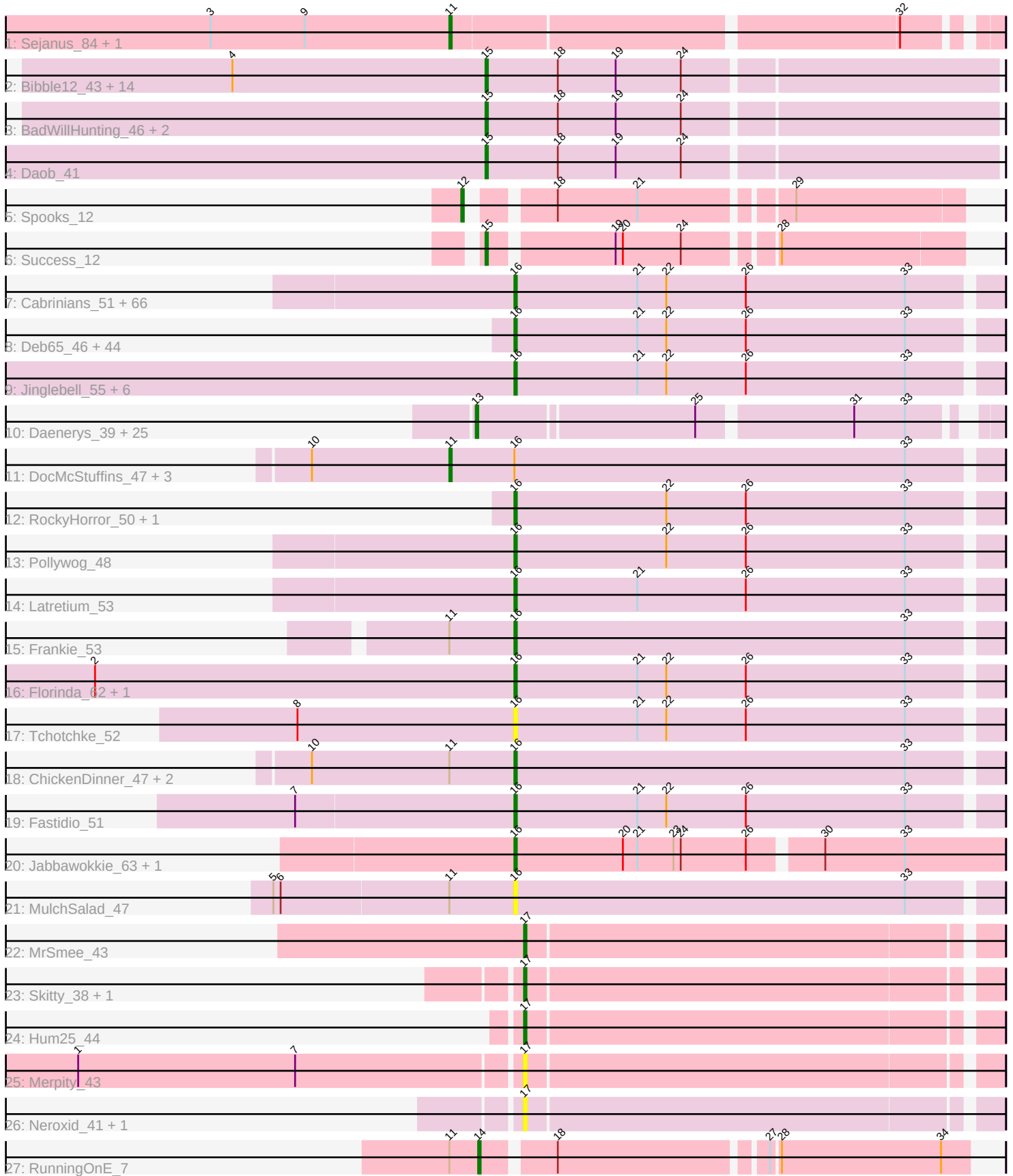


Pham 330504



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 330504 Report

This analysis was run 09/05/26 on database version 662.

Pham number 330504 has 195 members, 13 are drafts.

Phages represented in each track:

- Track 1 : Sejanus_84, Caterpie_88
- Track 2 : Bible12_43, PhirstandPhine_41, Amelia_39, Colusalem_40, GramZayde_41, Melons_41, Coral_39, Kepler_41, Bedetta_44, HannahPhantana_40, Cote_41, Pineda_41, Lunar_41, Damocles_43, Jerole_40
- Track 3 : BadWillHunting_46, Polka_39, OtsoOtso_40
- Track 4 : Daob_41
- Track 5 : Spooks_12
- Track 6 : Success_12
- Track 7 : Cabrinians_51, TDanisky_54, Grimmer_58, Jarcob_50, Seagreen_51, Marker_50, Eradicator_43, Dante_49, MulchExplorer_53, Avani_58, Llij_47, Girr_50, LilMoolah_49, Yorick_49, Lizziana_56, Leozinho_51, Kimberlium_53, Karhdo_49, Che8_52, Drago_49, Doug_52, QuickMath_52, Martik_50, Emmaloid_51, Starceвич_50, Koella_44, 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, PopTart_45, Totinger_50, NormanBulbieJr_50, Bubbles123_47, ShiLan_49, Nivrat_47, JalFarm20_59, GigiOuiOui_47, MisterCuddles_50, Aubs_49, Slim_51, Peridot_53, FreddyB_50, UncleRicky_50, Madiba_46, Tootsieroll_53, Eish_50, Crumble_45, Lucia_50, Sparkdehlily_54, DirtMcgirt_50, Burwell21_48, LittleShirley_50, Phatniss_49, Nichirin_54, Plumbus_52, SassyB_45
- Track 8 : Deb65_46, OlympiaSaint_50, Dorothy_47, Gandolph_51, Empress_49, Doomphist_49, Job42_50, Poenanya_49, Harley_52, BuzzLyseyear_55, Spoonbill_48, Blexus_48, Scottish_49, Leperchaun_43, OwlsT2W_49, Kersh_53, Veteran_47, Daenerys_45, JoeyJr_46, Stap_49, GÜmbie_47, PMC_44, PHappiness_46, Mantra_47, Radiance_50, BlueCrab_47, Oksu_55, Boomer_52, Krakatau_48, RitaG_46, DaddyRickover_50, PhilipPhlop_49, Spikelee_56, Polka14_47, Nimbo_45, Hamulus_51, Ramsey_51, Pacc40_45, SiSi_49, BodEinwohner17_50, RedBird_47, KingMidas_50, Cornie_43, Rockne_48, IbOuu_50
- Track 9 : Jinglebell_55, Ochi17_53, Llama_55, Modragons_54, AlpineSix_55, Seabastian_55, OfUltron_55
- Track 10 : 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, Royals2015_42, JoeyJr_40, GÜmbie_40, Empress_41, Polka14_41, Tchotchke_42, Tootsieroll_44, Radiance_41, Chuckly_41, OlympiaSaint_40, Sandalphon_44, Eish_41
- Track 11 : DocMcStuffins_47, Aloeri_48, Misha28_46, TootsiePop_46
- Track 12 : RockyHorror_50, Zerg_49

- Track 13 : Pollywog_48
- Track 14 : Latretium_53
- Track 15 : Frankie_53
- Track 16 : Florinda_62, Quico_59
- Track 17 : Tchotchke_52
- Track 18 : ChickenDinner_47, Awesomesauce_48, Piper2020_48
- Track 19 : Fastidio_51
- Track 20 : Jabbawokkie_63, Zapner_62
- Track 21 : MulchSalad_47
- Track 22 : MrSmee_43
- Track 23 : Skitty_38, Pitbull_42
- Track 24 : Hum25_44
- Track 25 : Merpity_43
- Track 26 : Neroxid_41, Raya_41
- Track 27 : RunningOnE_7

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

The start number called the most often in the published annotations is 16, it was called in 131 of the 182 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, Gandolph_51, GigiOuiOui_47, Girr_50, Grimmer_58, Hamulus_51, Harley_52, IbOuu_50, Ibhuesi_49, Jabbawokkie_63, JalFarm20_59, Jacob_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_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_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, Sabbbb_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, 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, Misha28_46, TootsiePop_46,

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

- Amelia_39, BadWillHunting_46, Bedetta_44, Bibble12_43, Blexus_40, Caterpie_88, Chuckly_41, Colusalem_40, Coral_39, Cote_41, Daenerys_39, Damocles_43, Dante_40, Daob_41, Eish_41, Empress_41, GUmby_40, GramZayde_41, HannahPhantana_40, Hum25_44, IbOuu_42, Inventum_39, Jerole_40, Job42_43, JoeyJr_40, Kepler_41, Leozinho_42, Lunar_41, Melons_41, Merpity_43, MrSme_43, Neroxid_41, Ogopogo_43, OlympiaSaint_40, OtsoOtso_40, OwlsT2W_40, PhirstandPhine_41, Pineda_41, Pitbull_42, Polka14_41, Polka_39, Pollywog_41, Radiance_41, Raya_41, Royals2015_42, RunningOnE_7, Sandalphon_44, Sassafras_41, Scottish_41, Sejanus_84, Skitty_38, Spooks_12, Spoonbill_40, Success_12, Tchotchke_42, Tootsieroll_44, Veteran_40,

Summary by start number:

Start 11:

- Found in 12 of 195 (6.2%) of genes in pham
- Manual Annotations of this start: 5 of 182
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Aloeri_48 (F1), Caterpie_88 (AD), DocMcStuffs_47 (F1), Misha28_46 (F1), Sejanus_84 (AD), TootsiePop_46 (F1),

Start 12:

- Found in 1 of 195 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 182
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Spooks_12 (BT),

Start 13:

- Found in 26 of 195 (13.3%) of genes in pham
- Manual Annotations of this start: 25 of 182
- 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), GUmby_40 (F1), IbOuu_42 (F1), Inventum_39 (F1), Job42_43 (F1), JoeyJr_40 (F1), Leozinho_42 (F1), Ogopogo_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 14:

- Found in 1 of 195 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 182
- Called 100.0% of time when present
- Phage (with cluster) where this start called: RunningOnE_7 (JN),

Start 15:

- Found in 20 of 195 (10.3%) of genes in pham
- Manual Annotations of this start: 15 of 182
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Amelia_39 (AS2), BadWillHunting_46 (AS2), Bedetta_44 (AS2), Bibble12_43 (AS2), Colusalem_40 (AS2), Coral_39 (AS2), Cote_41 (AS2), Damocles_43 (AS2), Daob_41 (AS2), GramZayde_41 (AS2), HannahPhantana_40 (AS2), Jerole_40 (AS2), Kepler_41 (AS2), Lunar_41 (AS2),

Melons_41 (AS2), OtsoOtso_40 (AS2), PhirstandPhine_41 (AS2), Pineda_41 (AS2), Polka_39 (AS2), Success_12 (BT),

Start 16:

- Found in 138 of 195 (70.8%) of genes in pham
- Manual Annotations of this start: 131 of 182
- 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), GUmble_47 (F1), Gandolph_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), Jacob_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_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_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), 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), Starcevic_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),

Start 17:

- Found in 7 of 195 (3.6%) of genes in pham
- Manual Annotations of this start: 4 of 182
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Hum25_44 (FQ1), Merpity_43 (FQ1), MrSmee_43 (FQ1), Neroxid_41 (FQ2), Pitbull_42 (FQ1), Raya_41 (FQ2), Skitty_38 (FQ1),

Summary by clusters:

There are 10 clusters represented in this pham: F1, F2, AD, AS2, F7, BT, JN, FQ2, FQ1, F5,

Info for manual annotations of cluster AD:

- Start number 11 was manually annotated 1 time for cluster AD.

Info for manual annotations of cluster AS2:

- Start number 15 was manually annotated 14 times for cluster AS2.

Info for manual annotations of cluster BT:

- Start number 12 was manually annotated 1 time for cluster BT.
- Start number 15 was manually annotated 1 time for cluster BT.

Info for manual annotations of cluster F1:

- Start number 11 was manually annotated 4 times for cluster F1.
- Start number 13 was manually annotated 25 times for cluster F1.
- Start number 16 was manually annotated 127 times for cluster F1.

Info for manual annotations of cluster F2:

- Start number 16 was manually annotated 3 times for cluster F2.

Info for manual annotations of cluster F5:

- Start number 16 was manually annotated 1 time for cluster F5.

Info for manual annotations of cluster FQ1:

- Start number 17 was manually annotated 4 times for cluster FQ1.

Info for manual annotations of cluster JN:

- Start number 14 was manually annotated 1 time for cluster JN.

Gene Information:

Gene: Aloeri_48 Start: 35702, Stop: 35926, Start Num: 11

Candidate Starts for Aloeri_48:

(10, 35645), (Start: 11 @35702 has 5 MA's), (Start: 16 @35729 has 131 MA's), (33, 35891),

Gene: AlpineSix_55 Start: 38663, Stop: 38860, Start Num: 16

Candidate Starts for AlpineSix_55:

(Start: 16 @38663 has 131 MA's), (21, 38714), (22, 38726), (26, 38759), (33, 38825),

Gene: Amelia_39 Start: 24861, Stop: 25067, Start Num: 15

Candidate Starts for Amelia_39:

(4, 24756), (Start: 15 @24861 has 15 MA's), (18, 24891), (19, 24915), (24, 24942),

Gene: ArcusAngelus_53 Start: 37779, Stop: 37976, Start Num: 16

Candidate Starts for ArcusAngelus_53:

(Start: 16 @37779 has 131 MA's), (21, 37830), (22, 37842), (26, 37875), (33, 37941),

Gene: Aubs_49 Start: 36346, Stop: 36543, Start Num: 16

Candidate Starts for Aubs_49:

(Start: 16 @36346 has 131 MA's), (21, 36397), (22, 36409), (26, 36442), (33, 36508),

Gene: Avani_58 Start: 36654, Stop: 36851, Start Num: 16
Candidate Starts for Avani_58:
(Start: 16 @36654 has 131 MA's), (21, 36705), (22, 36717), (26, 36750), (33, 36816),

Gene: Awesomesauce_48 Start: 34991, Stop: 35188, Start Num: 16
Candidate Starts for Awesomesauce_48:
(10, 34907), (Start: 11 @34964 has 5 MA's), (Start: 16 @34991 has 131 MA's), (33, 35153),

Gene: BadWillHunting_46 Start: 25340, Stop: 25546, Start Num: 15
Candidate Starts for BadWillHunting_46:
(Start: 15 @25340 has 15 MA's), (18, 25370), (19, 25394), (24, 25421),

Gene: Bedetta_44 Start: 25008, Stop: 25214, Start Num: 15
Candidate Starts for Bedetta_44:
(4, 24903), (Start: 15 @25008 has 15 MA's), (18, 25038), (19, 25062), (24, 25089),

Gene: Bibble12_43 Start: 24856, Stop: 25062, Start Num: 15
Candidate Starts for Bibble12_43:
(4, 24751), (Start: 15 @24856 has 15 MA's), (18, 24886), (19, 24910), (24, 24937),

Gene: Blexus_48 Start: 36433, Stop: 36630, Start Num: 16
Candidate Starts for Blexus_48:
(Start: 16 @36433 has 131 MA's), (21, 36484), (22, 36496), (26, 36529), (33, 36595),

Gene: Blexus_40 Start: 31585, Stop: 31391, Start Num: 13
Candidate Starts for Blexus_40:
(Start: 13 @31585 has 25 MA's), (25, 31498), (31, 31438), (33, 31417),

Gene: BlueCrab_47 Start: 36159, Stop: 36356, Start Num: 16
Candidate Starts for BlueCrab_47:
(Start: 16 @36159 has 131 MA's), (21, 36210), (22, 36222), (26, 36255), (33, 36321),

Gene: BodEinwohner17_50 Start: 36375, Stop: 36572, Start Num: 16
Candidate Starts for BodEinwohner17_50:
(Start: 16 @36375 has 131 MA's), (21, 36426), (22, 36438), (26, 36471), (33, 36537),

Gene: Boomer_52 Start: 37608, Stop: 37805, Start Num: 16
Candidate Starts for Boomer_52:
(Start: 16 @37608 has 131 MA's), (21, 37659), (22, 37671), (26, 37704), (33, 37770),

Gene: Bubbles123_47 Start: 37055, Stop: 37252, Start Num: 16
Candidate Starts for Bubbles123_47:
(Start: 16 @37055 has 131 MA's), (21, 37106), (22, 37118), (26, 37151), (33, 37217),

Gene: Burwell21_48 Start: 36717, Stop: 36914, Start Num: 16
Candidate Starts for Burwell21_48:
(Start: 16 @36717 has 131 MA's), (21, 36768), (22, 36780), (26, 36813), (33, 36879),

Gene: BuzzLyseyear_55 Start: 37985, Stop: 38182, Start Num: 16
Candidate Starts for BuzzLyseyear_55:
(Start: 16 @37985 has 131 MA's), (21, 38036), (22, 38048), (26, 38081), (33, 38147),

Gene: Cabrinians_51 Start: 36795, Stop: 36992, Start Num: 16

Candidate Starts for Cabrinians_51:

(Start: 16 @36795 has 131 MA's), (21, 36846), (22, 36858), (26, 36891), (33, 36957),

Gene: Caterpie_88 Start: 56710, Stop: 56919, Start Num: 11

Candidate Starts for Caterpie_88:

(3, 56611), (9, 56650), (Start: 11 @56710 has 5 MA's), (32, 56887),

Gene: Che8_52 Start: 37604, Stop: 37801, Start Num: 16

Candidate Starts for Che8_52:

(Start: 16 @37604 has 131 MA's), (21, 37655), (22, 37667), (26, 37700), (33, 37766),

Gene: Chevrolet_56 Start: 37780, Stop: 37977, Start Num: 16

Candidate Starts for Chevrolet_56:

(Start: 16 @37780 has 131 MA's), (21, 37831), (22, 37843), (26, 37876), (33, 37942),

Gene: ChickenDinner_47 Start: 35729, Stop: 35926, Start Num: 16

Candidate Starts for ChickenDinner_47:

(10, 35645), (Start: 11 @35702 has 5 MA's), (Start: 16 @35729 has 131 MA's), (33, 35891),

Gene: Chuckly_41 Start: 31551, Stop: 31357, Start Num: 13

Candidate Starts for Chuckly_41:

(Start: 13 @31551 has 25 MA's), (25, 31464), (31, 31404), (33, 31383),

Gene: Colusalem_40 Start: 24838, Stop: 25044, Start Num: 15

Candidate Starts for Colusalem_40:

(4, 24733), (Start: 15 @24838 has 15 MA's), (18, 24868), (19, 24892), (24, 24919),

Gene: Coral_39 Start: 24709, Stop: 24915, Start Num: 15

Candidate Starts for Coral_39:

(4, 24604), (Start: 15 @24709 has 15 MA's), (18, 24739), (19, 24763), (24, 24790),

Gene: Cornie_43 Start: 34495, Stop: 34692, Start Num: 16

Candidate Starts for Cornie_43:

(Start: 16 @34495 has 131 MA's), (21, 34546), (22, 34558), (26, 34591), (33, 34657),

Gene: Cote_41 Start: 25186, Stop: 25392, Start Num: 15

Candidate Starts for Cote_41:

(4, 25081), (Start: 15 @25186 has 15 MA's), (18, 25216), (19, 25240), (24, 25267),

Gene: Crumble_45 Start: 32731, Stop: 32928, Start Num: 16

Candidate Starts for Crumble_45:

(Start: 16 @32731 has 131 MA's), (21, 32782), (22, 32794), (26, 32827), (33, 32893),

Gene: DaddyRickover_50 Start: 37291, Stop: 37488, Start Num: 16

Candidate Starts for DaddyRickover_50:

(Start: 16 @37291 has 131 MA's), (21, 37342), (22, 37354), (26, 37387), (33, 37453),

Gene: Daenerys_39 Start: 31164, Stop: 30970, Start Num: 13

Candidate Starts for Daenerys_39:

(Start: 13 @31164 has 25 MA's), (25, 31077), (31, 31017), (33, 30996),

Gene: Daenerys_45 Start: 35102, Stop: 35299, Start Num: 16

Candidate Starts for Daenerys_45:

(Start: 16 @35102 has 131 MA's), (21, 35153), (22, 35165), (26, 35198), (33, 35264),

Gene: Damocles_43 Start: 24997, Stop: 25203, Start Num: 15

Candidate Starts for Damocles_43:

(4, 24892), (Start: 15 @24997 has 15 MA's), (18, 25027), (19, 25051), (24, 25078),

Gene: Dante_49 Start: 36138, Stop: 36335, Start Num: 16

Candidate Starts for Dante_49:

(Start: 16 @36138 has 131 MA's), (21, 36189), (22, 36201), (26, 36234), (33, 36300),

Gene: Dante_40 Start: 31281, Stop: 31087, Start Num: 13

Candidate Starts for Dante_40:

(Start: 13 @31281 has 25 MA's), (25, 31194), (31, 31134), (33, 31113),

Gene: Daob_41 Start: 25194, Stop: 25400, Start Num: 15

Candidate Starts for Daob_41:

(Start: 15 @25194 has 15 MA's), (18, 25224), (19, 25248), (24, 25275),

Gene: Deb65_46 Start: 35071, Stop: 35268, Start Num: 16

Candidate Starts for Deb65_46:

(Start: 16 @35071 has 131 MA's), (21, 35122), (22, 35134), (26, 35167), (33, 35233),

Gene: DirtMcgirt_50 Start: 35836, Stop: 36033, Start Num: 16

Candidate Starts for DirtMcgirt_50:

(Start: 16 @35836 has 131 MA's), (21, 35887), (22, 35899), (26, 35932), (33, 35998),

Gene: DocMcStuffins_47 Start: 35702, Stop: 35926, Start Num: 11

Candidate Starts for DocMcStuffins_47:

(10, 35645), (Start: 11 @35702 has 5 MA's), (Start: 16 @35729 has 131 MA's), (33, 35891),

Gene: Doomphist_49 Start: 37373, Stop: 37570, Start Num: 16

Candidate Starts for Doomphist_49:

(Start: 16 @37373 has 131 MA's), (21, 37424), (22, 37436), (26, 37469), (33, 37535),

Gene: Dorothy_47 Start: 36172, Stop: 36369, Start Num: 16

Candidate Starts for Dorothy_47:

(Start: 16 @36172 has 131 MA's), (21, 36223), (22, 36235), (26, 36268), (33, 36334),

Gene: DotProduct_46 Start: 35833, Stop: 36027, Start Num: 16

Candidate Starts for DotProduct_46:

(Start: 16 @35833 has 131 MA's), (21, 35881), (22, 35893), (26, 35926), (33, 35992),

Gene: Doug_52 Start: 37491, Stop: 37688, Start Num: 16

Candidate Starts for Doug_52:

(Start: 16 @37491 has 131 MA's), (21, 37542), (22, 37554), (26, 37587), (33, 37653),

Gene: Drago_49 Start: 35839, Stop: 36036, Start Num: 16

Candidate Starts for Drago_49:

(Start: 16 @35839 has 131 MA's), (21, 35890), (22, 35902), (26, 35935), (33, 36001),

Gene: Eish_50 Start: 36718, Stop: 36915, Start Num: 16

Candidate Starts for Eish_50:

(Start: 16 @36718 has 131 MA's), (21, 36769), (22, 36781), (26, 36814), (33, 36880),

Gene: Eish_41 Start: 31869, Stop: 31675, Start Num: 13

Candidate Starts for Eish_41:

(Start: 13 @31869 has 25 MA's), (25, 31782), (31, 31722), (33, 31701),

Gene: Emmaloid_51 Start: 37563, Stop: 37760, Start Num: 16

Candidate Starts for Emmaloid_51:

(Start: 16 @37563 has 131 MA's), (21, 37614), (22, 37626), (26, 37659), (33, 37725),

Gene: Empress_49 Start: 36516, Stop: 36713, Start Num: 16

Candidate Starts for Empress_49:

(Start: 16 @36516 has 131 MA's), (21, 36567), (22, 36579), (26, 36612), (33, 36678),

Gene: Empress_41 Start: 32577, Stop: 32383, Start Num: 13

Candidate Starts for Empress_41:

(Start: 13 @32577 has 25 MA's), (25, 32490), (31, 32430), (33, 32409),

Gene: Eradicator_43 Start: 35055, Stop: 35252, Start Num: 16

Candidate Starts for Eradicator_43:

(Start: 16 @35055 has 131 MA's), (21, 35106), (22, 35118), (26, 35151), (33, 35217),

Gene: Fastidio_51 Start: 35796, Stop: 35993, Start Num: 16

Candidate Starts for Fastidio_51:

(7, 35706), (Start: 16 @35796 has 131 MA's), (21, 35847), (22, 35859), (26, 35892), (33, 35958),

Gene: Florinda_62 Start: 38976, Stop: 39173, Start Num: 16

Candidate Starts for Florinda_62:

(2, 38802), (Start: 16 @38976 has 131 MA's), (21, 39027), (22, 39039), (26, 39072), (33, 39138),

Gene: Frankie_53 Start: 37777, Stop: 37974, Start Num: 16

Candidate Starts for Frankie_53:

(Start: 11 @37750 has 5 MA's), (Start: 16 @37777 has 131 MA's), (33, 37939),

Gene: FreddyB_50 Start: 35643, Stop: 35840, Start Num: 16

Candidate Starts for FreddyB_50:

(Start: 16 @35643 has 131 MA's), (21, 35694), (22, 35706), (26, 35739), (33, 35805),

Gene: GUmbie_40 Start: 31183, Stop: 30989, Start Num: 13

Candidate Starts for GUmbie_40:

(Start: 13 @31183 has 25 MA's), (25, 31096), (31, 31036), (33, 31015),

Gene: GUmbie_47 Start: 36062, Stop: 36259, Start Num: 16

Candidate Starts for GUmbie_47:

(Start: 16 @36062 has 131 MA's), (21, 36113), (22, 36125), (26, 36158), (33, 36224),

Gene: Gandalph_51 Start: 36305, Stop: 36502, Start Num: 16

Candidate Starts for Gandalph_51:

(Start: 16 @36305 has 131 MA's), (21, 36356), (22, 36368), (26, 36401), (33, 36467),

Gene: GigiOuiOui_47 Start: 35975, Stop: 36172, Start Num: 16

Candidate Starts for GigiOuiOui_47:

(Start: 16 @35975 has 131 MA's), (21, 36026), (22, 36038), (26, 36071), (33, 36137),

Gene: Girr_50 Start: 37034, Stop: 37231, Start Num: 16

Candidate Starts for Girr_50:

(Start: 16 @37034 has 131 MA's), (21, 37085), (22, 37097), (26, 37130), (33, 37196),

Gene: GramZayde_41 Start: 25022, Stop: 25228, Start Num: 15

Candidate Starts for GramZayde_41:

(4, 24917), (Start: 15 @25022 has 15 MA's), (18, 25052), (19, 25076), (24, 25103),

Gene: Grimmer_58 Start: 38549, Stop: 38746, Start Num: 16

Candidate Starts for Grimmer_58:

(Start: 16 @38549 has 131 MA's), (21, 38600), (22, 38612), (26, 38645), (33, 38711),

Gene: Hamulus_51 Start: 37417, Stop: 37614, Start Num: 16

Candidate Starts for Hamulus_51:

(Start: 16 @37417 has 131 MA's), (21, 37468), (22, 37480), (26, 37513), (33, 37579),

Gene: HannahPhantana_40 Start: 24856, Stop: 25062, Start Num: 15

Candidate Starts for HannahPhantana_40:

(4, 24751), (Start: 15 @24856 has 15 MA's), (18, 24886), (19, 24910), (24, 24937),

Gene: Harley_52 Start: 36770, Stop: 36967, Start Num: 16

Candidate Starts for Harley_52:

(Start: 16 @36770 has 131 MA's), (21, 36821), (22, 36833), (26, 36866), (33, 36932),

Gene: Hum25_44 Start: 27639, Stop: 27827, Start Num: 17

Candidate Starts for Hum25_44:

(Start: 17 @27639 has 4 MA's),

Gene: IbOuu_42 Start: 31738, Stop: 31544, Start Num: 13

Candidate Starts for IbOuu_42:

(Start: 13 @31738 has 25 MA's), (25, 31651), (31, 31591), (33, 31570),

Gene: IbOuu_50 Start: 37352, Stop: 37549, Start Num: 16

Candidate Starts for IbOuu_50:

(Start: 16 @37352 has 131 MA's), (21, 37403), (22, 37415), (26, 37448), (33, 37514),

Gene: Ibhubesi_49 Start: 35857, Stop: 36054, Start Num: 16

Candidate Starts for Ibhubesi_49:

(Start: 16 @35857 has 131 MA's), (21, 35908), (22, 35920), (26, 35953), (33, 36019),

Gene: Inventum_39 Start: 31844, Stop: 31650, Start Num: 13

Candidate Starts for Inventum_39:

(Start: 13 @31844 has 25 MA's), (25, 31757), (31, 31697), (33, 31676),

Gene: Jabbawokkie_63 Start: 37588, Stop: 37785, Start Num: 16

Candidate Starts for Jabbawokkie_63:

(Start: 16 @37588 has 131 MA's), (20, 37633), (21, 37639), (23, 37654), (24, 37657), (26, 37684), (30, 37711), (33, 37744),

Gene: JalFarm20_59 Start: 39334, Stop: 39531, Start Num: 16

Candidate Starts for JalFarm20_59:

(Start: 16 @39334 has 131 MA's), (21, 39385), (22, 39397), (26, 39430), (33, 39496),

Gene: Jarcob_50 Start: 36763, Stop: 36960, Start Num: 16
Candidate Starts for Jarcob_50:
(Start: 16 @36763 has 131 MA's), (21, 36814), (22, 36826), (26, 36859), (33, 36925),

Gene: Jerole_40 Start: 24980, Stop: 25186, Start Num: 15
Candidate Starts for Jerole_40:
(4, 24875), (Start: 15 @24980 has 15 MA's), (18, 25010), (19, 25034), (24, 25061),

Gene: Jinglebell_55 Start: 38662, Stop: 38859, Start Num: 16
Candidate Starts for Jinglebell_55:
(Start: 16 @38662 has 131 MA's), (21, 38713), (22, 38725), (26, 38758), (33, 38824),

Gene: Job42_50 Start: 38024, Stop: 38221, Start Num: 16
Candidate Starts for Job42_50:
(Start: 16 @38024 has 131 MA's), (21, 38075), (22, 38087), (26, 38120), (33, 38186),

Gene: Job42_43 Start: 33160, Stop: 32966, Start Num: 13
Candidate Starts for Job42_43:
(Start: 13 @33160 has 25 MA's), (25, 33073), (31, 33013), (33, 32992),

Gene: JoeyJr_46 Start: 35270, Stop: 35467, Start Num: 16
Candidate Starts for JoeyJr_46:
(Start: 16 @35270 has 131 MA's), (21, 35321), (22, 35333), (26, 35366), (33, 35432),

Gene: JoeyJr_40 Start: 31332, Stop: 31138, Start Num: 13
Candidate Starts for JoeyJr_40:
(Start: 13 @31332 has 25 MA's), (25, 31245), (31, 31185), (33, 31164),

Gene: Karhdo_49 Start: 36857, Stop: 37054, Start Num: 16
Candidate Starts for Karhdo_49:
(Start: 16 @36857 has 131 MA's), (21, 36908), (22, 36920), (26, 36953), (33, 37019),

Gene: Kepler_41 Start: 25604, Stop: 25810, Start Num: 15
Candidate Starts for Kepler_41:
(4, 25499), (Start: 15 @25604 has 15 MA's), (18, 25634), (19, 25658), (24, 25685),

Gene: Kersh_53 Start: 38807, Stop: 39004, Start Num: 16
Candidate Starts for Kersh_53:
(Start: 16 @38807 has 131 MA's), (21, 38858), (22, 38870), (26, 38903), (33, 38969),

Gene: Kimberlium_53 Start: 38669, Stop: 38866, Start Num: 16
Candidate Starts for Kimberlium_53:
(Start: 16 @38669 has 131 MA's), (21, 38720), (22, 38732), (26, 38765), (33, 38831),

Gene: KingMidas_50 Start: 36932, Stop: 37129, Start Num: 16
Candidate Starts for KingMidas_50:
(Start: 16 @36932 has 131 MA's), (21, 36983), (22, 36995), (26, 37028), (33, 37094),

Gene: Koella_44 Start: 32693, Stop: 32890, Start Num: 16
Candidate Starts for Koella_44:
(Start: 16 @32693 has 131 MA's), (21, 32744), (22, 32756), (26, 32789), (33, 32855),

Gene: Krakatau_48 Start: 36504, Stop: 36701, Start Num: 16

Candidate Starts for Krakatau_48:

(Start: 16 @36504 has 131 MA's), (21, 36555), (22, 36567), (26, 36600), (33, 36666),

Gene: Latretium_53 Start: 37646, Stop: 37843, Start Num: 16

Candidate Starts for Latretium_53:

(Start: 16 @37646 has 131 MA's), (21, 37697), (26, 37742), (33, 37808),

Gene: Leozinho_42 Start: 31585, Stop: 31391, Start Num: 13

Candidate Starts for Leozinho_42:

(Start: 13 @31585 has 25 MA's), (25, 31498), (31, 31438), (33, 31417),

Gene: Leozinho_51 Start: 36607, Stop: 36804, Start Num: 16

Candidate Starts for Leozinho_51:

(Start: 16 @36607 has 131 MA's), (21, 36658), (22, 36670), (26, 36703), (33, 36769),

Gene: Leperchaun_43 Start: 34500, Stop: 34697, Start Num: 16

Candidate Starts for Leperchaun_43:

(Start: 16 @34500 has 131 MA's), (21, 34551), (22, 34563), (26, 34596), (33, 34662),

Gene: LilMoolah_49 Start: 36424, Stop: 36621, Start Num: 16

Candidate Starts for LilMoolah_49:

(Start: 16 @36424 has 131 MA's), (21, 36475), (22, 36487), (26, 36520), (33, 36586),

Gene: LittleShirley_50 Start: 37455, Stop: 37652, Start Num: 16

Candidate Starts for LittleShirley_50:

(Start: 16 @37455 has 131 MA's), (21, 37506), (22, 37518), (26, 37551), (33, 37617),

Gene: Lizziana_56 Start: 37766, Stop: 37963, Start Num: 16

Candidate Starts for Lizziana_56:

(Start: 16 @37766 has 131 MA's), (21, 37817), (22, 37829), (26, 37862), (33, 37928),

Gene: Llama_55 Start: 38660, Stop: 38857, Start Num: 16

Candidate Starts for Llama_55:

(Start: 16 @38660 has 131 MA's), (21, 38711), (22, 38723), (26, 38756), (33, 38822),

Gene: Llij_47 Start: 35993, Stop: 36190, Start Num: 16

Candidate Starts for Llij_47:

(Start: 16 @35993 has 131 MA's), (21, 36044), (22, 36056), (26, 36089), (33, 36155),

Gene: Lucia_50 Start: 36137, Stop: 36334, Start Num: 16

Candidate Starts for Lucia_50:

(Start: 16 @36137 has 131 MA's), (21, 36188), (22, 36200), (26, 36233), (33, 36299),

Gene: Lunar_41 Start: 25520, Stop: 25726, Start Num: 15

Candidate Starts for Lunar_41:

(4, 25415), (Start: 15 @25520 has 15 MA's), (18, 25550), (19, 25574), (24, 25601),

Gene: MadMen_44 Start: 35477, Stop: 35674, Start Num: 16

Candidate Starts for MadMen_44:

(Start: 16 @35477 has 131 MA's), (21, 35528), (22, 35540), (26, 35573), (33, 35639),

Gene: Madiba_46 Start: 34766, Stop: 34963, Start Num: 16

Candidate Starts for Madiba_46:

(Start: 16 @34766 has 131 MA's), (21, 34817), (22, 34829), (26, 34862), (33, 34928),

Gene: Mahavrat_48 Start: 35954, Stop: 36151, Start Num: 16

Candidate Starts for Mahavrat_48:

(Start: 16 @35954 has 131 MA's), (21, 36005), (22, 36017), (26, 36050), (33, 36116),

Gene: Mantra_47 Start: 35945, Stop: 36142, Start Num: 16

Candidate Starts for Mantra_47:

(Start: 16 @35945 has 131 MA's), (21, 35996), (22, 36008), (26, 36041), (33, 36107),

Gene: Maravista_52 Start: 38428, Stop: 38625, Start Num: 16

Candidate Starts for Maravista_52:

(Start: 16 @38428 has 131 MA's), (21, 38479), (22, 38491), (26, 38524), (33, 38590),

Gene: Marker_50 Start: 36326, Stop: 36523, Start Num: 16

Candidate Starts for Marker_50:

(Start: 16 @36326 has 131 MA's), (21, 36377), (22, 36389), (26, 36422), (33, 36488),

Gene: Martik_50 Start: 36719, Stop: 36916, Start Num: 16

Candidate Starts for Martik_50:

(Start: 16 @36719 has 131 MA's), (21, 36770), (22, 36782), (26, 36815), (33, 36881),

Gene: Melons_41 Start: 25334, Stop: 25540, Start Num: 15

Candidate Starts for Melons_41:

(4, 25229), (Start: 15 @25334 has 15 MA's), (18, 25364), (19, 25388), (24, 25415),

Gene: Merpity_43 Start: 28039, Stop: 28227, Start Num: 17

Candidate Starts for Merpity_43:

(1, 27859), (7, 27949), (Start: 17 @28039 has 4 MA's),

Gene: Misha28_46 Start: 34969, Stop: 35193, Start Num: 11

Candidate Starts for Misha28_46:

(10, 34912), (Start: 11 @34969 has 5 MA's), (Start: 16 @34996 has 131 MA's), (33, 35158),

Gene: MisterCuddles_50 Start: 37034, Stop: 37231, Start Num: 16

Candidate Starts for MisterCuddles_50:

(Start: 16 @37034 has 131 MA's), (21, 37085), (22, 37097), (26, 37130), (33, 37196),

Gene: Modragons_54 Start: 38506, Stop: 38703, Start Num: 16

Candidate Starts for Modragons_54:

(Start: 16 @38506 has 131 MA's), (21, 38557), (22, 38569), (26, 38602), (33, 38668),

Gene: MrSmee_43 Start: 28469, Stop: 28657, Start Num: 17

Candidate Starts for MrSmee_43:

(Start: 17 @28469 has 4 MA's),

Gene: MulchExplorer_53 Start: 38668, Stop: 38865, Start Num: 16

Candidate Starts for MulchExplorer_53:

(Start: 16 @38668 has 131 MA's), (21, 38719), (22, 38731), (26, 38764), (33, 38830),

Gene: MulchSalad_47 Start: 33570, Stop: 33767, Start Num: 16

Candidate Starts for MulchSalad_47:

(5, 33471), (6, 33474), (Start: 11 @33543 has 5 MA's), (Start: 16 @33570 has 131 MA's), (33, 33732),

Gene: Neroxid_41 Start: 26871, Stop: 27059, Start Num: 17

Candidate Starts for Neroxid_41:

(Start: 17 @26871 has 4 MA's),

Gene: Nichirin_54 Start: 38298, Stop: 38495, Start Num: 16

Candidate Starts for Nichirin_54:

(Start: 16 @38298 has 131 MA's), (21, 38349), (22, 38361), (26, 38394), (33, 38460),

Gene: Nimbo_45 Start: 35073, Stop: 35270, Start Num: 16

Candidate Starts for Nimbo_45:

(Start: 16 @35073 has 131 MA's), (21, 35124), (22, 35136), (26, 35169), (33, 35235),

Gene: Nitzel_45 Start: 35193, Stop: 35390, Start Num: 16

Candidate Starts for Nitzel_45:

(Start: 16 @35193 has 131 MA's), (21, 35244), (22, 35256), (26, 35289), (33, 35355),

Gene: Nivrat_47 Start: 36297, Stop: 36494, Start Num: 16

Candidate Starts for Nivrat_47:

(Start: 16 @36297 has 131 MA's), (21, 36348), (22, 36360), (26, 36393), (33, 36459),

Gene: NormanBulbieJr_50 Start: 36706, Stop: 36903, Start Num: 16

Candidate Starts for NormanBulbieJr_50:

(Start: 16 @36706 has 131 MA's), (21, 36757), (22, 36769), (26, 36802), (33, 36868),

Gene: Ochi17_53 Start: 38113, Stop: 38310, Start Num: 16

Candidate Starts for Ochi17_53:

(Start: 16 @38113 has 131 MA's), (21, 38164), (22, 38176), (26, 38209), (33, 38275),

Gene: OfUltron_55 Start: 38662, Stop: 38859, Start Num: 16

Candidate Starts for OfUltron_55:

(Start: 16 @38662 has 131 MA's), (21, 38713), (22, 38725), (26, 38758), (33, 38824),

Gene: Ogopogo_43 Start: 31095, Stop: 30901, Start Num: 13

Candidate Starts for Ogopogo_43:

(Start: 13 @31095 has 25 MA's), (25, 31008), (31, 30948), (33, 30927),

Gene: Oksu_55 Start: 38558, Stop: 38755, Start Num: 16

Candidate Starts for Oksu_55:

(Start: 16 @38558 has 131 MA's), (21, 38609), (22, 38621), (26, 38654), (33, 38720),

Gene: OlympiaSaint_50 Start: 36632, Stop: 36829, Start Num: 16

Candidate Starts for OlympiaSaint_50:

(Start: 16 @36632 has 131 MA's), (21, 36683), (22, 36695), (26, 36728), (33, 36794),

Gene: OlympiaSaint_40 Start: 31613, Stop: 31419, Start Num: 13

Candidate Starts for OlympiaSaint_40:

(Start: 13 @31613 has 25 MA's), (25, 31526), (31, 31466), (33, 31445),

Gene: OtsoOtso_40 Start: 24710, Stop: 24916, Start Num: 15

Candidate Starts for OtsoOtso_40:

(Start: 15 @24710 has 15 MA's), (18, 24740), (19, 24764), (24, 24791),

Gene: OwlsT2W_49 Start: 36635, Stop: 36832, Start Num: 16
Candidate Starts for OwlsT2W_49:
(Start: 16 @36635 has 131 MA's), (21, 36686), (22, 36698), (26, 36731), (33, 36797),

Gene: OwlsT2W_40 Start: 31588, Stop: 31394, Start Num: 13
Candidate Starts for OwlsT2W_40:
(Start: 13 @31588 has 25 MA's), (25, 31501), (31, 31441), (33, 31420),

Gene: PHappiness_46 Start: 35046, Stop: 35243, Start Num: 16
Candidate Starts for PHappiness_46:
(Start: 16 @35046 has 131 MA's), (21, 35097), (22, 35109), (26, 35142), (33, 35208),

Gene: PMC_44 Start: 35844, Stop: 36041, Start Num: 16
Candidate Starts for PMC_44:
(Start: 16 @35844 has 131 MA's), (21, 35895), (22, 35907), (26, 35940), (33, 36006),

Gene: Pacc40_45 Start: 35120, Stop: 35317, Start Num: 16
Candidate Starts for Pacc40_45:
(Start: 16 @35120 has 131 MA's), (21, 35171), (22, 35183), (26, 35216), (33, 35282),

Gene: Peridot_53 Start: 36751, Stop: 36945, Start Num: 16
Candidate Starts for Peridot_53:
(Start: 16 @36751 has 131 MA's), (21, 36799), (22, 36811), (26, 36844), (33, 36910),

Gene: Phatniss_49 Start: 37088, Stop: 37285, Start Num: 16
Candidate Starts for Phatniss_49:
(Start: 16 @37088 has 131 MA's), (21, 37139), (22, 37151), (26, 37184), (33, 37250),

Gene: PhirstandPhine_41 Start: 25480, Stop: 25686, Start Num: 15
Candidate Starts for PhirstandPhine_41:
(4, 25375), (Start: 15 @25480 has 15 MA's), (18, 25510), (19, 25534), (24, 25561),

Gene: PhlipPhlop_49 Start: 37650, Stop: 37847, Start Num: 16
Candidate Starts for PhlipPhlop_49:
(Start: 16 @37650 has 131 MA's), (21, 37701), (22, 37713), (26, 37746), (33, 37812),

Gene: Pineda_41 Start: 25006, Stop: 25212, Start Num: 15
Candidate Starts for Pineda_41:
(4, 24901), (Start: 15 @25006 has 15 MA's), (18, 25036), (19, 25060), (24, 25087),

Gene: Piper2020_48 Start: 35712, Stop: 35909, Start Num: 16
Candidate Starts for Piper2020_48:
(10, 35628), (Start: 11 @35685 has 5 MA's), (Start: 16 @35712 has 131 MA's), (33, 35874),

Gene: Pitbull_42 Start: 26865, Stop: 27053, Start Num: 17
Candidate Starts for Pitbull_42:
(Start: 17 @26865 has 4 MA's),

Gene: Plumbus_52 Start: 36835, Stop: 37032, Start Num: 16
Candidate Starts for Plumbus_52:
(Start: 16 @36835 has 131 MA's), (21, 36886), (22, 36898), (26, 36931), (33, 36997),

Gene: Poenanya_49 Start: 37373, Stop: 37570, Start Num: 16

Candidate Starts for Poenanya_49:

(Start: 16 @37373 has 131 MA's), (21, 37424), (22, 37436), (26, 37469), (33, 37535),

Gene: Polka_39 Start: 24710, Stop: 24916, Start Num: 15

Candidate Starts for Polka_39:

(Start: 15 @24710 has 15 MA's), (18, 24740), (19, 24764), (24, 24791),

Gene: Polka14_41 Start: 31785, Stop: 31591, Start Num: 13

Candidate Starts for Polka14_41:

(Start: 13 @31785 has 25 MA's), (25, 31698), (31, 31638), (33, 31617),

Gene: Polka14_47 Start: 35723, Stop: 35920, Start Num: 16

Candidate Starts for Polka14_47:

(Start: 16 @35723 has 131 MA's), (21, 35774), (22, 35786), (26, 35819), (33, 35885),

Gene: Pollywog_41 Start: 31707, Stop: 31513, Start Num: 13

Candidate Starts for Pollywog_41:

(Start: 13 @31707 has 25 MA's), (25, 31620), (31, 31560), (33, 31539),

Gene: Pollywog_48 Start: 36551, Stop: 36748, Start Num: 16

Candidate Starts for Pollywog_48:

(Start: 16 @36551 has 131 MA's), (22, 36614), (26, 36647), (33, 36713),

Gene: PopTart_45 Start: 35859, Stop: 36056, Start Num: 16

Candidate Starts for PopTart_45:

(Start: 16 @35859 has 131 MA's), (21, 35910), (22, 35922), (26, 35955), (33, 36021),

Gene: Priscilla_50 Start: 36805, Stop: 37002, Start Num: 16

Candidate Starts for Priscilla_50:

(Start: 16 @36805 has 131 MA's), (21, 36856), (22, 36868), (26, 36901), (33, 36967),

Gene: QuickMath_52 Start: 38892, Stop: 39089, Start Num: 16

Candidate Starts for QuickMath_52:

(Start: 16 @38892 has 131 MA's), (21, 38943), (22, 38955), (26, 38988), (33, 39054),

Gene: Quico_59 Start: 38796, Stop: 38993, Start Num: 16

Candidate Starts for Quico_59:

(2, 38622), (Start: 16 @38796 has 131 MA's), (21, 38847), (22, 38859), (26, 38892), (33, 38958),

Gene: Radiance_50 Start: 36960, Stop: 37157, Start Num: 16

Candidate Starts for Radiance_50:

(Start: 16 @36960 has 131 MA's), (21, 37011), (22, 37023), (26, 37056), (33, 37122),

Gene: Radiance_41 Start: 31335, Stop: 31141, Start Num: 13

Candidate Starts for Radiance_41:

(Start: 13 @31335 has 25 MA's), (25, 31248), (31, 31188), (33, 31167),

Gene: Ramsey_51 Start: 37587, Stop: 37784, Start Num: 16

Candidate Starts for Ramsey_51:

(Start: 16 @37587 has 131 MA's), (21, 37638), (22, 37650), (26, 37683), (33, 37749),

Gene: Raya_41 Start: 26871, Stop: 27059, Start Num: 17

Candidate Starts for Raya_41:

(Start: 17 @26871 has 4 MA's),

Gene: RedBird_47 Start: 36184, Stop: 36381, Start Num: 16

Candidate Starts for RedBird_47:

(Start: 16 @36184 has 131 MA's), (21, 36235), (22, 36247), (26, 36280), (33, 36346),

Gene: RitaG_46 Start: 35391, Stop: 35588, Start Num: 16

Candidate Starts for RitaG_46:

(Start: 16 @35391 has 131 MA's), (21, 35442), (22, 35454), (26, 35487), (33, 35553),

Gene: Rockne_48 Start: 35844, Stop: 36041, Start Num: 16

Candidate Starts for Rockne_48:

(Start: 16 @35844 has 131 MA's), (21, 35895), (22, 35907), (26, 35940), (33, 36006),

Gene: RockyHorror_50 Start: 36248, Stop: 36445, Start Num: 16

Candidate Starts for RockyHorror_50:

(Start: 16 @36248 has 131 MA's), (22, 36311), (26, 36344), (33, 36410),

Gene: Royals2015_42 Start: 31621, Stop: 31427, Start Num: 13

Candidate Starts for Royals2015_42:

(Start: 13 @31621 has 25 MA's), (25, 31534), (31, 31474), (33, 31453),

Gene: Royals2015_52 Start: 36653, Stop: 36850, Start Num: 16

Candidate Starts for Royals2015_52:

(Start: 16 @36653 has 131 MA's), (21, 36704), (22, 36716), (26, 36749), (33, 36815),

Gene: Ruby_48 Start: 37035, Stop: 37232, Start Num: 16

Candidate Starts for Ruby_48:

(Start: 16 @37035 has 131 MA's), (21, 37086), (22, 37098), (26, 37131), (33, 37197),

Gene: RunningOnE_7 Start: 3413, Stop: 3225, Start Num: 14

Candidate Starts for RunningOnE_7:

(Start: 11 @3425 has 5 MA's), (Start: 14 @3413 has 1 MA's), (18, 3386), (27, 3305), (28, 3302), (34, 3236),

Gene: Sabbb_56 Start: 38083, Stop: 38280, Start Num: 16

Candidate Starts for Sabbb_56:

(Start: 16 @38083 has 131 MA's), (21, 38134), (22, 38146), (26, 38179), (33, 38245),

Gene: Sandalphon_44 Start: 32523, Stop: 32329, Start Num: 13

Candidate Starts for Sandalphon_44:

(Start: 13 @32523 has 25 MA's), (25, 32436), (31, 32376), (33, 32355),

Gene: Sassafras_41 Start: 31844, Stop: 31650, Start Num: 13

Candidate Starts for Sassafras_41:

(Start: 13 @31844 has 25 MA's), (25, 31757), (31, 31697), (33, 31676),

Gene: SassyB_45 Start: 35859, Stop: 36056, Start Num: 16

Candidate Starts for SassyB_45:

(Start: 16 @35859 has 131 MA's), (21, 35910), (22, 35922), (26, 35955), (33, 36021),

Gene: Scottish_41 Start: 32465, Stop: 32271, Start Num: 13

Candidate Starts for Scottish_41:

(Start: 13 @32465 has 25 MA's), (25, 32378), (31, 32318), (33, 32297),

Gene: Scottish_49 Start: 36403, Stop: 36600, Start Num: 16

Candidate Starts for Scottish_49:

(Start: 16 @36403 has 131 MA's), (21, 36454), (22, 36466), (26, 36499), (33, 36565),

Gene: Seabastian_55 Start: 38663, Stop: 38860, Start Num: 16

Candidate Starts for Seabastian_55:

(Start: 16 @38663 has 131 MA's), (21, 38714), (22, 38726), (26, 38759), (33, 38825),

Gene: Seagreen_51 Start: 36587, Stop: 36784, Start Num: 16

Candidate Starts for Seagreen_51:

(Start: 16 @36587 has 131 MA's), (21, 36638), (22, 36650), (26, 36683), (33, 36749),

Gene: Sejanus_84 Start: 57638, Stop: 57847, Start Num: 11

Candidate Starts for Sejanus_84:

(3, 57539), (9, 57578), (Start: 11 @57638 has 5 MA's), (32, 57815),

Gene: ShiLan_49 Start: 36752, Stop: 36949, Start Num: 16

Candidate Starts for ShiLan_49:

(Start: 16 @36752 has 131 MA's), (21, 36803), (22, 36815), (26, 36848), (33, 36914),

Gene: ShowerHandel_52 Start: 36719, Stop: 36916, Start Num: 16

Candidate Starts for ShowerHandel_52:

(Start: 16 @36719 has 131 MA's), (21, 36770), (22, 36782), (26, 36815), (33, 36881),

Gene: SiSi_49 Start: 36409, Stop: 36606, Start Num: 16

Candidate Starts for SiSi_49:

(Start: 16 @36409 has 131 MA's), (21, 36460), (22, 36472), (26, 36505), (33, 36571),

Gene: Skitty_38 Start: 26378, Stop: 26566, Start Num: 17

Candidate Starts for Skitty_38:

(Start: 17 @26378 has 4 MA's),

Gene: Slim_51 Start: 37554, Stop: 37751, Start Num: 16

Candidate Starts for Slim_51:

(Start: 16 @37554 has 131 MA's), (21, 37605), (22, 37617), (26, 37650), (33, 37716),

Gene: Sparkdehlily_54 Start: 37405, Stop: 37602, Start Num: 16

Candidate Starts for Sparkdehlily_54:

(Start: 16 @37405 has 131 MA's), (21, 37456), (22, 37468), (26, 37501), (33, 37567),

Gene: Spikelee_56 Start: 38143, Stop: 38340, Start Num: 16

Candidate Starts for Spikelee_56:

(Start: 16 @38143 has 131 MA's), (21, 38194), (22, 38206), (26, 38239), (33, 38305),

Gene: Spooks_12 Start: 9089, Stop: 8904, Start Num: 12

Candidate Starts for Spooks_12:

(Start: 12 @9089 has 1 MA's), (18, 9062), (21, 9029), (29, 8972),

Gene: Spoonbill_40 Start: 31424, Stop: 31230, Start Num: 13

Candidate Starts for Spoonbill_40:

(Start: 13 @31424 has 25 MA's), (25, 31337), (31, 31277), (33, 31256),

Gene: Spoonbill_48 Start: 35345, Stop: 35542, Start Num: 16

Candidate Starts for Spoonbill_48:

(Start: 16 @35345 has 131 MA's), (21, 35396), (22, 35408), (26, 35441), (33, 35507),

Gene: Stap_49 Start: 36146, Stop: 36343, Start Num: 16

Candidate Starts for Stap_49:

(Start: 16 @36146 has 131 MA's), (21, 36197), (22, 36209), (26, 36242), (33, 36308),

Gene: Starceвич_50 Start: 37039, Stop: 37236, Start Num: 16

Candidate Starts for Starceвич_50:

(Start: 16 @37039 has 131 MA's), (21, 37090), (22, 37102), (26, 37135), (33, 37201),

Gene: Success_12 Start: 8329, Stop: 8147, Start Num: 15

Candidate Starts for Success_12:

(Start: 15 @8329 has 15 MA's), (19, 8281), (20, 8278), (24, 8254), (28, 8221),

Gene: TDanisky_54 Start: 37405, Stop: 37602, Start Num: 16

Candidate Starts for TDanisky_54:

(Start: 16 @37405 has 131 MA's), (21, 37456), (22, 37468), (26, 37501), (33, 37567),

Gene: Tchotchke_52 Start: 36304, Stop: 36501, Start Num: 16

Candidate Starts for Tchotchke_52:

(8, 36214), (Start: 16 @36304 has 131 MA's), (21, 36355), (22, 36367), (26, 36400), (33, 36466),

Gene: Tchotchke_42 Start: 31300, Stop: 31106, Start Num: 13

Candidate Starts for Tchotchke_42:

(Start: 13 @31300 has 25 MA's), (25, 31213), (31, 31153), (33, 31132),

Gene: TootsiePop_46 Start: 34969, Stop: 35193, Start Num: 11

Candidate Starts for TootsiePop_46:

(10, 34912), (Start: 11 @34969 has 5 MA's), (Start: 16 @34996 has 131 MA's), (33, 35158),

Gene: Tootsieroll_44 Start: 31573, Stop: 31379, Start Num: 13

Candidate Starts for Tootsieroll_44:

(Start: 13 @31573 has 25 MA's), (25, 31486), (31, 31426), (33, 31405),

Gene: Tootsieroll_53 Start: 36596, Stop: 36793, Start Num: 16

Candidate Starts for Tootsieroll_53:

(Start: 16 @36596 has 131 MA's), (21, 36647), (22, 36659), (26, 36692), (33, 36758),

Gene: Totinger_50 Start: 36181, Stop: 36378, Start Num: 16

Candidate Starts for Totinger_50:

(Start: 16 @36181 has 131 MA's), (21, 36232), (22, 36244), (26, 36277), (33, 36343),

Gene: Tweety_49 Start: 36917, Stop: 37114, Start Num: 16

Candidate Starts for Tweety_49:

(Start: 16 @36917 has 131 MA's), (21, 36968), (22, 36980), (26, 37013), (33, 37079),

Gene: UncleRicky_50 Start: 37336, Stop: 37533, Start Num: 16

Candidate Starts for UncleRicky_50:

(Start: 16 @37336 has 131 MA's), (21, 37387), (22, 37399), (26, 37432), (33, 37498),

Gene: Veteran_40 Start: 31183, Stop: 30989, Start Num: 13
Candidate Starts for Veteran_40:
(Start: 13 @31183 has 25 MA's), (25, 31096), (31, 31036), (33, 31015),

Gene: Veteran_47 Start: 36053, Stop: 36250, Start Num: 16
Candidate Starts for Veteran_47:
(Start: 16 @36053 has 131 MA's), (21, 36104), (22, 36116), (26, 36149), (33, 36215),

Gene: Yorick_49 Start: 37093, Stop: 37290, Start Num: 16
Candidate Starts for Yorick_49:
(Start: 16 @37093 has 131 MA's), (21, 37144), (22, 37156), (26, 37189), (33, 37255),

Gene: Zapner_62 Start: 37589, Stop: 37786, Start Num: 16
Candidate Starts for Zapner_62:
(Start: 16 @37589 has 131 MA's), (20, 37634), (21, 37640), (23, 37655), (24, 37658), (26, 37685), (30, 37712), (33, 37745),

Gene: Zerg_49 Start: 36357, Stop: 36554, Start Num: 16
Candidate Starts for Zerg_49:
(Start: 16 @36357 has 131 MA's), (22, 36420), (26, 36453), (33, 36519),