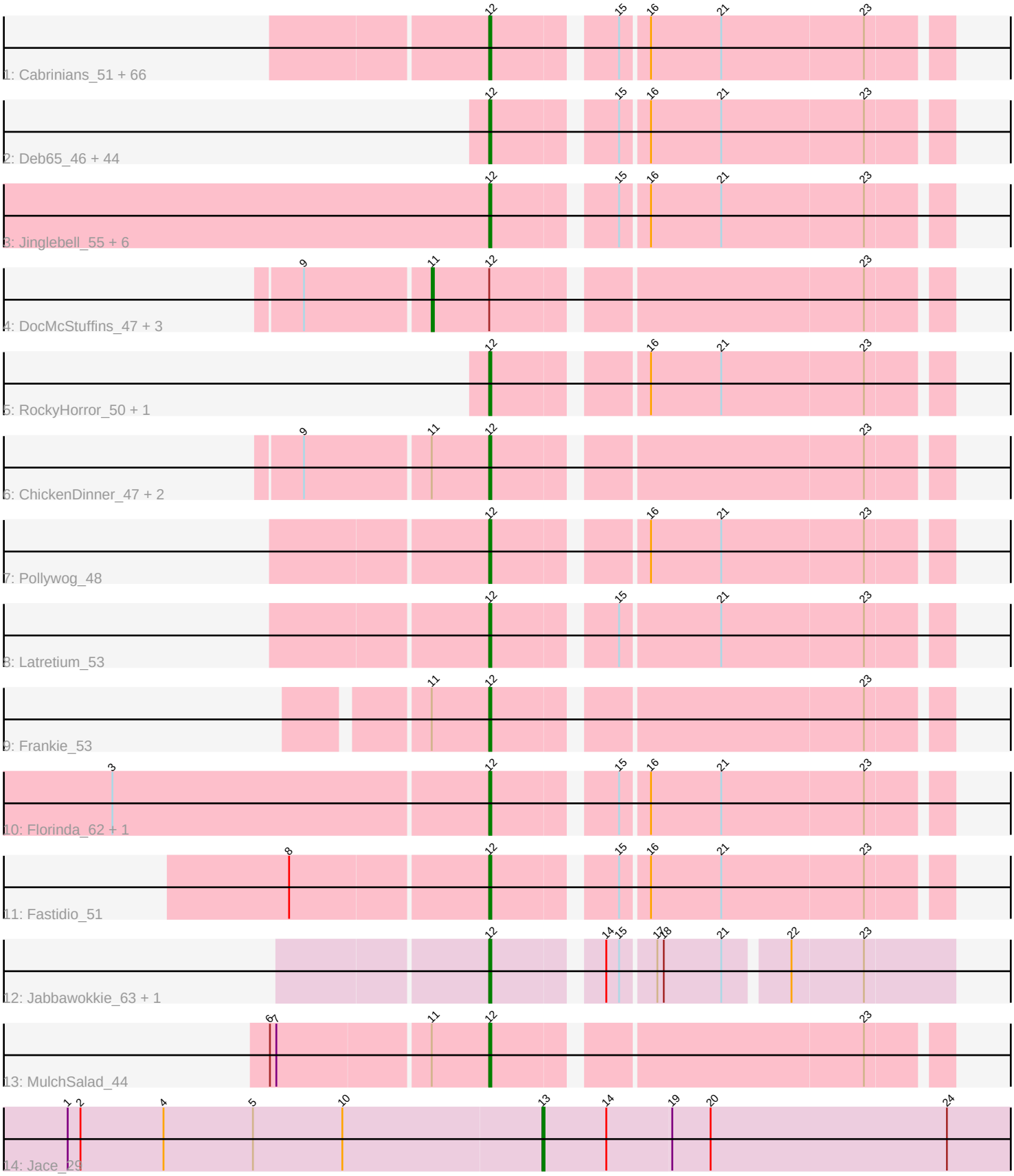
Pham 347367


1: Cabrinians_51 + 66
2: Deb65_46 + 44
3: Jinglebell_55 + 6
4: DocMcStuffins_47 + 3
5: RockyHorror_50 + 1
6: ChickenDinner_47 + 2
7: Pollywog_48
8: Latretium_53
9: Frankie_53
10: Florinda_62 + 1
11: Fastidio_51
12: Jabbawokkie_63 + 1
13: MulchSalad_44
14: Jace_29

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 347367 Report

This analysis was run 11/14/26 on database version 672.

Pham number 347367 has 138 members, 0 are drafts.

Phages represented in each track:
• Track 1 : Cabrinians_51, TDanisky_54, Yorick_49, Grimmer_58, Jarcob_50, Seagreen_51, Eradicator_43, Girr_50, Dante_49, MulchExplorer_53, Llij_47, LilMoolah_49, Lizziana_56, Doug_52, Leozinho_51, Kimberlium_53, Karhdo_49, Drago_49, QuickMath_52, Martik_50, Emmaloid_51, Starcevich_50, Koella_44, PopTart_45, Avani_58, ShowerHandel_52, Chevrolet_56, Nitzel_45, NormanBulbieJr_50, Maravista_52, Marker_50, DotProduct_46, Priscilla_50, Ibhubesi_49, MadMen_44, Tweety_49, Ruby_48, Royals2015_52, ArcusAngelus_53, Sabbb_56, Mahavrat_48, Peridot_50, Totinger_50, Bubbles123_47, ShiLan_49, Nivrat_47, JalFarm20_59, GigiOuiOui_47, MisterCuddles_50, Aubs_49, Slim_51, FreddyB_50, UncleRicky_50, Madiba_46, Tootsieroll_53, Eish_50, Crumble_45, Che8_52, Lucia_50, Sparkdehlily_54, DirtMcgirt_50, Burwell21_48, LittleShirley_50, Phatniss_49, Nichirin_54, Plumbus_52, SassyB_45
• Track 2 : Deb65_46, OlympiaSaint_50, BlueCrab_47, Dorothy_47, Gandalph_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, Stap_49, GUmbie_47, PMC_44, Rockne_48, PHappiness_46, Mantra_47, Radiance_50, Oksu_55, Boomer_52, JoeyJr_46, Krakatau_48, RitaG_46, DaddyRickover_50, PhlipPhlop_49, Spikelee_56, Polka14_47, Nimbo_45, Hamulus_51, Ramsey_51, Pacc40_45, SiSi_49, BodEinwohner17_50, RedBird_47, KingMidas_50, BuzzLyseyear_55, IbOuu_50
• Track 3 : Jinglebell_55, Ochi17_53, Llama_55, Modragons_54, AlpineSix_55, Seabastian_55, OfUltron_55
• Track 4 : DocMcStuffins_47, Aloeri_48, Misha28_46, TootsiePop_46
• Track 5 : RockyHorror_50, Zerg_49
• Track 6 : ChickenDinner_47, Awesomesauce_48, Piper2020_48
• Track 7 : Pollywog_48
• Track 8 : Latretium_53
• Track 9 : Frankie_53
• Track 10 : Florinda_62, Quico_59
• Track 11 : Fastidio_51
• Track 12 : Jabbawokkie_63, Zapner_62
• Track 13 : MulchSalad_44
• Track 14 : Jace_29

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

The start number called the most often in the published annotations is 12, it was called in 133 of the 138 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_56, ChickenDinner_47, Cornie_43, Crumble_45, DaddyRickover_50, Daenerys_45, Dante_49, Deb65_46, DirtMcgirt_50, Doomphist_49, Dorothy_47, DotProduct_46, Doug_52, Drago_49, Eish_50, Emmaloid_51, Empress_49, Eradicator_43, Fastidio_51, Florinda_62, Frankie_53, FreddyB_50, GUmbie_47, Gandalph_51, GigiOuiOui_47, Girr_50, Grimmer_58, Hamulus_51, Harley_52, IbOuu_50, 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_50, Lizziana_56, Llama_55, Llij_47, Lucia_50, MadMen_44, Madiba_46, Mahavrat_48, Mantra_47, Maravista_52, Marker_50, Martik_50, MisterCuddles_50, Modragons_54, MulchExplorer_53, MulchSalad_44, Nichirin_54, Nimbo_45, Nitzel_45, Nivrat_47, NormanBulbieJr_50, Ochi17_53, OfUltron_55, Oksu_55, OlympiaSaint_50, OwlsT2W_49, PHappiness_46, PMC_44, Pacc40_45, Peridot_50, Phatniss_49, PhlipPhlop_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, Seabastian_55, Seagreen_51, ShiLan_49, ShowerHandel_52, SiSi_49, Slim_51, Sparkdehlily_54, Spikelee_56, Spoonbill_48, Stap_49, Starcevich_50, TDanisky_54, Tootsieroll_53, Totinger_50, Tweety_49, UncleRicky_50, Veteran_47, Yorick_49, Zapner_62, Zerg_49,

Genes that have the "Most Annotated" start but do not call it:
• Aloeri_48, DocMcStuffins_47, Misha28_46, TootsiePop_46,

Genes that do not have the "Most Annotated" start:
• Jace_29,

Summary by start number:

Start 11:
• Found in 9 of 138 (6.5%) of genes in pham
• Manual Annotations of this start: 4 of 138
• Called 44.4% of time when present
• Phage (with cluster) where this start called: Aloeri_48 (F1), DocMcStuffins_47 (F1), Misha28_46 (F1), TootsiePop_46 (F1),

Start 12:
• Found in 137 of 138 (99.3%) of genes in pham
• Manual Annotations of this start: 133 of 138
• Called 97.1% 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_56 (F1), ChickenDinner_47 (F1), Cornie_43 (F5), Crumble_45 (F1), DaddyRickover_50 (F1), Daenerys_45 (F1), Dante_49 (F1), Deb65_46 (F1), DirtMcgirt_50 (F1), Doomphist_49 (F1), Dorothy_47 (F1), DotProduct_46 (F1), Doug_52 (F1), Drago_49 (F1), Eish_50 (F1), Emmaloid_51 (F1), Empress_49 (F1), Eradicator_43 (F1), Fastidio_51 (F1), Florinda_62 (F1), Frankie_53 (F1), FreddyB_50 (F1), GUmbie_47 (F1), Gandalph_51 (F1), GigiOuiOui_47 (F1), Girr_50 (F1), Grimmer_58 (F1), Hamulus_51 (F1), Harley_52 (F1), IbOuu_50 (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_50 (F1), Lizziana_56 (F1), Llama_55 (F1), Llij_47 (F1), Lucia_50 (F1), MadMen_44 (F1), Madiba_46 (F1), Mahavrat_48 (F1), Mantra_47 (F1), Maravista_52 (F1), Marker_50 (F1), Martik_50 (F1), MisterCuddles_50 (F1), Modragons_54 (F1), MulchExplorer_53 (F1), MulchSalad_44 (F7), Nichirin_54 (F1), Nimbo_45 (F1), Nitzel_45 (F1), Nivrat_47 (F1), NormanBulbieJr_50 (F1), Ochi17_53 (F1), OfUltron_55 (F1), Oksu_55 (F1), OlympiaSaint_50 (F1), OwlsT2W_49 (F1), PHappiness_46 (F1), PMC_44 (F1), Pacc40_45 (F1), Peridot_50 (F1), Phatniss_49 (F1), PhlipPhlop_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_52 (F1), SiSi_49 (F1), Slim_51 (F1), Sparkdehlily_54 (F1), Spikelee_56 (F1), Spoonbill_48 (F1), Stap_49 (F1), Starcevich_50 (F1), TDanisky_54 (F1), Tootsieroll_53 (F1), Totinger_50 (F1), Tweety_49 (F1), UncleRicky_50 (F1), Veteran_47 (F1), Yorick_49 (F1), Zapner_62 (F2), Zerg_49 (F1),

Start 13:
• Found in 1 of 138 (0.7%) of genes in pham
• Manual Annotations of this start: 1 of 138
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Jace_29 (singleton),

Summary by clusters:

There are 5 clusters represented in this pham: F1, F2, F7, F5, singleton,

Info for manual annotations of cluster F1:
•Start number 11 was manually annotated 4 times for cluster F1.
•Start number 12 was manually annotated 128 times for cluster F1.

Info for manual annotations of cluster F2:
•Start number 12 was manually annotated 3 times for cluster F2.

Info for manual annotations of cluster F5:
•Start number 12 was manually annotated 1 time for cluster F5.

Info for manual annotations of cluster F7:
•Start number 12 was manually annotated 1 time for cluster F7.

Gene Information:

Gene: Aloeri_48 Start: 35702, Stop: 35926, Start Num: 11
Candidate Starts for Aloeri_48:
(9, 35645), (Start: 11 @35702 has 4 MA's), (Start: 12 @35729 has 133 MA's), (23, 35891),

Gene: AlpineSix_55 Start: 38663, Stop: 38860, Start Num: 12
Candidate Starts for AlpineSix_55:
(Start: 12 @38663 has 133 MA's), (15, 38714), (16, 38726), (21, 38759), (23, 38825),

Gene: ArcusAngelus_53 Start: 37779, Stop: 37976, Start Num: 12
Candidate Starts for ArcusAngelus_53:
(Start: 12 @37779 has 133 MA's), (15, 37830), (16, 37842), (21, 37875), (23, 37941),

Gene: Aubs_49 Start: 36346, Stop: 36543, Start Num: 12
Candidate Starts for Aubs_49:
(Start: 12 @36346 has 133 MA's), (15, 36397), (16, 36409), (21, 36442), (23, 36508),

Gene: Avani_58 Start: 36654, Stop: 36851, Start Num: 12
Candidate Starts for Avani_58:
(Start: 12 @36654 has 133 MA's), (15, 36705), (16, 36717), (21, 36750), (23, 36816),

Gene: Awesomesauce_48 Start: 34991, Stop: 35188, Start Num: 12
Candidate Starts for Awesomesauce_48:
(9, 34907), (Start: 11 @34964 has 4 MA's), (Start: 12 @34991 has 133 MA's), (23, 35153),

Gene: Blexus_48 Start: 36433, Stop: 36630, Start Num: 12
Candidate Starts for Blexus_48:
(Start: 12 @36433 has 133 MA's), (15, 36484), (16, 36496), (21, 36529), (23, 36595),

Gene: BlueCrab_47 Start: 36159, Stop: 36356, Start Num: 12
Candidate Starts for BlueCrab_47:
(Start: 12 @36159 has 133 MA's), (15, 36210), (16, 36222), (21, 36255), (23, 36321),

Gene: BodEinwohner17_50 Start: 36375, Stop: 36572, Start Num: 12
Candidate Starts for BodEinwohner17_50:
(Start: 12 @36375 has 133 MA's), (15, 36426), (16, 36438), (21, 36471), (23, 36537),

Gene: Boomer_52 Start: 37608, Stop: 37805, Start Num: 12
Candidate Starts for Boomer_52:
(Start: 12 @37608 has 133 MA's), (15, 37659), (16, 37671), (21, 37704), (23, 37770),

Gene: Bubbles123_47 Start: 37055, Stop: 37252, Start Num: 12
Candidate Starts for Bubbles123_47:
(Start: 12 @37055 has 133 MA's), (15, 37106), (16, 37118), (21, 37151), (23, 37217),

Gene: Burwell21_48 Start: 36717, Stop: 36914, Start Num: 12
Candidate Starts for Burwell21_48:
(Start: 12 @36717 has 133 MA's), (15, 36768), (16, 36780), (21, 36813), (23, 36879),

Gene: BuzzLyseyear_55 Start: 37985, Stop: 38182, Start Num: 12
Candidate Starts for BuzzLyseyear_55:
(Start: 12 @37985 has 133 MA's), (15, 38036), (16, 38048), (21, 38081), (23, 38147),

Gene: Cabrinians_51 Start: 36795, Stop: 36992, Start Num: 12
Candidate Starts for Cabrinians_51:
(Start: 12 @36795 has 133 MA's), (15, 36846), (16, 36858), (21, 36891), (23, 36957),

Gene: Che8_52 Start: 37604, Stop: 37801, Start Num: 12
Candidate Starts for Che8_52:
(Start: 12 @37604 has 133 MA's), (15, 37655), (16, 37667), (21, 37700), (23, 37766),

Gene: Chevrolet_56 Start: 37780, Stop: 37977, Start Num: 12
Candidate Starts for Chevrolet_56:
(Start: 12 @37780 has 133 MA's), (15, 37831), (16, 37843), (21, 37876), (23, 37942),

Gene: ChickenDinner_47 Start: 35729, Stop: 35926, Start Num: 12
Candidate Starts for ChickenDinner_47:
(9, 35645), (Start: 11 @35702 has 4 MA's), (Start: 12 @35729 has 133 MA's), (23, 35891),

Gene: Cornie_43 Start: 34495, Stop: 34692, Start Num: 12
Candidate Starts for Cornie_43:
(Start: 12 @34495 has 133 MA's), (15, 34546), (16, 34558), (21, 34591), (23, 34657),

Gene: Crumble_45 Start: 32731, Stop: 32928, Start Num: 12
Candidate Starts for Crumble_45:
(Start: 12 @32731 has 133 MA's), (15, 32782), (16, 32794), (21, 32827), (23, 32893),

Gene: DaddyRickover_50 Start: 37291, Stop: 37488, Start Num: 12
Candidate Starts for DaddyRickover_50:
(Start: 12 @37291 has 133 MA's), (15, 37342), (16, 37354), (21, 37387), (23, 37453),

Gene: Daenerys_45 Start: 35102, Stop: 35299, Start Num: 12
Candidate Starts for Daenerys_45:
(Start: 12 @35102 has 133 MA's), (15, 35153), (16, 35165), (21, 35198), (23, 35264),

Gene: Dante_49 Start: 36138, Stop: 36335, Start Num: 12
Candidate Starts for Dante_49:
(Start: 12 @36138 has 133 MA's), (15, 36189), (16, 36201), (21, 36234), (23, 36300),

Gene: Deb65_46 Start: 35071, Stop: 35268, Start Num: 12
Candidate Starts for Deb65_46:
(Start: 12 @35071 has 133 MA's), (15, 35122), (16, 35134), (21, 35167), (23, 35233),

Gene: DirtMcgirt_50 Start: 35836, Stop: 36033, Start Num: 12
Candidate Starts for DirtMcgirt_50:
(Start: 12 @35836 has 133 MA's), (15, 35887), (16, 35899), (21, 35932), (23, 35998),

Gene: DocMcStuffins_47 Start: 35702, Stop: 35926, Start Num: 11
Candidate Starts for DocMcStuffins_47:
(9, 35645), (Start: 11 @35702 has 4 MA's), (Start: 12 @35729 has 133 MA's), (23, 35891),

Gene: Doomphist_49 Start: 37373, Stop: 37570, Start Num: 12
Candidate Starts for Doomphist_49:
(Start: 12 @37373 has 133 MA's), (15, 37424), (16, 37436), (21, 37469), (23, 37535),

Gene: Dorothy_47 Start: 36172, Stop: 36369, Start Num: 12
Candidate Starts for Dorothy_47:
(Start: 12 @36172 has 133 MA's), (15, 36223), (16, 36235), (21, 36268), (23, 36334),

Gene: DotProduct_46 Start: 35833, Stop: 36027, Start Num: 12
Candidate Starts for DotProduct_46:
(Start: 12 @35833 has 133 MA's), (15, 35881), (16, 35893), (21, 35926), (23, 35992),

Gene: Doug_52 Start: 37491, Stop: 37688, Start Num: 12
Candidate Starts for Doug_52:
(Start: 12 @37491 has 133 MA's), (15, 37542), (16, 37554), (21, 37587), (23, 37653),

Gene: Drago_49 Start: 35839, Stop: 36036, Start Num: 12
Candidate Starts for Drago_49:
(Start: 12 @35839 has 133 MA's), (15, 35890), (16, 35902), (21, 35935), (23, 36001),

Gene: Eish_50 Start: 36718, Stop: 36915, Start Num: 12
Candidate Starts for Eish_50:
(Start: 12 @36718 has 133 MA's), (15, 36769), (16, 36781), (21, 36814), (23, 36880),

Gene: Emmaloid_51 Start: 37563, Stop: 37760, Start Num: 12
Candidate Starts for Emmaloid_51:
(Start: 12 @37563 has 133 MA's), (15, 37614), (16, 37626), (21, 37659), (23, 37725),

Gene: Empress_49 Start: 36516, Stop: 36713, Start Num: 12
Candidate Starts for Empress_49:
(Start: 12 @36516 has 133 MA's), (15, 36567), (16, 36579), (21, 36612), (23, 36678),

Gene: Eradicator_43 Start: 35055, Stop: 35252, Start Num: 12
Candidate Starts for Eradicator_43:
(Start: 12 @35055 has 133 MA's), (15, 35106), (16, 35118), (21, 35151), (23, 35217),

Gene: Fastidio_51 Start: 35796, Stop: 35993, Start Num: 12
Candidate Starts for Fastidio_51:
(8, 35706), (Start: 12 @35796 has 133 MA's), (15, 35847), (16, 35859), (21, 35892), (23, 35958),

Gene: Florinda_62 Start: 38976, Stop: 39173, Start Num: 12
Candidate Starts for Florinda_62:
(3, 38802), (Start: 12 @38976 has 133 MA's), (15, 39027), (16, 39039), (21, 39072), (23, 39138),

Gene: Frankie_53 Start: 37777, Stop: 37974, Start Num: 12
Candidate Starts for Frankie_53:
(Start: 11 @37750 has 4 MA's), (Start: 12 @37777 has 133 MA's), (23, 37939),

Gene: FreddyB_50 Start: 35643, Stop: 35840, Start Num: 12
Candidate Starts for FreddyB_50:
(Start: 12 @35643 has 133 MA's), (15, 35694), (16, 35706), (21, 35739), (23, 35805),

Gene: GUmbie_47 Start: 36062, Stop: 36259, Start Num: 12
Candidate Starts for GUmbie_47:
(Start: 12 @36062 has 133 MA's), (15, 36113), (16, 36125), (21, 36158), (23, 36224),

Gene: Gandalph_51 Start: 36305, Stop: 36502, Start Num: 12

Candidate Starts for Gandalph_51:
(Start: 12 @36305 has 133 MA's), (15, 36356), (16, 36368), (21, 36401), (23, 36467),

Gene: GigiOuiOui_47 Start: 35975, Stop: 36172, Start Num: 12
Candidate Starts for GigiOuiOui_47:
(Start: 12 @35975 has 133 MA's), (15, 36026), (16, 36038), (21, 36071), (23, 36137),

Gene: Girr_50 Start: 37034, Stop: 37231, Start Num: 12
Candidate Starts for Girr_50:
(Start: 12 @37034 has 133 MA's), (15, 37085), (16, 37097), (21, 37130), (23, 37196),

Gene: Grimmer_58 Start: 38549, Stop: 38746, Start Num: 12
Candidate Starts for Grimmer_58:
(Start: 12 @38549 has 133 MA's), (15, 38600), (16, 38612), (21, 38645), (23, 38711),

Gene: Hamulus_51 Start: 37417, Stop: 37614, Start Num: 12
Candidate Starts for Hamulus_51:
(Start: 12 @37417 has 133 MA's), (15, 37468), (16, 37480), (21, 37513), (23, 37579),

Gene: Harley_52 Start: 36770, Stop: 36967, Start Num: 12
Candidate Starts for Harley_52:
(Start: 12 @36770 has 133 MA's), (15, 36821), (16, 36833), (21, 36866), (23, 36932),

Gene: IbOuu_50 Start: 37352, Stop: 37549, Start Num: 12
Candidate Starts for IbOuu_50:
(Start: 12 @37352 has 133 MA's), (15, 37403), (16, 37415), (21, 37448), (23, 37514),

Gene: Ibhubesi_49 Start: 35857, Stop: 36054, Start Num: 12
Candidate Starts for Ibhubesi_49:
(Start: 12 @35857 has 133 MA's), (15, 35908), (16, 35920), (21, 35953), (23, 36019),

Gene: Jabbawokkie_63 Start: 37588, Stop: 37785, Start Num: 12
Candidate Starts for Jabbawokkie_63:
(Start: 12 @37588 has 133 MA's), (14, 37633), (15, 37639), (17, 37654), (18, 37657), (21, 37684), (22, 37711), (23, 37744),

Gene: Jace_29 Start: 24871, Stop: 25110, Start Num: 13
Candidate Starts for Jace_29:
(1, 24649), (2, 24655), (4, 24694), (5, 24736), (10, 24778), (Start: 13 @24871 has 1 MA's), (14, 24901), (19, 24931), (20, 24949), (24, 25060),

Gene: JalFarm20_59 Start: 39334, Stop: 39531, Start Num: 12
Candidate Starts for JalFarm20_59:
(Start: 12 @39334 has 133 MA's), (15, 39385), (16, 39397), (21, 39430), (23, 39496),

Gene: Jarcob_50 Start: 36763, Stop: 36960, Start Num: 12
Candidate Starts for Jarcob_50:
(Start: 12 @36763 has 133 MA's), (15, 36814), (16, 36826), (21, 36859), (23, 36925),

Gene: Jinglebell_55 Start: 38662, Stop: 38859, Start Num: 12
Candidate Starts for Jinglebell_55:
(Start: 12 @38662 has 133 MA's), (15, 38713), (16, 38725), (21, 38758), (23, 38824),

Gene: Job42_50 Start: 38024, Stop: 38221, Start Num: 12
Candidate Starts for Job42_50:
(Start: 12 @38024 has 133 MA's), (15, 38075), (16, 38087), (21, 38120), (23, 38186),

Gene: JoeyJr_46 Start: 35270, Stop: 35467, Start Num: 12
Candidate Starts for JoeyJr_46:
(Start: 12 @35270 has 133 MA's), (15, 35321), (16, 35333), (21, 35366), (23, 35432),

Gene: Karhdo_49 Start: 36857, Stop: 37054, Start Num: 12
Candidate Starts for Karhdo_49:
(Start: 12 @36857 has 133 MA's), (15, 36908), (16, 36920), (21, 36953), (23, 37019),

Gene: Kersh_53 Start: 38807, Stop: 39004, Start Num: 12
Candidate Starts for Kersh_53:
(Start: 12 @38807 has 133 MA's), (15, 38858), (16, 38870), (21, 38903), (23, 38969),

Gene: Kimberlium_53 Start: 38669, Stop: 38866, Start Num: 12
Candidate Starts for Kimberlium_53:
(Start: 12 @38669 has 133 MA's), (15, 38720), (16, 38732), (21, 38765), (23, 38831),

Gene: KingMidas_50 Start: 36932, Stop: 37129, Start Num: 12
Candidate Starts for KingMidas_50:
(Start: 12 @36932 has 133 MA's), (15, 36983), (16, 36995), (21, 37028), (23, 37094),

Gene: Koella_44 Start: 32693, Stop: 32890, Start Num: 12
Candidate Starts for Koella_44:
(Start: 12 @32693 has 133 MA's), (15, 32744), (16, 32756), (21, 32789), (23, 32855),

Gene: Krakatau_48 Start: 36504, Stop: 36701, Start Num: 12
Candidate Starts for Krakatau_48:
(Start: 12 @36504 has 133 MA's), (15, 36555), (16, 36567), (21, 36600), (23, 36666),

Gene: Latretium_53 Start: 37646, Stop: 37843, Start Num: 12
Candidate Starts for Latretium_53:
(Start: 12 @37646 has 133 MA's), (15, 37697), (21, 37742), (23, 37808),

Gene: Leozinho_51 Start: 36607, Stop: 36804, Start Num: 12
Candidate Starts for Leozinho_51:
(Start: 12 @36607 has 133 MA's), (15, 36658), (16, 36670), (21, 36703), (23, 36769),

Gene: Leperchaun_43 Start: 34500, Stop: 34697, Start Num: 12
Candidate Starts for Leperchaun_43:
(Start: 12 @34500 has 133 MA's), (15, 34551), (16, 34563), (21, 34596), (23, 34662),

Gene: LilMoolah_49 Start: 36424, Stop: 36621, Start Num: 12
Candidate Starts for LilMoolah_49:
(Start: 12 @36424 has 133 MA's), (15, 36475), (16, 36487), (21, 36520), (23, 36586),

Gene: LittleShirley_50 Start: 37455, Stop: 37652, Start Num: 12
Candidate Starts for LittleShirley_50:
(Start: 12 @37455 has 133 MA's), (15, 37506), (16, 37518), (21, 37551), (23, 37617),

Gene: Lizziana_56 Start: 37766, Stop: 37963, Start Num: 12

Candidate Starts for Lizziana_56:
(Start: 12 @37766 has 133 MA's), (15, 37817), (16, 37829), (21, 37862), (23, 37928),

Gene: Llama_55 Start: 38660, Stop: 38857, Start Num: 12
Candidate Starts for Llama_55:
(Start: 12 @38660 has 133 MA's), (15, 38711), (16, 38723), (21, 38756), (23, 38822),

Gene: Llij_47 Start: 35993, Stop: 36190, Start Num: 12
Candidate Starts for Llij_47:
(Start: 12 @35993 has 133 MA's), (15, 36044), (16, 36056), (21, 36089), (23, 36155),

Gene: Lucia_50 Start: 36137, Stop: 36334, Start Num: 12
Candidate Starts for Lucia_50:
(Start: 12 @36137 has 133 MA's), (15, 36188), (16, 36200), (21, 36233), (23, 36299),

Gene: MadMen_44 Start: 35477, Stop: 35674, Start Num: 12
Candidate Starts for MadMen_44:
(Start: 12 @35477 has 133 MA's), (15, 35528), (16, 35540), (21, 35573), (23, 35639),

Gene: Madiba_46 Start: 34766, Stop: 34963, Start Num: 12
Candidate Starts for Madiba_46:
(Start: 12 @34766 has 133 MA's), (15, 34817), (16, 34829), (21, 34862), (23, 34928),

Gene: Mahavrat_48 Start: 35954, Stop: 36151, Start Num: 12
Candidate Starts for Mahavrat_48:
(Start: 12 @35954 has 133 MA's), (15, 36005), (16, 36017), (21, 36050), (23, 36116),

Gene: Mantra_47 Start: 35945, Stop: 36142, Start Num: 12
Candidate Starts for Mantra_47:
(Start: 12 @35945 has 133 MA's), (15, 35996), (16, 36008), (21, 36041), (23, 36107),

Gene: Maravista_52 Start: 38428, Stop: 38625, Start Num: 12
Candidate Starts for Maravista_52:
(Start: 12 @38428 has 133 MA's), (15, 38479), (16, 38491), (21, 38524), (23, 38590),

Gene: Marker_50 Start: 36326, Stop: 36523, Start Num: 12
Candidate Starts for Marker_50:
(Start: 12 @36326 has 133 MA's), (15, 36377), (16, 36389), (21, 36422), (23, 36488),

Gene: Martik_50 Start: 36719, Stop: 36916, Start Num: 12
Candidate Starts for Martik_50:
(Start: 12 @36719 has 133 MA's), (15, 36770), (16, 36782), (21, 36815), (23, 36881),

Gene: Misha28_46 Start: 34969, Stop: 35193, Start Num: 11
Candidate Starts for Misha28_46:
(9, 34912), (Start: 11 @34969 has 4 MA's), (Start: 12 @34996 has 133 MA's), (23, 35158),

Gene: MisterCuddles_50 Start: 37034, Stop: 37231, Start Num: 12
Candidate Starts for MisterCuddles_50:
(Start: 12 @37034 has 133 MA's), (15, 37085), (16, 37097), (21, 37130), (23, 37196),

Gene: Modragons_54 Start: 38506, Stop: 38703, Start Num: 12
Candidate Starts for Modragons_54:

(Start: 12 @38506 has 133 MA's), (15, 38557), (16, 38569), (21, 38602), (23, 38668),

Gene: MulchExplorer_53 Start: 38668, Stop: 38865, Start Num: 12
Candidate Starts for MulchExplorer_53:
(Start: 12 @38668 has 133 MA's), (15, 38719), (16, 38731), (21, 38764), (23, 38830),

Gene: MulchSalad_44 Start: 33570, Stop: 33767, Start Num: 12
Candidate Starts for MulchSalad_44:
(6, 33471), (7, 33474), (Start: 11 @33543 has 4 MA's), (Start: 12 @33570 has 133 MA's), (23, 33732),

Gene: Nichirin_54 Start: 38298, Stop: 38495, Start Num: 12
Candidate Starts for Nichirin_54:
(Start: 12 @38298 has 133 MA's), (15, 38349), (16, 38361), (21, 38394), (23, 38460),

Gene: Nimbo_45 Start: 35073, Stop: 35270, Start Num: 12
Candidate Starts for Nimbo_45:
(Start: 12 @35073 has 133 MA's), (15, 35124), (16, 35136), (21, 35169), (23, 35235),

Gene: Nitzel_45 Start: 35193, Stop: 35390, Start Num: 12
Candidate Starts for Nitzel_45:
(Start: 12 @35193 has 133 MA's), (15, 35244), (16, 35256), (21, 35289), (23, 35355),

Gene: Nivrat_47 Start: 36297, Stop: 36494, Start Num: 12
Candidate Starts for Nivrat_47:
(Start: 12 @36297 has 133 MA's), (15, 36348), (16, 36360), (21, 36393), (23, 36459),

Gene: NormanBulbieJr_50 Start: 36706, Stop: 36903, Start Num: 12
Candidate Starts for NormanBulbieJr_50:
(Start: 12 @36706 has 133 MA's), (15, 36757), (16, 36769), (21, 36802), (23, 36868),

Gene: Ochi17_53 Start: 38113, Stop: 38310, Start Num: 12
Candidate Starts for Ochi17_53:
(Start: 12 @38113 has 133 MA's), (15, 38164), (16, 38176), (21, 38209), (23, 38275),

Gene: OfUltron_55 Start: 38662, Stop: 38859, Start Num: 12
Candidate Starts for OfUltron_55:
(Start: 12 @38662 has 133 MA's), (15, 38713), (16, 38725), (21, 38758), (23, 38824),

Gene: Oksu_55 Start: 38558, Stop: 38755, Start Num: 12
Candidate Starts for Oksu_55:
(Start: 12 @38558 has 133 MA's), (15, 38609), (16, 38621), (21, 38654), (23, 38720),

Gene: OlympiaSaint_50 Start: 36632, Stop: 36829, Start Num: 12
Candidate Starts for OlympiaSaint_50:
(Start: 12 @36632 has 133 MA's), (15, 36683), (16, 36695), (21, 36728), (23, 36794),

Gene: OwlsT2W_49 Start: 36635, Stop: 36832, Start Num: 12
Candidate Starts for OwlsT2W_49:
(Start: 12 @36635 has 133 MA's), (15, 36686), (16, 36698), (21, 36731), (23, 36797),

Gene: PHappiness_46 Start: 35046, Stop: 35243, Start Num: 12
Candidate Starts for PHappiness_46:
(Start: 12 @35046 has 133 MA's), (15, 35097), (16, 35109), (21, 35142), (23, 35208),

Gene: PMC_44 Start: 35844, Stop: 36041, Start Num: 12
Candidate Starts for PMC_44:
(Start: 12 @35844 has 133 MA's), (15, 35895), (16, 35907), (21, 35940), (23, 36006),

Gene: Pacc40_45 Start: 35120, Stop: 35317, Start Num: 12
Candidate Starts for Pacc40_45:
(Start: 12 @35120 has 133 MA's), (15, 35171), (16, 35183), (21, 35216), (23, 35282),

Gene: Peridot_50 Start: 36751, Stop: 36945, Start Num: 12
Candidate Starts for Peridot_50:
(Start: 12 @36751 has 133 MA's), (15, 36799), (16, 36811), (21, 36844), (23, 36910),

Gene: Phatniss_49 Start: 37088, Stop: 37285, Start Num: 12
Candidate Starts for Phatniss_49:
(Start: 12 @37088 has 133 MA's), (15, 37139), (16, 37151), (21, 37184), (23, 37250),

Gene: PhlipPhlop_49 Start: 37650, Stop: 37847, Start Num: 12
Candidate Starts for PhlipPhlop_49:
(Start: 12 @37650 has 133 MA's), (15, 37701), (16, 37713), (21, 37746), (23, 37812),

Gene: Piper2020_48 Start: 35712, Stop: 35909, Start Num: 12
Candidate Starts for Piper2020_48:
(9, 35628), (Start: 11 @35685 has 4 MA's), (Start: 12 @35712 has 133 MA's), (23, 35874),

Gene: Plumbus_52 Start: 36835, Stop: 37032, Start Num: 12
Candidate Starts for Plumbus_52:
(Start: 12 @36835 has 133 MA's), (15, 36886), (16, 36898), (21, 36931), (23, 36997),

Gene: Poenanya_49 Start: 37373, Stop: 37570, Start Num: 12
Candidate Starts for Poenanya_49:
(Start: 12 @37373 has 133 MA's), (15, 37424), (16, 37436), (21, 37469), (23, 37535),

Gene: Polka14_47 Start: 35723, Stop: 35920, Start Num: 12
Candidate Starts for Polka14_47:
(Start: 12 @35723 has 133 MA's), (15, 35774), (16, 35786), (21, 35819), (23, 35885),

Gene: Pollywog_48 Start: 36551, Stop: 36748, Start Num: 12
Candidate Starts for Pollywog_48:
(Start: 12 @36551 has 133 MA's), (16, 36614), (21, 36647), (23, 36713),

Gene: PopTart_45 Start: 35859, Stop: 36056, Start Num: 12
Candidate Starts for PopTart_45:
(Start: 12 @35859 has 133 MA's), (15, 35910), (16, 35922), (21, 35955), (23, 36021),

Gene: Priscilla_50 Start: 36805, Stop: 37002, Start Num: 12
Candidate Starts for Priscilla_50:
(Start: 12 @36805 has 133 MA's), (15, 36856), (16, 36868), (21, 36901), (23, 36967),

Gene: QuickMath_52 Start: 38892, Stop: 39089, Start Num: 12
Candidate Starts for QuickMath_52:
(Start: 12 @38892 has 133 MA's), (15, 38943), (16, 38955), (21, 38988), (23, 39054),

Gene: Quico_59 Start: 38796, Stop: 38993, Start Num: 12
Candidate Starts for Quico_59:
(3, 38622), (Start: 12 @38796 has 133 MA's), (15, 38847), (16, 38859), (21, 38892), (23, 38958),

Gene: Radiance_50 Start: 36960, Stop: 37157, Start Num: 12
Candidate Starts for Radiance_50:
(Start: 12 @36960 has 133 MA's), (15, 37011), (16, 37023), (21, 37056), (23, 37122),

Gene: Ramsey_51 Start: 37587, Stop: 37784, Start Num: 12
Candidate Starts for Ramsey_51:
(Start: 12 @37587 has 133 MA's), (15, 37638), (16, 37650), (21, 37683), (23, 37749),

Gene: RedBird_47 Start: 36184, Stop: 36381, Start Num: 12
Candidate Starts for RedBird_47:
(Start: 12 @36184 has 133 MA's), (15, 36235), (16, 36247), (21, 36280), (23, 36346),

Gene: RitaG_46 Start: 35391, Stop: 35588, Start Num: 12
Candidate Starts for RitaG_46:
(Start: 12 @35391 has 133 MA's), (15, 35442), (16, 35454), (21, 35487), (23, 35553),

Gene: Rockne_48 Start: 35844, Stop: 36041, Start Num: 12
Candidate Starts for Rockne_48:
(Start: 12 @35844 has 133 MA's), (15, 35895), (16, 35907), (21, 35940), (23, 36006),

Gene: RockyHorror_50 Start: 36248, Stop: 36445, Start Num: 12
Candidate Starts for RockyHorror_50:
(Start: 12 @36248 has 133 MA's), (16, 36311), (21, 36344), (23, 36410),

Gene: Royals2015_52 Start: 36653, Stop: 36850, Start Num: 12
Candidate Starts for Royals2015_52:
(Start: 12 @36653 has 133 MA's), (15, 36704), (16, 36716), (21, 36749), (23, 36815),

Gene: Ruby_48 Start: 37035, Stop: 37232, Start Num: 12
Candidate Starts for Ruby_48:
(Start: 12 @37035 has 133 MA's), (15, 37086), (16, 37098), (21, 37131), (23, 37197),

Gene: Sabbb_56 Start: 38083, Stop: 38280, Start Num: 12
Candidate Starts for Sabbb_56:
(Start: 12 @38083 has 133 MA's), (15, 38134), (16, 38146), (21, 38179), (23, 38245),

Gene: SassyB_45 Start: 35859, Stop: 36056, Start Num: 12
Candidate Starts for SassyB_45:
(Start: 12 @35859 has 133 MA's), (15, 35910), (16, 35922), (21, 35955), (23, 36021),

Gene: Scottish_49 Start: 36403, Stop: 36600, Start Num: 12
Candidate Starts for Scottish_49:
(Start: 12 @36403 has 133 MA's), (15, 36454), (16, 36466), (21, 36499), (23, 36565),

Gene: Seabastian_55 Start: 38663, Stop: 38860, Start Num: 12
Candidate Starts for Seabastian_55:
(Start: 12 @38663 has 133 MA's), (15, 38714), (16, 38726), (21, 38759), (23, 38825),

Gene: Seagreen_51 Start: 36587, Stop: 36784, Start Num: 12

Candidate Starts for Seagreen_51:
(Start: 12 @36587 has 133 MA's), (15, 36638), (16, 36650), (21, 36683), (23, 36749),

Gene: ShiLan_49 Start: 36752, Stop: 36949, Start Num: 12
Candidate Starts for ShiLan_49:
(Start: 12 @36752 has 133 MA's), (15, 36803), (16, 36815), (21, 36848), (23, 36914),

Gene: ShowerHandel_52 Start: 36719, Stop: 36916, Start Num: 12
Candidate Starts for ShowerHandel_52:
(Start: 12 @36719 has 133 MA's), (15, 36770), (16, 36782), (21, 36815), (23, 36881),

Gene: SiSi_49 Start: 36409, Stop: 36606, Start Num: 12
Candidate Starts for SiSi_49:
(Start: 12 @36409 has 133 MA's), (15, 36460), (16, 36472), (21, 36505), (23, 36571),

Gene: Slim_51 Start: 37554, Stop: 37751, Start Num: 12
Candidate Starts for Slim_51:
(Start: 12 @37554 has 133 MA's), (15, 37605), (16, 37617), (21, 37650), (23, 37716),

Gene: Sparkdehlily_54 Start: 37405, Stop: 37602, Start Num: 12
Candidate Starts for Sparkdehlily_54:
(Start: 12 @37405 has 133 MA's), (15, 37456), (16, 37468), (21, 37501), (23, 37567),

Gene: Spikelee_56 Start: 38143, Stop: 38340, Start Num: 12
Candidate Starts for Spikelee_56:
(Start: 12 @38143 has 133 MA's), (15, 38194), (16, 38206), (21, 38239), (23, 38305),

Gene: Spoonbill_48 Start: 35345, Stop: 35542, Start Num: 12
Candidate Starts for Spoonbill_48:
(Start: 12 @35345 has 133 MA's), (15, 35396), (16, 35408), (21, 35441), (23, 35507),

Gene: Stap_49 Start: 36146, Stop: 36343, Start Num: 12
Candidate Starts for Stap_49:
(Start: 12 @36146 has 133 MA's), (15, 36197), (16, 36209), (21, 36242), (23, 36308),

Gene: Starcevich_50 Start: 37039, Stop: 37236, Start Num: 12
Candidate Starts for Starcevich_50:
(Start: 12 @37039 has 133 MA's), (15, 37090), (16, 37102), (21, 37135), (23, 37201),

Gene: TDanisky_54 Start: 37405, Stop: 37602, Start Num: 12
Candidate Starts for TDanisky_54:
(Start: 12 @37405 has 133 MA's), (15, 37456), (16, 37468), (21, 37501), (23, 37567),

Gene: TootsiePop_46 Start: 34969, Stop: 35193, Start Num: 11
Candidate Starts for TootsiePop_46:
(9, 34912), (Start: 11 @34969 has 4 MA's), (Start: 12 @34996 has 133 MA's), (23, 35158),

Gene: Tootsieroll_53 Start: 36596, Stop: 36793, Start Num: 12
Candidate Starts for Tootsieroll_53:
(Start: 12 @36596 has 133 MA's), (15, 36647), (16, 36659), (21, 36692), (23, 36758),

Gene: Totinger_50 Start: 36181, Stop: 36378, Start Num: 12
Candidate Starts for Totinger_50:

(Start: 12 @36181 has 133 MA's), (15, 36232), (16, 36244), (21, 36277), (23, 36343),

Gene: Tweety_49 Start: 36917, Stop: 37114, Start Num: 12
Candidate Starts for Tweety_49:
(Start: 12 @36917 has 133 MA's), (15, 36968), (16, 36980), (21, 37013), (23, 37079),

Gene: UncleRicky_50 Start: 37336, Stop: 37533, Start Num: 12
Candidate Starts for UncleRicky_50:
(Start: 12 @37336 has 133 MA's), (15, 37387), (16, 37399), (21, 37432), (23, 37498),

Gene: Veteran_47 Start: 36053, Stop: 36250, Start Num: 12
Candidate Starts for Veteran_47:
(Start: 12 @36053 has 133 MA's), (15, 36104), (16, 36116), (21, 36149), (23, 36215),

Gene: Yorick_49 Start: 37093, Stop: 37290, Start Num: 12
Candidate Starts for Yorick_49:
(Start: 12 @37093 has 133 MA's), (15, 37144), (16, 37156), (21, 37189), (23, 37255),

Gene: Zapner_62 Start: 37589, Stop: 37786, Start Num: 12
Candidate Starts for Zapner_62:
(Start: 12 @37589 has 133 MA's), (14, 37634), (15, 37640), (17, 37655), (18, 37658), (21, 37685), (22, 37712), (23, 37745),

Gene: Zerg_49 Start: 36357, Stop: 36554, Start Num: 12
Candidate Starts for Zerg_49:
(Start: 12 @36357 has 133 MA's), (16, 36420), (21, 36453), (23, 36519),