover_50 (F1), Daenerys_45 (F1), Dante_49 (F1), DirtMcgirt_50 (F1), Doomphist_49 (F1), Dorothy_47 (F1), DotProduct_46 (F1), Doug_52 (F1), Drago_49 (F1), Eish_50 (F1), Empress_49 (F1), Eradicator_43 (F1), Florinda_62 (F1), Frankie_53 (F1), FreddyB_50 (F1), GUmbie_47 (F1), Gandalph_51 (F1), GigiOuiOui_47 (F1), Girr_50 (F1), Hamulus_51 (F1), Harley_52 (F1), IbOuu_52 (F1), Ibhubesi_49 (F1), Jabbawokkie_63 (F2), JalFarm20_59 (F1), Jarcob_50 (F1), Jinglebell_55 (F1), Job42_50 (F1), JoeyJr_46 (F1), Karhdo_49 (F1), Kersh_53 (F1), Kimberlium_53 (F1), KingMidas_50 (F1), Koella_44 (F1), Krakatau_48 (F1), Latretium_53 (F1), Leozinho_51 (F1), Leperchaun_43 (F1), LilMoolah_49 (F1), LittleShirley_51 (F1), Lizziana_56 (F1), Llama_55 (F1), Llij_47 (F1), MadMen_44 (F1), Madiba_46 (F1), Mahavrat_48 (F1), Mantra_47 (F1), Maravista_52 (F1), Martik_50 (F1), MisterCuddles_50 (F1), Modragons_54 (F1), MulchSalad_47 (F), Nimbo_45 (F1), Nitzel_45 (F1), Nivrat_47 (F1), NormanBulbieJr_50 (F1), Ochi17_53 (F1), OfUltron_55 (F1), Oksu_54 (F1), OlympiaSaint_50 (F1), OwlsT2W_49 (F1), PHappiness_46 (F1), PMC_44 (F1), Pacc40_45 (F1), Phatniss_49 (F1), Piper2020_48 (F1), Plumbus_52 (F1), Poenanya_49 (F1), Polka14_47 (F1), Pollywog_48 (F1), PopTart_45 (F1), Priscilla_50 (F1), QuickMath_52 (F1), Quico_59 (F1), Radiance_50 (F1), Ramsey_51 (F1), RedBird_47 (F1), RitaG_46 (F1), Rockne_48 (F1), RockyHorror_50 (F1), Royals2015_52 (F1), Ruby_48 (F1), Sabbb_56 (F1), SassyB_45 (F1), Scottish_49 (F1), Seabastian_55 (F1), Seagreen_51 (F1), ShiLan_49 (F1), ShowerHandel_51 (F1), SiSi_49 (F1), Sparkdehlily_54 (F1), Spikelee_56 (F1), Spoonbill_48 (F1), Stap_49 (F1), Starcevich_50 (F1), TDanisky_54 (F1), Tootsieroll_53 (F1), Totinger_53 (F1), Tweety_49 (F1), UncleRicky_50 (F1), Veteran_47 (F1), Yorick_49 (F1), Zapner_62 (F2), Zerg_49 (F1),

Summary by clusters:

There are 5 clusters represented in this pham: F1, F2, F, EP, F5,

Info for manual annotations of cluster EP:

- Start number 7 was manually annotated 8 times for cluster EP.

Info for manual annotations of cluster F1:

- Start number 6 was manually annotated 2 times for cluster F1.
- Start number 8 was manually annotated 107 times for cluster F1.

Info for manual annotations of cluster F2:

- Start number 8 was manually annotated 3 times for cluster F2.

Info for manual annotations of cluster F5:

- Start number 8 was manually annotated 1 time for cluster F5.

Gene Information:

Gene: Adelaide_33 Start: 28241, Stop: 28435, Start Num: 7

Candidate Starts for Adelaide_33:

(Start: 7 @28241 has 8 MA's), (9, 28250), (10, 28265), (16, 28322), (18, 28370), (20, 28409),

Gene: AlpineSix_55 Start: 38663, Stop: 38860, Start Num: 8

Candidate Starts for AlpineSix_55:

(Start: 8 @38663 has 111 MA's), (12, 38714), (13, 38726), (17, 38759), (20, 38825),

Gene: ArcusAngelus_53 Start: 37779, Stop: 37976, Start Num: 8

Candidate Starts for ArcusAngelus_53:

(Start: 8 @37779 has 111 MA's), (12, 37830), (13, 37842), (17, 37875), (20, 37941),

Gene: Aubs_49 Start: 36346, Stop: 36543, Start Num: 8

Candidate Starts for Aubs_49:

(Start: 8 @36346 has 111 MA's), (12, 36397), (13, 36409), (17, 36442), (20, 36508),

Gene: Avani_58 Start: 36654, Stop: 36851, Start Num: 8

Candidate Starts for Avani_58:

(Start: 8 @36654 has 111 MA's), (12, 36705), (13, 36717), (17, 36750), (20, 36816),

Gene: Awesomesauce_48 Start: 34991, Stop: 35188, Start Num: 8

Candidate Starts for Awesomesauce_48:

(5, 34907), (Start: 6 @34964 has 2 MA's), (Start: 8 @34991 has 111 MA's), (20, 35153),

Gene: Blexus_48 Start: 36433, Stop: 36630, Start Num: 8

Candidate Starts for Blexus_48:

(Start: 8 @36433 has 111 MA's), (12, 36484), (13, 36496), (17, 36529), (20, 36595),

Gene: BlueCrab_47 Start: 36159, Stop: 36356, Start Num: 8

Candidate Starts for BlueCrab_47:

(Start: 8 @36159 has 111 MA's), (12, 36210), (13, 36222), (17, 36255), (20, 36321),

Gene: BodEinwohner17_50 Start: 36375, Stop: 36572, Start Num: 8

Candidate Starts for BodEinwohner17_50:

(Start: 8 @36375 has 111 MA's), (12, 36426), (13, 36438), (17, 36471), (20, 36537),

Gene: Boomer_52 Start: 37608, Stop: 37805, Start Num: 8

Candidate Starts for Boomer_52:

(Start: 8 @37608 has 111 MA's), (12, 37659), (13, 37671), (17, 37704), (20, 37770),

Gene: Bran_38 Start: 30086, Stop: 30280, Start Num: 7

Candidate Starts for Bran_38:

(2, 29924), (Start: 7 @30086 has 8 MA's), (9, 30095), (10, 30110), (16, 30167), (18, 30215), (20, 30254),

Gene: Bubbles123_47 Start: 37055, Stop: 37252, Start Num: 8

Candidate Starts for Bubbles123_47:

(Start: 8 @37055 has 111 MA's), (12, 37106), (13, 37118), (17, 37151), (20, 37217),

Gene: Burwell21_48 Start: 36717, Stop: 36914, Start Num: 8

Candidate Starts for Burwell21_48:

(Start: 8 @36717 has 111 MA's), (12, 36768), (13, 36780), (17, 36813), (20, 36879),

Gene: BuzzLyseyear_55 Start: 37985, Stop: 38182, Start Num: 8

Candidate Starts for BuzzLyseyear_55:

(Start: 8 @37985 has 111 MA's), (12, 38036), (13, 38048), (17, 38081), (20, 38147),

Gene: Cabrinians_51 Start: 36795, Stop: 36992, Start Num: 8

Candidate Starts for Cabrinians_51:

(Start: 8 @36795 has 111 MA's), (12, 36846), (13, 36858), (17, 36891), (20, 36957),

Gene: Che8_52 Start: 37604, Stop: 37801, Start Num: 8

Candidate Starts for Che8_52:

(Start: 8 @37604 has 111 MA's), (12, 37655), (13, 37667), (17, 37700), (20, 37766),

Gene: Chevrolet_59 Start: 37780, Stop: 37977, Start Num: 8

Candidate Starts for Chevrolet_59:

(Start: 8 @37780 has 111 MA's), (12, 37831), (13, 37843), (17, 37876), (20, 37942),

Gene: ChickenDinner_49 Start: 35729, Stop: 35926, Start Num: 8

Candidate Starts for ChickenDinner_49:

(5, 35645), (Start: 6 @35702 has 2 MA's), (Start: 8 @35729 has 111 MA's), (20, 35891),

Gene: Cornie_43 Start: 34495, Stop: 34692, Start Num: 8

Candidate Starts for Cornie_43:

(Start: 8 @34495 has 111 MA's), (12, 34546), (13, 34558), (17, 34591), (20, 34657),

Gene: DaddyRickover_50 Start: 37291, Stop: 37488, Start Num: 8

Candidate Starts for DaddyRickover_50:

(Start: 8 @37291 has 111 MA's), (12, 37342), (13, 37354), (17, 37387), (20, 37453),

Gene: Daenerys_45 Start: 35102, Stop: 35299, Start Num: 8

Candidate Starts for Daenerys_45:

(Start: 8 @35102 has 111 MA's), (12, 35153), (13, 35165), (17, 35198), (20, 35264),

Gene: Dante_49 Start: 36138, Stop: 36335, Start Num: 8

Candidate Starts for Dante_49:

(Start: 8 @36138 has 111 MA's), (12, 36189), (13, 36201), (17, 36234), (20, 36300),

Gene: Dina_35 Start: 27311, Stop: 27499, Start Num: 7

Candidate Starts for Dina_35:

(2, 27149), (Start: 7 @27311 has 8 MA's), (10, 27329), (16, 27386), (18, 27434), (21, 27482),

Gene: DirtMcgirt_50 Start: 35836, Stop: 36033, Start Num: 8

Candidate Starts for DirtMcgirt_50:

(Start: 8 @35836 has 111 MA's), (12, 35887), (13, 35899), (17, 35932), (20, 35998),

Gene: Doomphist_49 Start: 37373, Stop: 37570, Start Num: 8

Candidate Starts for Doomphist_49:

(Start: 8 @37373 has 111 MA's), (12, 37424), (13, 37436), (17, 37469), (20, 37535),

Gene: Dorothy_47 Start: 36172, Stop: 36369, Start Num: 8

Candidate Starts for Dorothy_47:

(Start: 8 @36172 has 111 MA's), (12, 36223), (13, 36235), (17, 36268), (20, 36334),

Gene: DotProduct_46 Start: 35833, Stop: 36027, Start Num: 8

Candidate Starts for DotProduct_46:

(Start: 8 @35833 has 111 MA's), (12, 35881), (13, 35893), (17, 35926), (20, 35992),

Gene: Doug_52 Start: 37491, Stop: 37688, Start Num: 8

Candidate Starts for Doug_52:

(Start: 8 @37491 has 111 MA's), (12, 37542), (13, 37554), (17, 37587), (20, 37653),

Gene: Drago_49 Start: 35839, Stop: 36036, Start Num: 8

Candidate Starts for Drago_49:

(Start: 8 @35839 has 111 MA's), (12, 35890), (13, 35902), (17, 35935), (20, 36001),

Gene: Eish_50 Start: 36718, Stop: 36915, Start Num: 8

Candidate Starts for Eish_50:

(Start: 8 @36718 has 111 MA's), (12, 36769), (13, 36781), (17, 36814), (20, 36880),

Gene: Empress_49 Start: 36516, Stop: 36713, Start Num: 8

Candidate Starts for Empress_49:

(Start: 8 @36516 has 111 MA's), (12, 36567), (13, 36579), (17, 36612), (20, 36678),

Gene: Eradicator_43 Start: 35055, Stop: 35252, Start Num: 8

Candidate Starts for Eradicator_43:

(Start: 8 @35055 has 111 MA's), (12, 35106), (13, 35118), (17, 35151), (20, 35217),

Gene: Florinda_62 Start: 38976, Stop: 39173, Start Num: 8

Candidate Starts for Florinda_62:

(1, 38802), (Start: 8 @38976 has 111 MA's), (12, 39027), (13, 39039), (17, 39072), (20, 39138),

Gene: Frankie_53 Start: 37777, Stop: 37974, Start Num: 8

Candidate Starts for Frankie_53:

(Start: 6 @37750 has 2 MA's), (Start: 8 @37777 has 111 MA's), (20, 37939),

Gene: FreddyB_50 Start: 35643, Stop: 35840, Start Num: 8

Candidate Starts for FreddyB_50:

(Start: 8 @35643 has 111 MA's), (12, 35694), (13, 35706), (17, 35739), (20, 35805),

Gene: GUmbie_47 Start: 36062, Stop: 36259, Start Num: 8

Candidate Starts for GUmbie_47:

(Start: 8 @36062 has 111 MA's), (12, 36113), (13, 36125), (17, 36158), (20, 36224),

Gene: Gandalph_51 Start: 36305, Stop: 36502, Start Num: 8

Candidate Starts for Gandalph_51:

(Start: 8 @36305 has 111 MA's), (12, 36356), (13, 36368), (17, 36401), (20, 36467),

Gene: GigiOuiOui_47 Start: 35975, Stop: 36172, Start Num: 8

Candidate Starts for GigiOuiOui_47:

(Start: 8 @35975 has 111 MA's), (12, 36026), (13, 36038), (17, 36071), (20, 36137),

Gene: Girr_50 Start: 37034, Stop: 37231, Start Num: 8

Candidate Starts for Girr_50:

(Start: 8 @37034 has 111 MA's), (12, 37085), (13, 37097), (17, 37130), (20, 37196),

Gene: Hamulus_51 Start: 37417, Stop: 37614, Start Num: 8
Candidate Starts for Hamulus_51:
(Start: 8 @37417 has 111 MA's), (12, 37468), (13, 37480), (17, 37513), (20, 37579),

Gene: Harley_52 Start: 36770, Stop: 36967, Start Num: 8
Candidate Starts for Harley_52:
(Start: 8 @36770 has 111 MA's), (12, 36821), (13, 36833), (17, 36866), (20, 36932),

Gene: lbOuu_52 Start: 37352, Stop: 37549, Start Num: 8
Candidate Starts for lbOuu_52:
(Start: 8 @37352 has 111 MA's), (12, 37403), (13, 37415), (17, 37448), (20, 37514),

Gene: lbhubesi_49 Start: 35857, Stop: 36054, Start Num: 8
Candidate Starts for lbhubesi_49:
(Start: 8 @35857 has 111 MA's), (12, 35908), (13, 35920), (17, 35953), (20, 36019),

Gene: Jabbawokkie_63 Start: 37588, Stop: 37785, Start Num: 8
Candidate Starts for Jabbawokkie_63:
(Start: 8 @37588 has 111 MA's), (11, 37633), (12, 37639), (14, 37654), (15, 37657), (17, 37684), (19, 37711), (20, 37744),

Gene: JalFarm20_59 Start: 39334, Stop: 39531, Start Num: 8
Candidate Starts for JalFarm20_59:
(Start: 8 @39334 has 111 MA's), (12, 39385), (13, 39397), (17, 39430), (20, 39496),

Gene: Jaracob_50 Start: 36763, Stop: 36960, Start Num: 8
Candidate Starts for Jaracob_50:
(Start: 8 @36763 has 111 MA's), (12, 36814), (13, 36826), (17, 36859), (20, 36925),

Gene: Jinglebell_55 Start: 38662, Stop: 38859, Start Num: 8
Candidate Starts for Jinglebell_55:
(Start: 8 @38662 has 111 MA's), (12, 38713), (13, 38725), (17, 38758), (20, 38824),

Gene: Job42_50 Start: 38024, Stop: 38221, Start Num: 8
Candidate Starts for Job42_50:
(Start: 8 @38024 has 111 MA's), (12, 38075), (13, 38087), (17, 38120), (20, 38186),

Gene: JoeyJr_46 Start: 35270, Stop: 35467, Start Num: 8
Candidate Starts for JoeyJr_46:
(Start: 8 @35270 has 111 MA's), (12, 35321), (13, 35333), (17, 35366), (20, 35432),

Gene: Karhdo_49 Start: 36857, Stop: 37054, Start Num: 8
Candidate Starts for Karhdo_49:
(Start: 8 @36857 has 111 MA's), (12, 36908), (13, 36920), (17, 36953), (20, 37019),

Gene: Kersh_53 Start: 38807, Stop: 39004, Start Num: 8
Candidate Starts for Kersh_53:
(Start: 8 @38807 has 111 MA's), (12, 38858), (13, 38870), (17, 38903), (20, 38969),

Gene: Kimberlium_53 Start: 38669, Stop: 38866, Start Num: 8
Candidate Starts for Kimberlium_53:
(Start: 8 @38669 has 111 MA's), (12, 38720), (13, 38732), (17, 38765), (20, 38831),

Gene: KingMidas_50 Start: 36932, Stop: 37129, Start Num: 8

Candidate Starts for KingMidas_50:

(Start: 8 @36932 has 111 MA's), (12, 36983), (13, 36995), (17, 37028), (20, 37094),

Gene: Koella_44 Start: 32693, Stop: 32890, Start Num: 8

Candidate Starts for Koella_44:

(Start: 8 @32693 has 111 MA's), (12, 32744), (13, 32756), (17, 32789), (20, 32855),

Gene: Krakatau_48 Start: 36504, Stop: 36701, Start Num: 8

Candidate Starts for Krakatau_48:

(Start: 8 @36504 has 111 MA's), (12, 36555), (13, 36567), (17, 36600), (20, 36666),

Gene: Latretium_53 Start: 37646, Stop: 37843, Start Num: 8

Candidate Starts for Latretium_53:

(Start: 8 @37646 has 111 MA's), (12, 37697), (17, 37742), (20, 37808),

Gene: Lederberg_33 Start: 28110, Stop: 28304, Start Num: 7

Candidate Starts for Lederberg_33:

(Start: 7 @28110 has 8 MA's), (9, 28119), (10, 28134), (16, 28191), (18, 28239), (20, 28278),

Gene: Leozinho_51 Start: 36607, Stop: 36804, Start Num: 8

Candidate Starts for Leozinho_51:

(Start: 8 @36607 has 111 MA's), (12, 36658), (13, 36670), (17, 36703), (20, 36769),

Gene: Leperchaun_43 Start: 34500, Stop: 34697, Start Num: 8

Candidate Starts for Leperchaun_43:

(Start: 8 @34500 has 111 MA's), (12, 34551), (13, 34563), (17, 34596), (20, 34662),

Gene: LilMoolah_49 Start: 36424, Stop: 36621, Start Num: 8

Candidate Starts for LilMoolah_49:

(Start: 8 @36424 has 111 MA's), (12, 36475), (13, 36487), (17, 36520), (20, 36586),

Gene: LittleShirley_51 Start: 37455, Stop: 37652, Start Num: 8

Candidate Starts for LittleShirley_51:

(Start: 8 @37455 has 111 MA's), (12, 37506), (13, 37518), (17, 37551), (20, 37617),

Gene: Lizziana_56 Start: 37766, Stop: 37963, Start Num: 8

Candidate Starts for Lizziana_56:

(Start: 8 @37766 has 111 MA's), (12, 37817), (13, 37829), (17, 37862), (20, 37928),

Gene: Llama_55 Start: 38660, Stop: 38857, Start Num: 8

Candidate Starts for Llama_55:

(Start: 8 @38660 has 111 MA's), (12, 38711), (13, 38723), (17, 38756), (20, 38822),

Gene: Llij_47 Start: 35993, Stop: 36190, Start Num: 8

Candidate Starts for Llij_47:

(Start: 8 @35993 has 111 MA's), (12, 36044), (13, 36056), (17, 36089), (20, 36155),

Gene: MadMen_44 Start: 35477, Stop: 35674, Start Num: 8

Candidate Starts for MadMen_44:

(Start: 8 @35477 has 111 MA's), (12, 35528), (13, 35540), (17, 35573), (20, 35639),

Gene: Madiba_46 Start: 34766, Stop: 34963, Start Num: 8

Candidate Starts for Madiba_46:

(Start: 8 @34766 has 111 MA's), (12, 34817), (13, 34829), (17, 34862), (20, 34928),

Gene: Mahavrat_48 Start: 35954, Stop: 36151, Start Num: 8

Candidate Starts for Mahavrat_48:

(Start: 8 @35954 has 111 MA's), (12, 36005), (13, 36017), (17, 36050), (20, 36116),

Gene: Mantra_47 Start: 35945, Stop: 36142, Start Num: 8

Candidate Starts for Mantra_47:

(Start: 8 @35945 has 111 MA's), (12, 35996), (13, 36008), (17, 36041), (20, 36107),

Gene: Maravista_52 Start: 38428, Stop: 38625, Start Num: 8

Candidate Starts for Maravista_52:

(Start: 8 @38428 has 111 MA's), (12, 38479), (13, 38491), (17, 38524), (20, 38590),

Gene: Martik_50 Start: 36719, Stop: 36916, Start Num: 8

Candidate Starts for Martik_50:

(Start: 8 @36719 has 111 MA's), (12, 36770), (13, 36782), (17, 36815), (20, 36881),

Gene: Misha28_46 Start: 34969, Stop: 35193, Start Num: 6

Candidate Starts for Misha28_46:

(5, 34912), (Start: 6 @34969 has 2 MA's), (Start: 8 @34996 has 111 MA's), (20, 35158),

Gene: MisterCuddles_50 Start: 37034, Stop: 37231, Start Num: 8

Candidate Starts for MisterCuddles_50:

(Start: 8 @37034 has 111 MA's), (12, 37085), (13, 37097), (17, 37130), (20, 37196),

Gene: Modragons_54 Start: 38506, Stop: 38703, Start Num: 8

Candidate Starts for Modragons_54:

(Start: 8 @38506 has 111 MA's), (12, 38557), (13, 38569), (17, 38602), (20, 38668),

Gene: MulchSalad_47 Start: 33570, Stop: 33767, Start Num: 8

Candidate Starts for MulchSalad_47:

(3, 33471), (4, 33474), (Start: 6 @33543 has 2 MA's), (Start: 8 @33570 has 111 MA's), (20, 33732),

Gene: Nimbo_45 Start: 35073, Stop: 35270, Start Num: 8

Candidate Starts for Nimbo_45:

(Start: 8 @35073 has 111 MA's), (12, 35124), (13, 35136), (17, 35169), (20, 35235),

Gene: Nitzel_45 Start: 35193, Stop: 35390, Start Num: 8

Candidate Starts for Nitzel_45:

(Start: 8 @35193 has 111 MA's), (12, 35244), (13, 35256), (17, 35289), (20, 35355),

Gene: Nivrat_47 Start: 36297, Stop: 36494, Start Num: 8

Candidate Starts for Nivrat_47:

(Start: 8 @36297 has 111 MA's), (12, 36348), (13, 36360), (17, 36393), (20, 36459),

Gene: NormanBulbieJr_50 Start: 36706, Stop: 36903, Start Num: 8

Candidate Starts for NormanBulbieJr_50:

(Start: 8 @36706 has 111 MA's), (12, 36757), (13, 36769), (17, 36802), (20, 36868),

Gene: Ochi17_53 Start: 38113, Stop: 38310, Start Num: 8

Candidate Starts for Ochi17_53:

(Start: 8 @38113 has 111 MA's), (12, 38164), (13, 38176), (17, 38209), (20, 38275),

Gene: OfUltron_55 Start: 38662, Stop: 38859, Start Num: 8

Candidate Starts for OfUltron_55:

(Start: 8 @38662 has 111 MA's), (12, 38713), (13, 38725), (17, 38758), (20, 38824),

Gene: Oksu_54 Start: 38558, Stop: 38755, Start Num: 8

Candidate Starts for Oksu_54:

(Start: 8 @38558 has 111 MA's), (12, 38609), (13, 38621), (17, 38654), (20, 38720),

Gene: OlympiaSaint_50 Start: 36632, Stop: 36829, Start Num: 8

Candidate Starts for OlympiaSaint_50:

(Start: 8 @36632 has 111 MA's), (12, 36683), (13, 36695), (17, 36728), (20, 36794),

Gene: OwlsT2W_49 Start: 36635, Stop: 36832, Start Num: 8

Candidate Starts for OwlsT2W_49:

(Start: 8 @36635 has 111 MA's), (12, 36686), (13, 36698), (17, 36731), (20, 36797),

Gene: PHappiness_46 Start: 35046, Stop: 35243, Start Num: 8

Candidate Starts for PHappiness_46:

(Start: 8 @35046 has 111 MA's), (12, 35097), (13, 35109), (17, 35142), (20, 35208),

Gene: PMC_44 Start: 35844, Stop: 36041, Start Num: 8

Candidate Starts for PMC_44:

(Start: 8 @35844 has 111 MA's), (12, 35895), (13, 35907), (17, 35940), (20, 36006),

Gene: Pacc40_45 Start: 35120, Stop: 35317, Start Num: 8

Candidate Starts for Pacc40_45:

(Start: 8 @35120 has 111 MA's), (12, 35171), (13, 35183), (17, 35216), (20, 35282),

Gene: Phatniss_49 Start: 37088, Stop: 37285, Start Num: 8

Candidate Starts for Phatniss_49:

(Start: 8 @37088 has 111 MA's), (12, 37139), (13, 37151), (17, 37184), (20, 37250),

Gene: Piper2020_48 Start: 35712, Stop: 35909, Start Num: 8

Candidate Starts for Piper2020_48:

(5, 35628), (Start: 6 @35685 has 2 MA's), (Start: 8 @35712 has 111 MA's), (20, 35874),

Gene: Plumbus_52 Start: 36835, Stop: 37032, Start Num: 8

Candidate Starts for Plumbus_52:

(Start: 8 @36835 has 111 MA's), (12, 36886), (13, 36898), (17, 36931), (20, 36997),

Gene: Poenanya_49 Start: 37373, Stop: 37570, Start Num: 8

Candidate Starts for Poenanya_49:

(Start: 8 @37373 has 111 MA's), (12, 37424), (13, 37436), (17, 37469), (20, 37535),

Gene: Polka14_47 Start: 35723, Stop: 35920, Start Num: 8

Candidate Starts for Polka14_47:

(Start: 8 @35723 has 111 MA's), (12, 35774), (13, 35786), (17, 35819), (20, 35885),

Gene: Pollywog_48 Start: 36551, Stop: 36748, Start Num: 8

Candidate Starts for Pollywog_48:

(Start: 8 @36551 has 111 MA's), (13, 36614), (17, 36647), (20, 36713),

Gene: PopTart_45 Start: 35859, Stop: 36056, Start Num: 8

Candidate Starts for PopTart_45:

(Start: 8 @35859 has 111 MA's), (12, 35910), (13, 35922), (17, 35955), (20, 36021),

Gene: Priscilla_50 Start: 36805, Stop: 37002, Start Num: 8

Candidate Starts for Priscilla_50:

(Start: 8 @36805 has 111 MA's), (12, 36856), (13, 36868), (17, 36901), (20, 36967),

Gene: QuickMath_52 Start: 38892, Stop: 39089, Start Num: 8

Candidate Starts for QuickMath_52:

(Start: 8 @38892 has 111 MA's), (12, 38943), (13, 38955), (17, 38988), (20, 39054),

Gene: Quico_59 Start: 38796, Stop: 38993, Start Num: 8

Candidate Starts for Quico_59:

(1, 38622), (Start: 8 @38796 has 111 MA's), (12, 38847), (13, 38859), (17, 38892), (20, 38958),

Gene: Radiance_50 Start: 36960, Stop: 37157, Start Num: 8

Candidate Starts for Radiance_50:

(Start: 8 @36960 has 111 MA's), (12, 37011), (13, 37023), (17, 37056), (20, 37122),

Gene: Ramsey_51 Start: 37587, Stop: 37784, Start Num: 8

Candidate Starts for Ramsey_51:

(Start: 8 @37587 has 111 MA's), (12, 37638), (13, 37650), (17, 37683), (20, 37749),

Gene: RedBird_47 Start: 36184, Stop: 36381, Start Num: 8

Candidate Starts for RedBird_47:

(Start: 8 @36184 has 111 MA's), (12, 36235), (13, 36247), (17, 36280), (20, 36346),

Gene: RitaG_46 Start: 35391, Stop: 35588, Start Num: 8

Candidate Starts for RitaG_46:

(Start: 8 @35391 has 111 MA's), (12, 35442), (13, 35454), (17, 35487), (20, 35553),

Gene: Rockne_48 Start: 35844, Stop: 36041, Start Num: 8

Candidate Starts for Rockne_48:

(Start: 8 @35844 has 111 MA's), (12, 35895), (13, 35907), (17, 35940), (20, 36006),

Gene: RockyHorror_50 Start: 36248, Stop: 36445, Start Num: 8

Candidate Starts for RockyHorror_50:

(Start: 8 @36248 has 111 MA's), (13, 36311), (17, 36344), (20, 36410),

Gene: Royals2015_52 Start: 36653, Stop: 36850, Start Num: 8

Candidate Starts for Royals2015_52:

(Start: 8 @36653 has 111 MA's), (12, 36704), (13, 36716), (17, 36749), (20, 36815),

Gene: Ruby_48 Start: 37035, Stop: 37232, Start Num: 8

Candidate Starts for Ruby_48:

(Start: 8 @37035 has 111 MA's), (12, 37086), (13, 37098), (17, 37131), (20, 37197),

Gene: Sabbb_56 Start: 38083, Stop: 38280, Start Num: 8

Candidate Starts for Sabbb_56:

(Start: 8 @38083 has 111 MA's), (12, 38134), (13, 38146), (17, 38179), (20, 38245),

Gene: SamW_33 Start: 27725, Stop: 27919, Start Num: 7
Candidate Starts for SamW_33:
(Start: 7 @27725 has 8 MA's), (9, 27734), (10, 27749), (16, 27806), (18, 27854), (20, 27893),

Gene: SassyB_45 Start: 35859, Stop: 36056, Start Num: 8
Candidate Starts for SassyB_45:
(Start: 8 @35859 has 111 MA's), (12, 35910), (13, 35922), (17, 35955), (20, 36021),

Gene: Scottish_49 Start: 36403, Stop: 36600, Start Num: 8
Candidate Starts for Scottish_49:
(Start: 8 @36403 has 111 MA's), (12, 36454), (13, 36466), (17, 36499), (20, 36565),

Gene: Seabastian_55 Start: 38663, Stop: 38860, Start Num: 8
Candidate Starts for Seabastian_55:
(Start: 8 @38663 has 111 MA's), (12, 38714), (13, 38726), (17, 38759), (20, 38825),

Gene: Seagreen_51 Start: 36587, Stop: 36784, Start Num: 8
Candidate Starts for Seagreen_51:
(Start: 8 @36587 has 111 MA's), (12, 36638), (13, 36650), (17, 36683), (20, 36749),

Gene: ShiLan_49 Start: 36752, Stop: 36949, Start Num: 8
Candidate Starts for ShiLan_49:
(Start: 8 @36752 has 111 MA's), (12, 36803), (13, 36815), (17, 36848), (20, 36914),

Gene: ShowerHandel_51 Start: 36719, Stop: 36916, Start Num: 8
Candidate Starts for ShowerHandel_51:
(Start: 8 @36719 has 111 MA's), (12, 36770), (13, 36782), (17, 36815), (20, 36881),

Gene: SiSi_49 Start: 36409, Stop: 36606, Start Num: 8
Candidate Starts for SiSi_49:
(Start: 8 @36409 has 111 MA's), (12, 36460), (13, 36472), (17, 36505), (20, 36571),

Gene: Sparkdehlily_54 Start: 37405, Stop: 37602, Start Num: 8
Candidate Starts for Sparkdehlily_54:
(Start: 8 @37405 has 111 MA's), (12, 37456), (13, 37468), (17, 37501), (20, 37567),

Gene: Spikelee_56 Start: 38143, Stop: 38340, Start Num: 8
Candidate Starts for Spikelee_56:
(Start: 8 @38143 has 111 MA's), (12, 38194), (13, 38206), (17, 38239), (20, 38305),

Gene: Spoonbill_48 Start: 35345, Stop: 35542, Start Num: 8
Candidate Starts for Spoonbill_48:
(Start: 8 @35345 has 111 MA's), (12, 35396), (13, 35408), (17, 35441), (20, 35507),

Gene: StAB_33 Start: 28951, Stop: 29145, Start Num: 7
Candidate Starts for StAB_33:
(Start: 7 @28951 has 8 MA's), (9, 28960), (10, 28975), (16, 29032), (18, 29080), (20, 29119),

Gene: Stap_49 Start: 36146, Stop: 36343, Start Num: 8
Candidate Starts for Stap_49:
(Start: 8 @36146 has 111 MA's), (12, 36197), (13, 36209), (17, 36242), (20, 36308),

Gene: Starcevich_50 Start: 37039, Stop: 37236, Start Num: 8

Candidate Starts for Starcevich_50:

(Start: 8 @37039 has 111 MA's), (12, 37090), (13, 37102), (17, 37135), (20, 37201),

Gene: Stiles_35 Start: 28902, Stop: 29096, Start Num: 7

Candidate Starts for Stiles_35:

(Start: 7 @28902 has 8 MA's), (9, 28911), (10, 28926), (16, 28983), (18, 29031), (20, 29070),

Gene: TDanisky_54 Start: 37405, Stop: 37602, Start Num: 8

Candidate Starts for TDanisky_54:

(Start: 8 @37405 has 111 MA's), (12, 37456), (13, 37468), (17, 37501), (20, 37567),

Gene: TootsiePop_46 Start: 34969, Stop: 35193, Start Num: 6

Candidate Starts for TootsiePop_46:

(5, 34912), (Start: 6 @34969 has 2 MA's), (Start: 8 @34996 has 111 MA's), (20, 35158),

Gene: Tootsieroll_53 Start: 36596, Stop: 36793, Start Num: 8

Candidate Starts for Tootsieroll_53:

(Start: 8 @36596 has 111 MA's), (12, 36647), (13, 36659), (17, 36692), (20, 36758),

Gene: Totinger_53 Start: 36181, Stop: 36378, Start Num: 8

Candidate Starts for Totinger_53:

(Start: 8 @36181 has 111 MA's), (12, 36232), (13, 36244), (17, 36277), (20, 36343),

Gene: Troy_33 Start: 27725, Stop: 27919, Start Num: 7

Candidate Starts for Troy_33:

(Start: 7 @27725 has 8 MA's), (9, 27734), (10, 27749), (16, 27806), (18, 27854), (20, 27893),

Gene: Tweety_49 Start: 36917, Stop: 37114, Start Num: 8

Candidate Starts for Tweety_49:

(Start: 8 @36917 has 111 MA's), (12, 36968), (13, 36980), (17, 37013), (20, 37079),

Gene: UncleRicky_50 Start: 37336, Stop: 37533, Start Num: 8

Candidate Starts for UncleRicky_50:

(Start: 8 @37336 has 111 MA's), (12, 37387), (13, 37399), (17, 37432), (20, 37498),

Gene: Veteran_47 Start: 36053, Stop: 36250, Start Num: 8

Candidate Starts for Veteran_47:

(Start: 8 @36053 has 111 MA's), (12, 36104), (13, 36116), (17, 36149), (20, 36215),

Gene: Yorick_49 Start: 37093, Stop: 37290, Start Num: 8

Candidate Starts for Yorick_49:

(Start: 8 @37093 has 111 MA's), (12, 37144), (13, 37156), (17, 37189), (20, 37255),

Gene: Zapner_62 Start: 37589, Stop: 37786, Start Num: 8

Candidate Starts for Zapner_62:

(Start: 8 @37589 has 111 MA's), (11, 37634), (12, 37640), (14, 37655), (15, 37658), (17, 37685), (19, 37712), (20, 37745),

Gene: Zerg_49 Start: 36357, Stop: 36554, Start Num: 8

Candidate Starts for Zerg_49:

(Start: 8 @36357 has 111 MA's), (13, 36420), (17, 36453), (20, 36519),