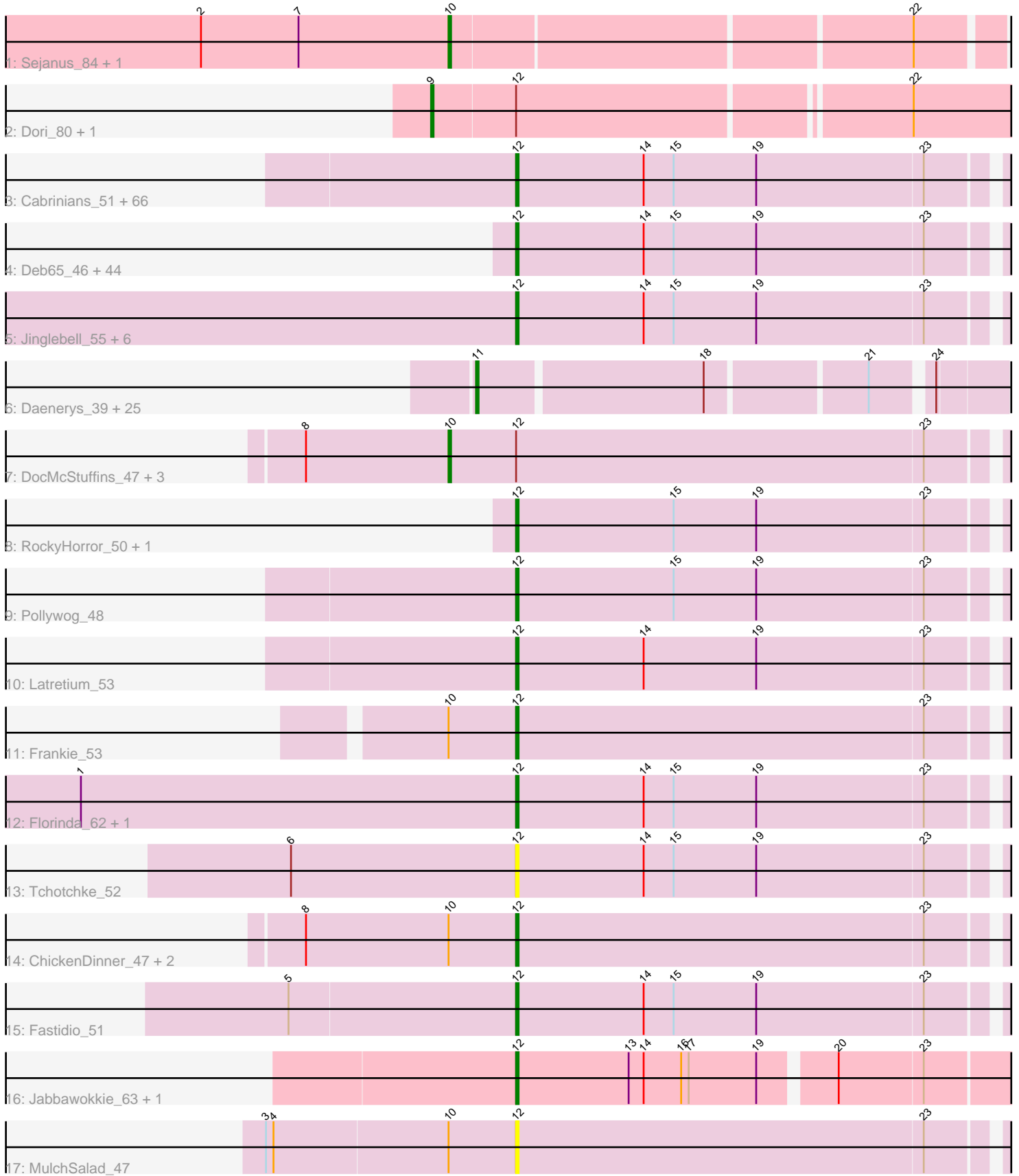


Pham 311289



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 311289 Report

This analysis was run 06/27/26 on database version 652.

Pham number 311289 has 168 members, 8 are drafts.

Phages represented in each track:

- Track 1 : Sejanus_84, Caterpie_88
- Track 2 : Dori_80, Mao1_82
- Track 3 : Cabrinians_51, TDanisky_54, Yorick_49, Jarcob_50, Seagreen_51, Eradicator_43, Dante_49, MulchExplorer_53, Avani_58, Llij_47, Girr_50, LilMoolah_49, Lizziana_56, Leozinho_51, Kimberlium_53, Karhdo_49, Che8_52, Drago_49, Marker_50, QuickMath_52, Martik_50, Emmaloid_51, Starcevich_50, Koella_44, PopTart_45, ShowerHandel_52, Chevrolet_56, Nitzel_45, Maravista_52, DotProduct_46, Priscilla_50, Ibhubesi_49, MadMen_44, Tweety_49, Ruby_48, Royals2015_52, ArcusAngelus_53, Sabbb_56, Mahavrat_48, Peridot_53, Totinger_50, NormanBulbieJr_50, Bubbles123_47, ShiLan_49, Nivrat_47, Madiba_46, GigiOuiOui_47, MisterCuddles_50, Aubs_49, Slim_51, FreddyB_50, Nichirin_55, UncleRicky_50, Doug_52, Tootsieroll_53, Eish_50, JalFarm20_59, Crumble_45, Lucia_50, Sparkdehilly_54, Grimmer_61, DirtMcgirt_50, Burwell21_48, LittleShirley_50, Phatniss_49, Plumbus_52, SassyB_45
- Track 4 : Deb65_46, OlympiaSaint_50, BlueCrab_47, Dorothy_47, Gandolph_51, Empress_49, Doomphist_49, Job42_50, Poenanya_49, Harley_52, Cornie_43, Spoonbill_48, Blexus_48, Leperchaun_43, OwlsT2W_49, Kersh_53, Veteran_47, Daenerys_45, JoeyJr_46, Stap_49, GUmbie_47, PMC_44, PHappiness_46, Mantra_47, Radiance_50, Boomer_52, Krakatau_48, RitaG_46, DaddyRickover_50, PhilipPhlop_49, Oksu_54, Scottish_49, IbOuu_50, Spikelee_56, Polka14_47, Nimbo_45, Hamulus_51, Ramsey_51, Pacc40_45, SiSi_49, BodEinwohner17_50, RedBird_47, KingMidas_50, BuzzLyseyear_55, Rockne_48
- Track 5 : Jinglebell_55, Ochi17_53, Llama_55, Modragons_54, AlpineSix_55, Seabastian_55, OfUltron_55
- Track 6 : Daenerys_39, Inventum_39, Leozinho_42, Dante_40, Pollywog_41, Spoonbill_40, Job42_43, Ogopogo_43, IbOuu_42, Blexus_40, Scottish_41, Sassafras_41, OwlsT2W_40, Veteran_40, Chuckly_41, Royals2015_42, JoeyJr_40, GUmbie_40, Empress_41, Tchotchke_42, Tootsieroll_44, Radiance_41, OlympiaSaint_40, Sandalphon_44, Eish_41, Polka14_41
- Track 7 : DocMcStuffins_47, Aloeri_48, Misha28_46, TootsiePop_46
- Track 8 : RockyHorror_50, Zerg_49
- Track 9 : Pollywog_48
- Track 10 : Latretium_53
- Track 11 : Frankie_53
- Track 12 : Florinda_62, Quico_59
- Track 13 : Tchotchke_52
- Track 14 : ChickenDinner_47, Awesomesauce_48, Piper2020_48

- Track 15 : Fastidio_51
- Track 16 : Jabbawokkie_63, Zapner_62
- Track 17 : MulchSalad_47

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 128 of the 160 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, GUmble_47, Gandolph_51, GigiOuiOui_47, Girr_50, Grimmer_61, Hamulus_51, Harley_52, IbOuu_50, Ibhuesi_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_47, Nichirin_55, Nimbo_45, Nitzel_45, Nivrat_47, NormanBulbieJr_50, Ochi17_53, OfUltron_55, Oksu_54, OlympiaSaint_50, OwlsT2W_49, PHappiness_46, PMC_44, Pacc40_45, Peridot_53, Phatniss_49, PhilipPhlop_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_52, SiSi_49, Slim_51, Sparkdehlily_54, Spikelee_56, Spoonbill_48, Stap_49, Starceovich_50, TDanisky_54, Tchotchke_52, 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, Dori_80, Mao1_82, Misha28_46, TootsiePop_46,

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

- Blexus_40, Caterpie_88, Chuckly_41, Daenerys_39, Dante_40, Eish_41, Empress_41, GUmble_40, IbOuu_42, Invention_39, Job42_43, JoeyJr_40, Leozinho_42, Ogoopogo_43, OlympiaSaint_40, OwlsT2W_40, Polka14_41, Pollywog_41, Radiance_41, Royals2015_42, Sandalphon_44, Sassafras_41, Scottish_41, Sejanus_84, Spoonbill_40, Tchotchke_42, Tootsieroll_44, Veteran_40,

Summary by start number:

Start 9:

- Found in 2 of 168 (1.2%) of genes in pham
- Manual Annotations of this start: 2 of 160

- Called 100.0% of time when present
- Phage (with cluster) where this start called: Dori_80 (AD), Mao1_82 (AD),

Start 10:

- Found in 11 of 168 (6.5%) of genes in pham
- Manual Annotations of this start: 5 of 160
- Called 54.5% of time when present
- Phage (with cluster) where this start called: Aloeri_48 (F1), Caterpie_88 (AD), DocMcStuffins_47 (F1), Misha28_46 (F1), Sejanus_84 (AD), TootsiePop_46 (F1),

Start 11:

- Found in 26 of 168 (15.5%) of genes in pham
- Manual Annotations of this start: 25 of 160
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Blexus_40 (F1), Chuckly_41 (F1), Daenerys_39 (F1), Dante_40 (F1), Eish_41 (F1), Empress_41 (F1), GUmbe_40 (F1), IbOuu_42 (F1), Inventum_39 (F1), Job42_43 (F1), JoeyJr_40 (F1), Leozinho_42 (F1), Ogoogo_43 (F1), OlympiaSaint_40 (F1), OwlsT2W_40 (F1), Polka14_41 (F1), Pollywog_41 (F1), Radiance_41 (F1), Royals2015_42 (F1), Sandalphon_44 (F1), Sassafras_41 (F1), Scottish_41 (F1), Spoonbill_40 (F1), Tchotchke_42 (F1), Tootsieroll_44 (F1), Veteran_40 (F1),

Start 12:

- Found in 140 of 168 (83.3%) of genes in pham
- Manual Annotations of this start: 128 of 160
- Called 95.7% 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), GUmbe_47 (F1), Gandolph_51 (F1), GigiOuiOui_47 (F1), Girr_50 (F1), Grimmer_61 (F1), Hamulus_51 (F1), Harley_52 (F1), IbOuu_50 (F1), Ibhubes_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_47 (F7), Nichirin_55 (F1), 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), Peridot_53 (F1), Phatniss_49 (F1), PhilipPhlop_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), Sebastian_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), Tchotchke_52 (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),

Summary by clusters:

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

Info for manual annotations of cluster AD:

- Start number 9 was manually annotated 2 times for cluster AD.
- Start number 10 was manually annotated 1 time for cluster AD.

Info for manual annotations of cluster F1:

- Start number 10 was manually annotated 4 times for cluster F1.
- Start number 11 was manually annotated 25 times for cluster F1.
- Start number 12 was manually annotated 124 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.

Gene Information:

Gene: Aloeri_48 Start: 35702, Stop: 35926, Start Num: 10

Candidate Starts for Aloeri_48:

(8, 35645), (Start: 10 @35702 has 5 MA's), (Start: 12 @35729 has 128 MA's), (23, 35891),

Gene: AlpineSix_55 Start: 38663, Stop: 38860, Start Num: 12

Candidate Starts for AlpineSix_55:

(Start: 12 @38663 has 128 MA's), (14, 38714), (15, 38726), (19, 38759), (23, 38825),

Gene: ArcusAngelus_53 Start: 37779, Stop: 37976, Start Num: 12

Candidate Starts for ArcusAngelus_53:

(Start: 12 @37779 has 128 MA's), (14, 37830), (15, 37842), (19, 37875), (23, 37941),

Gene: Aubs_49 Start: 36346, Stop: 36543, Start Num: 12

Candidate Starts for Aubs_49:

(Start: 12 @36346 has 128 MA's), (14, 36397), (15, 36409), (19, 36442), (23, 36508),

Gene: Avani_58 Start: 36654, Stop: 36851, Start Num: 12

Candidate Starts for Avani_58:

(Start: 12 @36654 has 128 MA's), (14, 36705), (15, 36717), (19, 36750), (23, 36816),

Gene: Awesomesauce_48 Start: 34991, Stop: 35188, Start Num: 12

Candidate Starts for Awesomesauce_48:

(8, 34907), (Start: 10 @34964 has 5 MA's), (Start: 12 @34991 has 128 MA's), (23, 35153),

Gene: Blexus_48 Start: 36433, Stop: 36630, Start Num: 12
Candidate Starts for Blexus_48:
(Start: 12 @36433 has 128 MA's), (14, 36484), (15, 36496), (19, 36529), (23, 36595),

Gene: Blexus_40 Start: 31585, Stop: 31391, Start Num: 11
Candidate Starts for Blexus_40:
(Start: 11 @31585 has 25 MA's), (18, 31498), (21, 31438), (24, 31417),

Gene: BlueCrab_47 Start: 36159, Stop: 36356, Start Num: 12
Candidate Starts for BlueCrab_47:
(Start: 12 @36159 has 128 MA's), (14, 36210), (15, 36222), (19, 36255), (23, 36321),

Gene: BodEinwohner17_50 Start: 36375, Stop: 36572, Start Num: 12
Candidate Starts for BodEinwohner17_50:
(Start: 12 @36375 has 128 MA's), (14, 36426), (15, 36438), (19, 36471), (23, 36537),

Gene: Boomer_52 Start: 37608, Stop: 37805, Start Num: 12
Candidate Starts for Boomer_52:
(Start: 12 @37608 has 128 MA's), (14, 37659), (15, 37671), (19, 37704), (23, 37770),

Gene: Bubbles123_47 Start: 37055, Stop: 37252, Start Num: 12
Candidate Starts for Bubbles123_47:
(Start: 12 @37055 has 128 MA's), (14, 37106), (15, 37118), (19, 37151), (23, 37217),

Gene: Burwell21_48 Start: 36717, Stop: 36914, Start Num: 12
Candidate Starts for Burwell21_48:
(Start: 12 @36717 has 128 MA's), (14, 36768), (15, 36780), (19, 36813), (23, 36879),

Gene: BuzzLyseyear_55 Start: 37985, Stop: 38182, Start Num: 12
Candidate Starts for BuzzLyseyear_55:
(Start: 12 @37985 has 128 MA's), (14, 38036), (15, 38048), (19, 38081), (23, 38147),

Gene: Cabrinians_51 Start: 36795, Stop: 36992, Start Num: 12
Candidate Starts for Cabrinians_51:
(Start: 12 @36795 has 128 MA's), (14, 36846), (15, 36858), (19, 36891), (23, 36957),

Gene: Caterpie_88 Start: 56710, Stop: 56919, Start Num: 10
Candidate Starts for Caterpie_88:
(2, 56611), (7, 56650), (Start: 10 @56710 has 5 MA's), (22, 56887),

Gene: Che8_52 Start: 37604, Stop: 37801, Start Num: 12
Candidate Starts for Che8_52:
(Start: 12 @37604 has 128 MA's), (14, 37655), (15, 37667), (19, 37700), (23, 37766),

Gene: Chevrolet_56 Start: 37780, Stop: 37977, Start Num: 12
Candidate Starts for Chevrolet_56:
(Start: 12 @37780 has 128 MA's), (14, 37831), (15, 37843), (19, 37876), (23, 37942),

Gene: ChickenDinner_47 Start: 35729, Stop: 35926, Start Num: 12
Candidate Starts for ChickenDinner_47:
(8, 35645), (Start: 10 @35702 has 5 MA's), (Start: 12 @35729 has 128 MA's), (23, 35891),

Gene: Chuckly_41 Start: 31551, Stop: 31357, Start Num: 11
Candidate Starts for Chuckly_41:
(Start: 11 @31551 has 25 MA's), (18, 31464), (21, 31404), (24, 31383),

Gene: Cornie_43 Start: 34495, Stop: 34692, Start Num: 12
Candidate Starts for Cornie_43:
(Start: 12 @34495 has 128 MA's), (14, 34546), (15, 34558), (19, 34591), (23, 34657),

Gene: Crumble_45 Start: 32731, Stop: 32928, Start Num: 12
Candidate Starts for Crumble_45:
(Start: 12 @32731 has 128 MA's), (14, 32782), (15, 32794), (19, 32827), (23, 32893),

Gene: DaddyRickover_50 Start: 37291, Stop: 37488, Start Num: 12
Candidate Starts for DaddyRickover_50:
(Start: 12 @37291 has 128 MA's), (14, 37342), (15, 37354), (19, 37387), (23, 37453),

Gene: Daenerys_39 Start: 31164, Stop: 30970, Start Num: 11
Candidate Starts for Daenerys_39:
(Start: 11 @31164 has 25 MA's), (18, 31077), (21, 31017), (24, 30996),

Gene: Daenerys_45 Start: 35102, Stop: 35299, Start Num: 12
Candidate Starts for Daenerys_45:
(Start: 12 @35102 has 128 MA's), (14, 35153), (15, 35165), (19, 35198), (23, 35264),

Gene: Dante_49 Start: 36138, Stop: 36335, Start Num: 12
Candidate Starts for Dante_49:
(Start: 12 @36138 has 128 MA's), (14, 36189), (15, 36201), (19, 36234), (23, 36300),

Gene: Dante_40 Start: 31281, Stop: 31087, Start Num: 11
Candidate Starts for Dante_40:
(Start: 11 @31281 has 25 MA's), (18, 31194), (21, 31134), (24, 31113),

Gene: Deb65_46 Start: 35071, Stop: 35268, Start Num: 12
Candidate Starts for Deb65_46:
(Start: 12 @35071 has 128 MA's), (14, 35122), (15, 35134), (19, 35167), (23, 35233),

Gene: DirtMcgirt_50 Start: 35836, Stop: 36033, Start Num: 12
Candidate Starts for DirtMcgirt_50:
(Start: 12 @35836 has 128 MA's), (14, 35887), (15, 35899), (19, 35932), (23, 35998),

Gene: DocMcStuffins_47 Start: 35702, Stop: 35926, Start Num: 10
Candidate Starts for DocMcStuffins_47:
(8, 35645), (Start: 10 @35702 has 5 MA's), (Start: 12 @35729 has 128 MA's), (23, 35891),

Gene: Doomphist_49 Start: 37373, Stop: 37570, Start Num: 12
Candidate Starts for Doomphist_49:
(Start: 12 @37373 has 128 MA's), (14, 37424), (15, 37436), (19, 37469), (23, 37535),

Gene: Dori_80 Start: 57490, Stop: 57729, Start Num: 9
Candidate Starts for Dori_80:
(Start: 9 @57490 has 2 MA's), (Start: 12 @57523 has 128 MA's), (22, 57673),

Gene: Dorothy_47 Start: 36172, Stop: 36369, Start Num: 12

Candidate Starts for Dorothy_47:

(Start: 12 @36172 has 128 MA's), (14, 36223), (15, 36235), (19, 36268), (23, 36334),

Gene: DotProduct_46 Start: 35833, Stop: 36027, Start Num: 12

Candidate Starts for DotProduct_46:

(Start: 12 @35833 has 128 MA's), (14, 35881), (15, 35893), (19, 35926), (23, 35992),

Gene: Doug_52 Start: 37491, Stop: 37688, Start Num: 12

Candidate Starts for Doug_52:

(Start: 12 @37491 has 128 MA's), (14, 37542), (15, 37554), (19, 37587), (23, 37653),

Gene: Drago_49 Start: 35839, Stop: 36036, Start Num: 12

Candidate Starts for Drago_49:

(Start: 12 @35839 has 128 MA's), (14, 35890), (15, 35902), (19, 35935), (23, 36001),

Gene: Eish_50 Start: 36718, Stop: 36915, Start Num: 12

Candidate Starts for Eish_50:

(Start: 12 @36718 has 128 MA's), (14, 36769), (15, 36781), (19, 36814), (23, 36880),

Gene: Eish_41 Start: 31869, Stop: 31675, Start Num: 11

Candidate Starts for Eish_41:

(Start: 11 @31869 has 25 MA's), (18, 31782), (21, 31722), (24, 31701),

Gene: Emmaloid_51 Start: 37563, Stop: 37760, Start Num: 12

Candidate Starts for Emmaloid_51:

(Start: 12 @37563 has 128 MA's), (14, 37614), (15, 37626), (19, 37659), (23, 37725),

Gene: Empress_49 Start: 36516, Stop: 36713, Start Num: 12

Candidate Starts for Empress_49:

(Start: 12 @36516 has 128 MA's), (14, 36567), (15, 36579), (19, 36612), (23, 36678),

Gene: Empress_41 Start: 32577, Stop: 32383, Start Num: 11

Candidate Starts for Empress_41:

(Start: 11 @32577 has 25 MA's), (18, 32490), (21, 32430), (24, 32409),

Gene: Eradicator_43 Start: 35055, Stop: 35252, Start Num: 12

Candidate Starts for Eradicator_43:

(Start: 12 @35055 has 128 MA's), (14, 35106), (15, 35118), (19, 35151), (23, 35217),

Gene: Fastidio_51 Start: 35796, Stop: 35993, Start Num: 12

Candidate Starts for Fastidio_51:

(5, 35706), (Start: 12 @35796 has 128 MA's), (14, 35847), (15, 35859), (19, 35892), (23, 35958),

Gene: Florinda_62 Start: 38976, Stop: 39173, Start Num: 12

Candidate Starts for Florinda_62:

(1, 38802), (Start: 12 @38976 has 128 MA's), (14, 39027), (15, 39039), (19, 39072), (23, 39138),

Gene: Frankie_53 Start: 37777, Stop: 37974, Start Num: 12

Candidate Starts for Frankie_53:

(Start: 10 @37750 has 5 MA's), (Start: 12 @37777 has 128 MA's), (23, 37939),

Gene: FreddyB_50 Start: 35643, Stop: 35840, Start Num: 12

Candidate Starts for FreddyB_50:

(Start: 12 @35643 has 128 MA's), (14, 35694), (15, 35706), (19, 35739), (23, 35805),

Gene: GUmbie_40 Start: 31183, Stop: 30989, Start Num: 11

Candidate Starts for GUmbie_40:

(Start: 11 @31183 has 25 MA's), (18, 31096), (21, 31036), (24, 31015),

Gene: GUmbie_47 Start: 36062, Stop: 36259, Start Num: 12

Candidate Starts for GUmbie_47:

(Start: 12 @36062 has 128 MA's), (14, 36113), (15, 36125), (19, 36158), (23, 36224),

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

Candidate Starts for Gandalph_51:

(Start: 12 @36305 has 128 MA's), (14, 36356), (15, 36368), (19, 36401), (23, 36467),

Gene: GigiOuiOui_47 Start: 35975, Stop: 36172, Start Num: 12

Candidate Starts for GigiOuiOui_47:

(Start: 12 @35975 has 128 MA's), (14, 36026), (15, 36038), (19, 36071), (23, 36137),

Gene: Girr_50 Start: 37034, Stop: 37231, Start Num: 12

Candidate Starts for Girr_50:

(Start: 12 @37034 has 128 MA's), (14, 37085), (15, 37097), (19, 37130), (23, 37196),

Gene: Grimmer_61 Start: 38549, Stop: 38746, Start Num: 12

Candidate Starts for Grimmer_61:

(Start: 12 @38549 has 128 MA's), (14, 38600), (15, 38612), (19, 38645), (23, 38711),

Gene: Hamulus_51 Start: 37417, Stop: 37614, Start Num: 12

Candidate Starts for Hamulus_51:

(Start: 12 @37417 has 128 MA's), (14, 37468), (15, 37480), (19, 37513), (23, 37579),

Gene: Harley_52 Start: 36770, Stop: 36967, Start Num: 12

Candidate Starts for Harley_52:

(Start: 12 @36770 has 128 MA's), (14, 36821), (15, 36833), (19, 36866), (23, 36932),

Gene: lbOuu_42 Start: 31738, Stop: 31544, Start Num: 11

Candidate Starts for lbOuu_42:

(Start: 11 @31738 has 25 MA's), (18, 31651), (21, 31591), (24, 31570),

Gene: lbOuu_50 Start: 37352, Stop: 37549, Start Num: 12

Candidate Starts for lbOuu_50:

(Start: 12 @37352 has 128 MA's), (14, 37403), (15, 37415), (19, 37448), (23, 37514),

Gene: lbhubesi_49 Start: 35857, Stop: 36054, Start Num: 12

Candidate Starts for lbhubesi_49:

(Start: 12 @35857 has 128 MA's), (14, 35908), (15, 35920), (19, 35953), (23, 36019),

Gene: Inventum_39 Start: 31844, Stop: 31650, Start Num: 11

Candidate Starts for Inventum_39:

(Start: 11 @31844 has 25 MA's), (18, 31757), (21, 31697), (24, 31676),

Gene: Jabbawokkie_63 Start: 37588, Stop: 37785, Start Num: 12

Candidate Starts for Jabbawokkie_63:

(Start: 12 @37588 has 128 MA's), (13, 37633), (14, 37639), (16, 37654), (17, 37657), (19, 37684), (20, 37711), (23, 37744),

Gene: JalFarm20_59 Start: 39334, Stop: 39531, Start Num: 12

Candidate Starts for JalFarm20_59:

(Start: 12 @39334 has 128 MA's), (14, 39385), (15, 39397), (19, 39430), (23, 39496),

Gene: Jarcob_50 Start: 36763, Stop: 36960, Start Num: 12

Candidate Starts for Jarcob_50:

(Start: 12 @36763 has 128 MA's), (14, 36814), (15, 36826), (19, 36859), (23, 36925),

Gene: Jinglebell_55 Start: 38662, Stop: 38859, Start Num: 12

Candidate Starts for Jinglebell_55:

(Start: 12 @38662 has 128 MA's), (14, 38713), (15, 38725), (19, 38758), (23, 38824),

Gene: Job42_50 Start: 38024, Stop: 38221, Start Num: 12

Candidate Starts for Job42_50:

(Start: 12 @38024 has 128 MA's), (14, 38075), (15, 38087), (19, 38120), (23, 38186),

Gene: Job42_43 Start: 33160, Stop: 32966, Start Num: 11

Candidate Starts for Job42_43:

(Start: 11 @33160 has 25 MA's), (18, 33073), (21, 33013), (24, 32992),

Gene: JoeyJr_46 Start: 35270, Stop: 35467, Start Num: 12

Candidate Starts for JoeyJr_46:

(Start: 12 @35270 has 128 MA's), (14, 35321), (15, 35333), (19, 35366), (23, 35432),

Gene: JoeyJr_40 Start: 31332, Stop: 31138, Start Num: 11

Candidate Starts for JoeyJr_40:

(Start: 11 @31332 has 25 MA's), (18, 31245), (21, 31185), (24, 31164),

Gene: Karhdo_49 Start: 36857, Stop: 37054, Start Num: 12

Candidate Starts for Karhdo_49:

(Start: 12 @36857 has 128 MA's), (14, 36908), (15, 36920), (19, 36953), (23, 37019),

Gene: Kersh_53 Start: 38807, Stop: 39004, Start Num: 12

Candidate Starts for Kersh_53:

(Start: 12 @38807 has 128 MA's), (14, 38858), (15, 38870), (19, 38903), (23, 38969),

Gene: Kimberlium_53 Start: 38669, Stop: 38866, Start Num: 12

Candidate Starts for Kimberlium_53:

(Start: 12 @38669 has 128 MA's), (14, 38720), (15, 38732), (19, 38765), (23, 38831),

Gene: KingMidas_50 Start: 36932, Stop: 37129, Start Num: 12

Candidate Starts for KingMidas_50:

(Start: 12 @36932 has 128 MA's), (14, 36983), (15, 36995), (19, 37028), (23, 37094),

Gene: Koella_44 Start: 32693, Stop: 32890, Start Num: 12

Candidate Starts for Koella_44:

(Start: 12 @32693 has 128 MA's), (14, 32744), (15, 32756), (19, 32789), (23, 32855),

Gene: Krakatau_48 Start: 36504, Stop: 36701, Start Num: 12

Candidate Starts for Krakatau_48:

(Start: 12 @36504 has 128 MA's), (14, 36555), (15, 36567), (19, 36600), (23, 36666),

Gene: Latretium_53 Start: 37646, Stop: 37843, Start Num: 12

Candidate Starts for Latretium_53:

(Start: 12 @37646 has 128 MA's), (14, 37697), (19, 37742), (23, 37808),

Gene: Leozinho_42 Start: 31585, Stop: 31391, Start Num: 11

Candidate Starts for Leozinho_42:

(Start: 11 @31585 has 25 MA's), (18, 31498), (21, 31438), (24, 31417),

Gene: Leozinho_51 Start: 36607, Stop: 36804, Start Num: 12

Candidate Starts for Leozinho_51:

(Start: 12 @36607 has 128 MA's), (14, 36658), (15, 36670), (19, 36703), (23, 36769),

Gene: Leperchaun_43 Start: 34500, Stop: 34697, Start Num: 12

Candidate Starts for Leperchaun_43:

(Start: 12 @34500 has 128 MA's), (14, 34551), (15, 34563), (19, 34596), (23, 34662),

Gene: LilMoolah_49 Start: 36424, Stop: 36621, Start Num: 12

Candidate Starts for LilMoolah_49:

(Start: 12 @36424 has 128 MA's), (14, 36475), (15, 36487), (19, 36520), (23, 36586),

Gene: LittleShirley_50 Start: 37455, Stop: 37652, Start Num: 12

Candidate Starts for LittleShirley_50:

(Start: 12 @37455 has 128 MA's), (14, 37506), (15, 37518), (19, 37551), (23, 37617),

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

Candidate Starts for Lizziana_56:

(Start: 12 @37766 has 128 MA's), (14, 37817), (15, 37829), (19, 37862), (23, 37928),

Gene: Llama_55 Start: 38660, Stop: 38857, Start Num: 12

Candidate Starts for Llama_55:

(Start: 12 @38660 has 128 MA's), (14, 38711), (15, 38723), (19, 38756), (23, 38822),

Gene: Llij_47 Start: 35993, Stop: 36190, Start Num: 12

Candidate Starts for Llij_47:

(Start: 12 @35993 has 128 MA's), (14, 36044), (15, 36056), (19, 36089), (23, 36155),

Gene: Lucia_50 Start: 36137, Stop: 36334, Start Num: 12

Candidate Starts for Lucia_50:

(Start: 12 @36137 has 128 MA's), (14, 36188), (15, 36200), (19, 36233), (23, 36299),

Gene: MadMen_44 Start: 35477, Stop: 35674, Start Num: 12

Candidate Starts for MadMen_44:

(Start: 12 @35477 has 128 MA's), (14, 35528), (15, 35540), (19, 35573), (23, 35639),

Gene: Madiba_46 Start: 34766, Stop: 34963, Start Num: 12

Candidate Starts for Madiba_46:

(Start: 12 @34766 has 128 MA's), (14, 34817), (15, 34829), (19, 34862), (23, 34928),

Gene: Mahavrat_48 Start: 35954, Stop: 36151, Start Num: 12

Candidate Starts for Mahavrat_48:

(Start: 12 @35954 has 128 MA's), (14, 36005), (15, 36017), (19, 36050), (23, 36116),

Gene: Mantra_47 Start: 35945, Stop: 36142, Start Num: 12

Candidate Starts for Mantra_47:

(Start: 12 @35945 has 128 MA's), (14, 35996), (15, 36008), (19, 36041), (23, 36107),

Gene: Mao1_82 Start: 56379, Stop: 56618, Start Num: 9

Candidate Starts for Mao1_82:

(Start: 9 @56379 has 2 MA's), (Start: 12 @56412 has 128 MA's), (22, 56562),

Gene: Maravista_52 Start: 38428, Stop: 38625, Start Num: 12

Candidate Starts for Maravista_52:

(Start: 12 @38428 has 128 MA's), (14, 38479), (15, 38491), (19, 38524), (23, 38590),

Gene: Marker_50 Start: 36326, Stop: 36523, Start Num: 12

Candidate Starts for Marker_50:

(Start: 12 @36326 has 128 MA's), (14, 36377), (15, 36389), (19, 36422), (23, 36488),

Gene: Martik_50 Start: 36719, Stop: 36916, Start Num: 12

Candidate Starts for Martik_50:

(Start: 12 @36719 has 128 MA's), (14, 36770), (15, 36782), (19, 36815), (23, 36881),

Gene: Misha28_46 Start: 34969, Stop: 35193, Start Num: 10

Candidate Starts for Misha28_46:

(8, 34912), (Start: 10 @34969 has 5 MA's), (Start: 12 @34996 has 128 MA's), (23, 35158),

Gene: MisterCuddles_50 Start: 37034, Stop: 37231, Start Num: 12

Candidate Starts for MisterCuddles_50:

(Start: 12 @37034 has 128 MA's), (14, 37085), (15, 37097), (19, 37130), (23, 37196),

Gene: Modragons_54 Start: 38506, Stop: 38703, Start Num: 12

Candidate Starts for Modragons_54:

(Start: 12 @38506 has 128 MA's), (14, 38557), (15, 38569), (19, 38602), (23, 38668),

Gene: MulchExplorer_53 Start: 38668, Stop: 38865, Start Num: 12

Candidate Starts for MulchExplorer_53:

(Start: 12 @38668 has 128 MA's), (14, 38719), (15, 38731), (19, 38764), (23, 38830),

Gene: MulchSalad_47 Start: 33570, Stop: 33767, Start Num: 12

Candidate Starts for MulchSalad_47:

(3, 33471), (4, 33474), (Start: 10 @33543 has 5 MA's), (Start: 12 @33570 has 128 MA's), (23, 33732),

Gene: Nichirin_55 Start: 38298, Stop: 38495, Start Num: 12

Candidate Starts for Nichirin_55:

(Start: 12 @38298 has 128 MA's), (14, 38349), (15, 38361), (19, 38394), (23, 38460),

Gene: Nimbo_45 Start: 35073, Stop: 35270, Start Num: 12

Candidate Starts for Nimbo_45:

(Start: 12 @35073 has 128 MA's), (14, 35124), (15, 35136), (19, 35169), (23, 35235),

Gene: Nitzel_45 Start: 35193, Stop: 35390, Start Num: 12

Candidate Starts for Nitzel_45:

(Start: 12 @35193 has 128 MA's), (14, 35244), (15, 35256), (19, 35289), (23, 35355),

Gene: Nivrat_47 Start: 36297, Stop: 36494, Start Num: 12
Candidate Starts for Nivrat_47:
(Start: 12 @36297 has 128 MA's), (14, 36348), (15, 36360), (19, 36393), (23, 36459),

Gene: NormanBulbieJr_50 Start: 36706, Stop: 36903, Start Num: 12
Candidate Starts for NormanBulbieJr_50:
(Start: 12 @36706 has 128 MA's), (14, 36757), (15, 36769), (19, 36802), (23, 36868),

Gene: Ochi17_53 Start: 38113, Stop: 38310, Start Num: 12
Candidate Starts for Ochi17_53:
(Start: 12 @38113 has 128 MA's), (14, 38164), (15, 38176), (19, 38209), (23, 38275),

Gene: OfUltron_55 Start: 38662, Stop: 38859, Start Num: 12
Candidate Starts for OfUltron_55:
(Start: 12 @38662 has 128 MA's), (14, 38713), (15, 38725), (19, 38758), (23, 38824),

Gene: Ogopogo_43 Start: 31095, Stop: 30901, Start Num: 11
Candidate Starts for Ogopogo_43:
(Start: 11 @31095 has 25 MA's), (18, 31008), (21, 30948), (24, 30927),

Gene: Oksu_54 Start: 38558, Stop: 38755, Start Num: 12
Candidate Starts for Oksu_54:
(Start: 12 @38558 has 128 MA's), (14, 38609), (15, 38621), (19, 38654), (23, 38720),

Gene: OlympiaSaint_50 Start: 36632, Stop: 36829, Start Num: 12
Candidate Starts for OlympiaSaint_50:
(Start: 12 @36632 has 128 MA's), (14, 36683), (15, 36695), (19, 36728), (23, 36794),

Gene: OlympiaSaint_40 Start: 31613, Stop: 31419, Start Num: 11
Candidate Starts for OlympiaSaint_40:
(Start: 11 @31613 has 25 MA's), (18, 31526), (21, 31466), (24, 31445),

Gene: OwlsT2W_49 Start: 36635, Stop: 36832, Start Num: 12
Candidate Starts for OwlsT2W_49:
(Start: 12 @36635 has 128 MA's), (14, 36686), (15, 36698), (19, 36731), (23, 36797),

Gene: OwlsT2W_40 Start: 31588, Stop: 31394, Start Num: 11
Candidate Starts for OwlsT2W_40:
(Start: 11 @31588 has 25 MA's), (18, 31501), (21, 31441), (24, 31420),

Gene: PHappiness_46 Start: 35046, Stop: 35243, Start Num: 12
Candidate Starts for PHappiness_46:
(Start: 12 @35046 has 128 MA's), (14, 35097), (15, 35109), (19, 35142), (23, 35208),

Gene: PMC_44 Start: 35844, Stop: 36041, Start Num: 12
Candidate Starts for PMC_44:
(Start: 12 @35844 has 128 MA's), (14, 35895), (15, 35907), (19, 35940), (23, 36006),

Gene: Pacc40_45 Start: 35120, Stop: 35317, Start Num: 12
Candidate Starts for Pacc40_45:
(Start: 12 @35120 has 128 MA's), (14, 35171), (15, 35183), (19, 35216), (23, 35282),

Gene: Peridot_53 Start: 36751, Stop: 36945, Start Num: 12

Candidate Starts for Peridot_53:

(Start: 12 @36751 has 128 MA's), (14, 36799), (15, 36811), (19, 36844), (23, 36910),

Gene: Phatniss_49 Start: 37088, Stop: 37285, Start Num: 12

Candidate Starts for Phatniss_49:

(Start: 12 @37088 has 128 MA's), (14, 37139), (15, 37151), (19, 37184), (23, 37250),

Gene: PhlipPhlop_49 Start: 37650, Stop: 37847, Start Num: 12

Candidate Starts for PhlipPhlop_49:

(Start: 12 @37650 has 128 MA's), (14, 37701), (15, 37713), (19, 37746), (23, 37812),

Gene: Piper2020_48 Start: 35712, Stop: 35909, Start Num: 12

Candidate Starts for Piper2020_48:

(8, 35628), (Start: 10 @35685 has 5 MA's), (Start: 12 @35712 has 128 MA's), (23, 35874),

Gene: Plumbus_52 Start: 36835, Stop: 37032, Start Num: 12

Candidate Starts for Plumbus_52:

(Start: 12 @36835 has 128 MA's), (14, 36886), (15, 36898), (19, 36931), (23, 36997),

Gene: Poenanya_49 Start: 37373, Stop: 37570, Start Num: 12

Candidate Starts for Poenanya_49:

(Start: 12 @37373 has 128 MA's), (14, 37424), (15, 37436), (19, 37469), (23, 37535),

Gene: Polka14_47 Start: 35723, Stop: 35920, Start Num: 12

Candidate Starts for Polka14_47:

(Start: 12 @35723 has 128 MA's), (14, 35774), (15, 35786), (19, 35819), (23, 35885),

Gene: Polka14_41 Start: 31785, Stop: 31591, Start Num: 11

Candidate Starts for Polka14_41:

(Start: 11 @31785 has 25 MA's), (18, 31698), (21, 31638), (24, 31617),

Gene: Pollywog_41 Start: 31707, Stop: 31513, Start Num: 11

Candidate Starts for Pollywog_41:

(Start: 11 @31707 has 25 MA's), (18, 31620), (21, 31560), (24, 31539),

Gene: Pollywog_48 Start: 36551, Stop: 36748, Start Num: 12

Candidate Starts for Pollywog_48:

(Start: 12 @36551 has 128 MA's), (15, 36614), (19, 36647), (23, 36713),

Gene: PopTart_45 Start: 35859, Stop: 36056, Start Num: 12

Candidate Starts for PopTart_45:

(Start: 12 @35859 has 128 MA's), (14, 35910), (15, 35922), (19, 35955), (23, 36021),

Gene: Priscilla_50 Start: 36805, Stop: 37002, Start Num: 12

Candidate Starts for Priscilla_50:

(Start: 12 @36805 has 128 MA's), (14, 36856), (15, 36868), (19, 36901), (23, 36967),

Gene: QuickMath_52 Start: 38892, Stop: 39089, Start Num: 12

Candidate Starts for QuickMath_52:

(Start: 12 @38892 has 128 MA's), (14, 38943), (15, 38955), (19, 38988), (23, 39054),

Gene: Quico_59 Start: 38796, Stop: 38993, Start Num: 12

Candidate Starts for Quico_59:

(1, 38622), (Start: 12 @38796 has 128 MA's), (14, 38847), (15, 38859), (19, 38892), (23, 38958),

Gene: Radiance_50 Start: 36960, Stop: 37157, Start Num: 12

Candidate Starts for Radiance_50:

(Start: 12 @36960 has 128 MA's), (14, 37011), (15, 37023), (19, 37056), (23, 37122),

Gene: Radiance_41 Start: 31335, Stop: 31141, Start Num: 11

Candidate Starts for Radiance_41:

(Start: 11 @31335 has 25 MA's), (18, 31248), (21, 31188), (24, 31167),

Gene: Ramsey_51 Start: 37587, Stop: 37784, Start Num: 12

Candidate Starts for Ramsey_51:

(Start: 12 @37587 has 128 MA's), (14, 37638), (15, 37650), (19, 37683), (23, 37749),

Gene: RedBird_47 Start: 36184, Stop: 36381, Start Num: 12

Candidate Starts for RedBird_47:

(Start: 12 @36184 has 128 MA's), (14, 36235), (15, 36247), (19, 36280), (23, 36346),

Gene: RitaG_46 Start: 35391, Stop: 35588, Start Num: 12

Candidate Starts for RitaG_46:

(Start: 12 @35391 has 128 MA's), (14, 35442), (15, 35454), (19, 35487), (23, 35553),

Gene: Rockne_48 Start: 35844, Stop: 36041, Start Num: 12

Candidate Starts for Rockne_48:

(Start: 12 @35844 has 128 MA's), (14, 35895), (15, 35907), (19, 35940), (23, 36006),

Gene: RockyHorror_50 Start: 36248, Stop: 36445, Start Num: 12

Candidate Starts for RockyHorror_50:

(Start: 12 @36248 has 128 MA's), (15, 36311), (19, 36344), (23, 36410),

Gene: Royals2015_42 Start: 31621, Stop: 31427, Start Num: 11

Candidate Starts for Royals2015_42:

(Start: 11 @31621 has 25 MA's), (18, 31534), (21, 31474), (24, 31453),

Gene: Royals2015_52 Start: 36653, Stop: 36850, Start Num: 12

Candidate Starts for Royals2015_52:

(Start: 12 @36653 has 128 MA's), (14, 36704), (15, 36716), (19, 36749), (23, 36815),

Gene: Ruby_48 Start: 37035, Stop: 37232, Start Num: 12

Candidate Starts for Ruby_48:

(Start: 12 @37035 has 128 MA's), (14, 37086), (15, 37098), (19, 37131), (23, 37197),

Gene: Sabbb_56 Start: 38083, Stop: 38280, Start Num: 12

Candidate Starts for Sabbb_56:

(Start: 12 @38083 has 128 MA's), (14, 38134), (15, 38146), (19, 38179), (23, 38245),

Gene: Sandalphon_44 Start: 32523, Stop: 32329, Start Num: 11

Candidate Starts for Sandalphon_44:

(Start: 11 @32523 has 25 MA's), (18, 32436), (21, 32376), (24, 32355),

Gene: Sassafras_41 Start: 31844, Stop: 31650, Start Num: 11

Candidate Starts for Sassafras_41:

(Start: 11 @31844 has 25 MA's), (18, 31757), (21, 31697), (24, 31676),

Gene: SassyB_45 Start: 35859, Stop: 36056, Start Num: 12
Candidate Starts for SassyB_45:
(Start: 12 @35859 has 128 MA's), (14, 35910), (15, 35922), (19, 35955), (23, 36021),

Gene: Scottish_41 Start: 32465, Stop: 32271, Start Num: 11
Candidate Starts for Scottish_41:
(Start: 11 @32465 has 25 MA's), (18, 32378), (21, 32318), (24, 32297),

Gene: Scottish_49 Start: 36403, Stop: 36600, Start Num: 12
Candidate Starts for Scottish_49:
(Start: 12 @36403 has 128 MA's), (14, 36454), (15, 36466), (19, 36499), (23, 36565),

Gene: Seabastian_55 Start: 38663, Stop: 38860, Start Num: 12
Candidate Starts for Seabastian_55:
(Start: 12 @38663 has 128 MA's), (14, 38714), (15, 38726), (19, 38759), (23, 38825),

Gene: Seagreen_51 Start: 36587, Stop: 36784, Start Num: 12
Candidate Starts for Seagreen_51:
(Start: 12 @36587 has 128 MA's), (14, 36638), (15, 36650), (19, 36683), (23, 36749),

Gene: Sejanus_84 Start: 57638, Stop: 57847, Start Num: 10
Candidate Starts for Sejanus_84:
(2, 57539), (7, 57578), (Start: 10 @57638 has 5 MA's), (22, 57815),

Gene: ShiLan_49 Start: 36752, Stop: 36949, Start Num: 12
Candidate Starts for ShiLan_49:
(Start: 12 @36752 has 128 MA's), (14, 36803), (15, 36815), (19, 36848), (23, 36914),

Gene: ShowerHandel_52 Start: 36719, Stop: 36916, Start Num: 12
Candidate Starts for ShowerHandel_52:
(Start: 12 @36719 has 128 MA's), (14, 36770), (15, 36782), (19, 36815), (23, 36881),

Gene: SiSi_49 Start: 36409, Stop: 36606, Start Num: 12
Candidate Starts for SiSi_49:
(Start: 12 @36409 has 128 MA's), (14, 36460), (15, 36472), (19, 36505), (23, 36571),

Gene: Slim_51 Start: 37554, Stop: 37751, Start Num: 12
Candidate Starts for Slim_51:
(Start: 12 @37554 has 128 MA's), (14, 37605), (15, 37617), (19, 37650), (23, 37716),

Gene: Sparkdehlily_54 Start: 37405, Stop: 37602, Start Num: 12
Candidate Starts for Sparkdehlily_54:
(Start: 12 @37405 has 128 MA's), (14, 37456), (15, 37468), (19, 37501), (23, 37567),

Gene: Spikelee_56 Start: 38143, Stop: 38340, Start Num: 12
Candidate Starts for Spikelee_56:
(Start: 12 @38143 has 128 MA's), (14, 38194), (15, 38206), (19, 38239), (23, 38305),

Gene: Spoonbill_40 Start: 31424, Stop: 31230, Start Num: 11
Candidate Starts for Spoonbill_40:
(Start: 11 @31424 has 25 MA's), (18, 31337), (21, 31277), (24, 31256),

Gene: Spoonbill_48 Start: 35345, Stop: 35542, Start Num: 12
Candidate Starts for Spoonbill_48:
(Start: 12 @35345 has 128 MA's), (14, 35396), (15, 35408), (19, 35441), (23, 35507),

Gene: Stap_49 Start: 36146, Stop: 36343, Start Num: 12
Candidate Starts for Stap_49:
(Start: 12 @36146 has 128 MA's), (14, 36197), (15, 36209), (19, 36242), (23, 36308),

Gene: Starcevich_50 Start: 37039, Stop: 37236, Start Num: 12
Candidate Starts for Starcevich_50:
(Start: 12 @37039 has 128 MA's), (14, 37090), (15, 37102), (19, 37135), (23, 37201),

Gene: TDanisky_54 Start: 37405, Stop: 37602, Start Num: 12
Candidate Starts for TDanisky_54:
(Start: 12 @37405 has 128 MA's), (14, 37456), (15, 37468), (19, 37501), (23, 37567),

Gene: Tchotchke_52 Start: 36304, Stop: 36501, Start Num: 12
Candidate Starts for Tchotchke_52:
(6, 36214), (Start: 12 @36304 has 128 MA's), (14, 36355), (15, 36367), (19, 36400), (23, 36466),

Gene: Tchotchke_42 Start: 31300, Stop: 31106, Start Num: 11
Candidate Starts for Tchotchke_42:
(Start: 11 @31300 has 25 MA's), (18, 31213), (21, 31153), (24, 31132),

Gene: TootsiePop_46 Start: 34969, Stop: 35193, Start Num: 10
Candidate Starts for TootsiePop_46:
(8, 34912), (Start: 10 @34969 has 5 MA's), (Start: 12 @34996 has 128 MA's), (23, 35158),

Gene: Tootsieroll_44 Start: 31573, Stop: 31379, Start Num: 11
Candidate Starts for Tootsieroll_44:
(Start: 11 @31573 has 25 MA's), (18, 31486), (21, 31426), (24, 31405),

Gene: Tootsieroll_53 Start: 36596, Stop: 36793, Start Num: 12
Candidate Starts for Tootsieroll_53:
(Start: 12 @36596 has 128 MA's), (14, 36647), (15, 36659), (19, 36692), (23, 36758),

Gene: Totinger_50 Start: 36181, Stop: 36378, Start Num: 12
Candidate Starts for Totinger_50:
(Start: 12 @36181 has 128 MA's), (14, 36232), (15, 36244), (19, 36277), (23, 36343),

Gene: Tweety_49 Start: 36917, Stop: 37114, Start Num: 12
Candidate Starts for Tweety_49:
(Start: 12 @36917 has 128 MA's), (14, 36968), (15, 36980), (19, 37013), (23, 37079),

Gene: UncleRicky_50 Start: 37336, Stop: 37533, Start Num: 12
Candidate Starts for UncleRicky_50:
(Start: 12 @37336 has 128 MA's), (14, 37387), (15, 37399), (19, 37432), (23, 37498),

Gene: Veteran_40 Start: 31183, Stop: 30989, Start Num: 11
Candidate Starts for Veteran_40:
(Start: 11 @31183 has 25 MA's), (18, 31096), (21, 31036), (24, 31015),

Gene: Veteran_47 Start: 36053, Stop: 36250, Start Num: 12

Candidate Starts for Veteran_47:

(Start: 12 @36053 has 128 MA's), (14, 36104), (15, 36116), (19, 36149), (23, 36215),

Gene: Yorick_49 Start: 37093, Stop: 37290, Start Num: 12

Candidate Starts for Yorick_49:

(Start: 12 @37093 has 128 MA's), (14, 37144), (15, 37156), (19, 37189), (23, 37255),

Gene: Zapner_62 Start: 37589, Stop: 37786, Start Num: 12

Candidate Starts for Zapner_62:

(Start: 12 @37589 has 128 MA's), (13, 37634), (14, 37640), (16, 37655), (17, 37658), (19, 37685), (20, 37712), (23, 37745),

Gene: Zerg_49 Start: 36357, Stop: 36554, Start Num: 12

Candidate Starts for Zerg_49:

(Start: 12 @36357 has 128 MA's), (15, 36420), (19, 36453), (23, 36519),