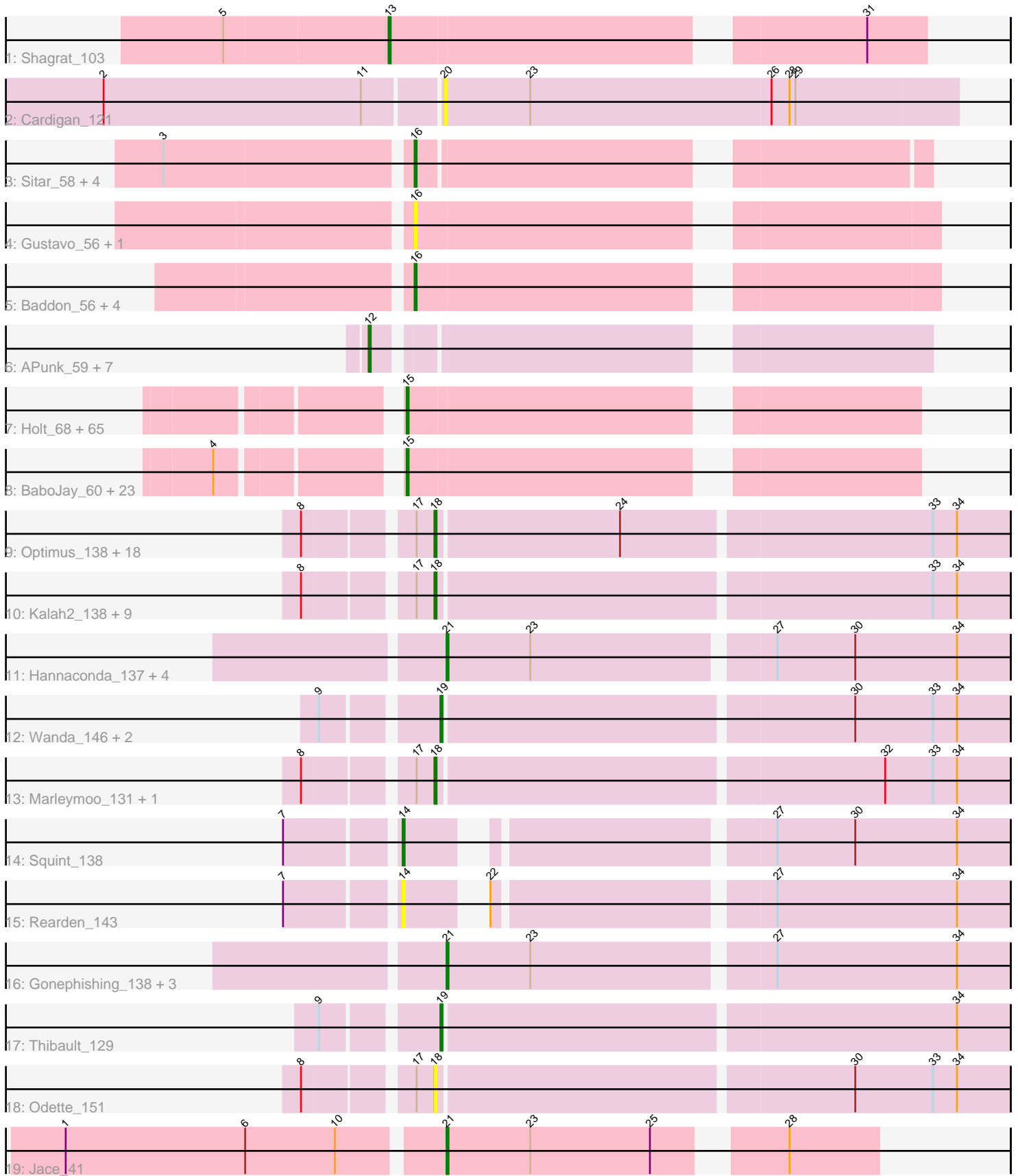


Pham 206634



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 206634 Report

This analysis was run 02/22/25 on database version 588.

Pham number 206634 has 160 members, 16 are drafts.

Phages represented in each track:

- Track 1 : Shagrat_103
- Track 2 : Cardigan_121
- Track 3 : Sitar_58, Barsten_58, Geodirt_57, Kamashten_56, Nordenberg_54
- Track 4 : Gustavo_56, Saronaya_56
- Track 5 : Baddon_56, Bibwit_57, JKSyngboy_54, Kwobi_57, Tangerine_55
- Track 6 : APunk_59, Zipp_59, Sampson_58, Delrey21_58, Tardus_60, ViaConlectus_58, DoctorFroggo_58, Verity_58
- Track 7 : Holt_68, OrionPax_62, StolenFromERC_66, Kimchi_67, Thimble_65, NelitzaMV_61, Pumpkin_66, NoSleep_65, BilboSwaggins_63, StellaBean_62, Stank_67, Adnama_68, Henry_62, TeardropMSU_60, Mindy_63, Hoonter_66, Dumbo_63, Manda_64, BigBubba_64, TBrady12_67, GoldenSpark_67, IHOP_62, ShamWow_64, Easy2Say_65, AmericanBeauty_67, Teaspoon_65, Porky_63, Kostya_64, SophKB_61, Toto_62, Eureka_62, CrystalP_63, 244_64, Elite2014_63, GooberAzure_66, Thresher_66, ChosenOne_64, Goldilocks_66, Gage_65, Goku_62, Pharsalus_61, Inca_61, Dusk_61, BadStone_61, Gator_62, Asriel_63, Gemini_68, DoctorDiddles_62, Phaja_62, Tuco_65, JeTaime_63, Miniwave_59, Rakim_65, Traaww1_60, Moldemort_67, Emmina_64, Tarkin_63, Paperbeatsrock_63, Simpliphy_63, Barbarian_63, ABCat_61, Lilpickle_63, Argent26_67, Wiggin_66, Filch_65, Xandras_63
- Track 8 : BaboJay_60, YassJohnny_60, Qualification_64, Pat3_61, SirDuracell_62, Sassay_58, ChotaBhai_62, Glexan_62, MadamMonkfish_64, Kanye_60, Willez_58, FairyPath_63, Flypotenuse_59, Cookies_60, Harella_63, Balomoji_63, Command613_65, Stark_64, Bask21_63, HanKaySha_63, Ukulele_59, Myrale_63, Daikon_65, ShereKhan_62
- Track 9 : Optimus_138, Bagrid_148, ThreeRngTarjay_142, Halley_149, Duke13_143, BAKA_147, Hughesyang_146, Constella_141, JuicyJay_143, EricMillard_139, Ejimix_140, DmpstrDiver_148, Dallas_148, Pound_139, Beem_149, Klein_145, Schatzie_143, Phoebus_147, Bombitas_135
- Track 10 : Kalah2_138, Porcelain_143, MiaZeal_146, Lucky2013_139, NihilNomen_149, HokkenD_140, Dove_133, Redno2_142, KashFlow_146, Yeet_141
- Track 11 : Hannaconda_137, Courthouse_139, Superphikiman_141, Ariel_143, Omega_151
- Track 12 : Wanda_146, Zelink_141, Minerva_146
- Track 13 : Marleymoo_131, Bobby_137
- Track 14 : Squint_138
- Track 15 : Rearden_143
- Track 16 : Gonephishing_138, LittleE_147, Shaboozey_144, Nekros_142

- Track 17 : Thibault_129
- Track 18 : Odette_151
- Track 19 : Jace_41

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

The start number called the most often in the published annotations is 15, it was called in 86 of the 144 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- 244_64, ABCat_61, Adnama_68, AmericanBeauty_67, Argent26_67, Asriel_63, BaboJay_60, BadStone_61, Balomoji_63, Barbarian_63, Bask21_63, BigBubba_64, BilboSwaggins_63, ChosenOne_64, ChotaBhai_62, Command613_65, Cookies_60, CrystalP_63, Daikon_65, DoctorDiddles_62, Dumbo_63, Dusk_61, Easy2Say_65, Elite2014_63, Emmina_64, Eureka_62, FairyPath_63, Filch_65, Flypotenuse_59, Gage_65, Gator_62, Gemini_68, Glexan_62, Goku_62, GoldenSpark_67, Goldilocks_66, GooberAzure_66, HanKaySha_63, Harella_63, Henry_62, Holt_68, Hoonter_66, IHOP_62, Inca_61, JeTaime_63, Kanye_60, Kimchi_67, Kostya_64, Lilpickle_63, MadamMonkfish_64, Manda_64, Mindy_63, Miniwave_59, Moldemort_67, Myrale_63, NelitzaMV_61, NoSleep_65, OrionPax_62, Paperbeatsrock_63, Pat3_61, Phaja_62, Pharsalus_61, Porky_63, Pumpkin_66, Quallification_64, Rakim_65, Sassay_58, ShamWow_64, ShereKhan_62, Simpliphy_63, SirDuracell_62, SophKB_61, Stank_67, Stark_64, StellaBean_62, StolenFromERC_66, TBrady12_67, Tarkin_63, TeardropMSU_60, Teaspoon_65, Thimble_65, Thresher_66, Toto_62, Traaww1_60, Tuco_65, Ukulele_59, Wiggin_66, Willez_58, Xandras_63, YassJohnny_60,

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

-

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

- APunk_59, Ariel_143, BAKA_147, Baddon_56, Bagrid_148, Barsten_58, Beem_149, Bibwit_57, Bobby_137, Bombitas_135, Cardigan_121, Constella_141, Courthouse_139, Dallas_148, Delrey21_58, DmpstrDiver_148, DoctorFroggo_58, Dove_133, Duke13_143, Ejimix_140, EricMillard_139, Geodirt_57, Gonephishing_138, Gustavo_56, Halley_149, Hannaconda_137, HokkenD_140, Hughesyang_146, JKSyngboy_54, Jace_41, JuicyJay_143, Kalah2_138, Kamashten_56, KashFlow_146, Klein_145, Kwobi_57, LittleE_147, Lucky2013_139, Marleymoo_131, MiaZeal_146, Minerva_146, Nekros_142, NihilNomen_149, Nordenberg_54, Odette_151, Omega_151, Optimus_138, Phoebus_147, Porcelain_143, Pound_139, Rearden_143, Redno2_142, Sampson_58, Saronaya_56, Schatzie_143, Shaboozey_144, Shagrat_103, Sitar_58, Squint_138, Superphikiman_141, Tangerine_55, Tardus_60, Thibault_129, ThreeRngTarjay_142, Verity_58, ViaConlectus_58, Wanda_146, Yeet_141, Zelink_141, Zipp_59,

Summary by start number:

Start 12:

- Found in 8 of 160 (5.0%) of genes in pham
- Manual Annotations of this start: 8 of 144

- Called 100.0% of time when present
- Phage (with cluster) where this start called: APunk_59 (DE4), Delrey21_58 (DE4), DoctorFroggo_58 (DE4), Sampson_58 (DE4), Tardus_60 (DE4), Verity_58 (DE4), ViaConlectus_58 (DE4), Zipp_59 (DE4),

Start 13:

- Found in 1 of 160 (0.6%) of genes in pham
- Manual Annotations of this start: 1 of 144
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Shagrat_103 (CF),

Start 14:

- Found in 2 of 160 (1.2%) of genes in pham
- Manual Annotations of this start: 1 of 144
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Rearden_143 (J), Squint_138 (J),

Start 15:

- Found in 90 of 160 (56.2%) of genes in pham
- Manual Annotations of this start: 86 of 144
- Called 100.0% of time when present
- Phage (with cluster) where this start called: 244_64 (E), ABCat_61 (E), Adnama_68 (E), AmericanBeauty_67 (E), Argent26_67 (E), Asriel_63 (E), BaboJay_60 (E), BadStone_61 (E), Balomoji_63 (E), Barbarian_63 (E), Bask21_63 (E), BigBubba_64 (E), BilboSwaggins_63 (E), ChosenOne_64 (E), ChotaBhai_62 (E), Command613_65 (E), Cookies_60 (E), CrystalP_63 (E), Daikon_65 (E), DoctorDiddles_62 (E), Dumbo_63 (E), Dusk_61 (E), Easy2Say_65 (E), Elite2014_63 (E), Emmina_64 (E), Eureka_62 (E), FairyPath_63 (E), Filch_65 (E), Flypotenuse_59 (E), Gage_65 (E), Gator_62 (E), Gemini_68 (E), Glexan_62 (E), Goku_62 (E), GoldenSpark_67 (E), Goldilocks_66 (E), GooberAzure_66 (E), HanKaySha_63 (E), Harella_63 (E), Henry_62 (E), Holt_68 (E), Hoonter_66 (E), IHOP_62 (E), Inca_61 (E), JeTaimé_63 (E), Kanye_60 (E), Kimchi_67 (E), Kostya_64 (E), Lilpickle_63 (E), MadamMonkfish_64 (E), Manda_64 (E), Mindy_63 (E), Miniwave_59 (E), Moldemort_67 (E), Myrale_63 (E), NelitzaMV_61 (E), NoSleep_65 (E), OrionPax_62 (E), Paperbeatsrock_63 (E), Pat3_61 (E), Phaja_62 (E), Pharsalus_61 (E), Porky_63 (E), Pumpkin_66 (E), Quallification_64 (E), Rakim_65 (E), Sassay_58 (E), ShamWow_64 (E), ShereKhan_62 (E), Simpliphy_63 (E), SirDuracell_62 (E), SophKB_61 (E), Stank_67 (E), Stark_64 (E), StellaBean_62 (E), StolenFromERC_66 (E), TBrady12_67 (E), Tarkin_63 (E), TeardropMSU_60 (E), Teaspoon_65 (E), Thimble_65 (E), Thresher_66 (E), Toto_62 (E), Traaww1_60 (E), Tuco_65 (E), Ukulele_59 (E), Wiggín_66 (E), Willez_58 (E), Xandras_63 (E), YassJohnny_60 (E),

Start 16:

- Found in 12 of 160 (7.5%) of genes in pham
- Manual Annotations of this start: 8 of 144
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Baddon_56 (DE1), Barsten_58 (DE1), Bibwit_57 (DE1), Geodirt_57 (DE1), Gustavo_56 (DE1), JKSyngboy_54 (DE1), Kamashten_56 (DE1), Kwobi_57 (DE1), Nordenberg_54 (DE1), Saronaya_56 (DE1), Sitar_58 (DE1), Tangerine_55 (DE1),

Start 18:

- Found in 32 of 160 (20.0%) of genes in pham

- Manual Annotations of this start: 29 of 144
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BAKA_147 (J), Bagrid_148 (J), Beem_149 (J), Bobby_137 (J), Bombitas_135 (J), Constella_141 (J), Dallas_148 (J), DmpstrDiver_148 (J), Dove_133 (J), Duke13_143 (J), Ejimix_140 (J), EricMillard_139 (J), Halley_149 (J), HokkenD_140 (J), Hughesyang_146 (J), JuicyJay_143 (J), Kalah2_138 (J), KashFlow_146 (J), Klein_145 (J), Lucky2013_139 (J), Marleymoo_131 (J), MiaZeal_146 (J), NihilNomen_149 (J), Odette_151 (J), Optimus_138 (J), Phoebus_147 (J), Porcelain_143 (J), Pound_139 (J), Redno2_142 (J), Schatzie_143 (J), ThreeRngTarjay_142 (J), Yeet_141 (J),

Start 19:

- Found in 4 of 160 (2.5%) of genes in pham
- Manual Annotations of this start: 4 of 144
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Minerva_146 (J), Thibault_129 (J), Wanda_146 (J), Zelink_141 (J),

Start 20:

- Found in 1 of 160 (0.6%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cardigan_121 (DD),

Start 21:

- Found in 10 of 160 (6.2%) of genes in pham
- Manual Annotations of this start: 7 of 144
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ariel_143 (J), Courthouse_139 (J), Gonephishing_138 (J), Hannaconda_137 (J), Jace_41 (singleton), LittleE_147 (J), Nekros_142 (J), Omega_151 (J), Shaboozey_144 (J), Superphikiman_141 (J),

Summary by clusters:

There are 7 clusters represented in this pham: singleton, E, DE1, DD, J, DE4, CF,

Info for manual annotations of cluster CF:

- Start number 13 was manually annotated 1 time for cluster CF.

Info for manual annotations of cluster DE1:

- Start number 16 was manually annotated 8 times for cluster DE1.

Info for manual annotations of cluster DE4:

- Start number 12 was manually annotated 8 times for cluster DE4.

Info for manual annotations of cluster E:

- Start number 15 was manually annotated 86 times for cluster E.

Info for manual annotations of cluster J:

- Start number 14 was manually annotated 1 time for cluster J.
- Start number 18 was manually annotated 29 times for cluster J.
- Start number 19 was manually annotated 4 times for cluster J.

- Start number 21 was manually annotated 6 times for cluster J.

Gene Information:

Gene: 244_64 Start: 42954, Stop: 43187, Start Num: 15

Candidate Starts for 244_64:

(Start: 15 @42954 has 86 MA's),

Gene: ABCat_61 Start: 43599, Stop: 43832, Start Num: 15

Candidate Starts for ABCat_61:

(Start: 15 @43599 has 86 MA's),

Gene: APunk_59 Start: 46515, Stop: 46763, Start Num: 12

Candidate Starts for APunk_59:

(Start: 12 @46515 has 8 MA's),

Gene: Adnama_68 Start: 43622, Stop: 43855, Start Num: 15

Candidate Starts for Adnama_68:

(Start: 15 @43622 has 86 MA's),

Gene: AmericanBeauty_67 Start: 43467, Stop: 43700, Start Num: 15

Candidate Starts for AmericanBeauty_67:

(Start: 15 @43467 has 86 MA's),

Gene: Argent26_67 Start: 43105, Stop: 43338, Start Num: 15

Candidate Starts for Argent26_67:

(Start: 15 @43105 has 86 MA's),

Gene: Ariel_143 Start: 73283, Stop: 73555, Start Num: 21

Candidate Starts for Ariel_143:

(Start: 21 @73283 has 7 MA's), (23, 73325), (27, 73439), (30, 73478), (34, 73529),

Gene: Asriel_63 Start: 41959, Stop: 42192, Start Num: 15

Candidate Starts for Asriel_63:

(Start: 15 @41959 has 86 MA's),

Gene: BAKA_147 Start: 76909, Stop: 77187, Start Num: 18

Candidate Starts for BAKA_147:

(8, 76852), (17, 76900), (Start: 18 @76909 has 29 MA's), (24, 76999), (33, 77149), (34, 77161),

Gene: BaboJay_60 Start: 42499, Stop: 42732, Start Num: 15

Candidate Starts for BaboJay_60:

(4, 42421), (Start: 15 @42499 has 86 MA's),

Gene: BadStone_61 Start: 43168, Stop: 43401, Start Num: 15

Candidate Starts for BadStone_61:

(Start: 15 @43168 has 86 MA's),

Gene: Baddon_56 Start: 46941, Stop: 47180, Start Num: 16

Candidate Starts for Baddon_56:

(Start: 16 @46941 has 8 MA's),

Gene: Bagrid_148 Start: 77604, Stop: 77882, Start Num: 18
Candidate Starts for Bagrid_148:
(8, 77547), (17, 77595), (Start: 18 @77604 has 29 MA's), (24, 77694), (33, 77844), (34, 77856),

Gene: Balomoji_63 Start: 43431, Stop: 43664, Start Num: 15
Candidate Starts for Balomoji_63:
(4, 43353), (Start: 15 @43431 has 86 MA's),

Gene: Barbarian_63 Start: 41959, Stop: 42192, Start Num: 15
Candidate Starts for Barbarian_63:
(Start: 15 @41959 has 86 MA's),

Gene: Barsten_58 Start: 46874, Stop: 47104, Start Num: 16
Candidate Starts for Barsten_58:
(3, 46757), (Start: 16 @46874 has 8 MA's),

Gene: Bask21_63 Start: 42272, Stop: 42505, Start Num: 15
Candidate Starts for Bask21_63:
(4, 42194), (Start: 15 @42272 has 86 MA's),

Gene: Beem_149 Start: 78507, Stop: 78785, Start Num: 18
Candidate Starts for Beem_149:
(8, 78450), (17, 78498), (Start: 18 @78507 has 29 MA's), (24, 78597), (33, 78747), (34, 78759),

Gene: Bibwit_57 Start: 45842, Stop: 46075, Start Num: 16
Candidate Starts for Bibwit_57:
(Start: 16 @45842 has 8 MA's),

Gene: BigBubba_64 Start: 42978, Stop: 43211, Start Num: 15
Candidate Starts for BigBubba_64:
(Start: 15 @42978 has 86 MA's),

Gene: BilboSwaggins_63 Start: 43607, Stop: 43840, Start Num: 15
Candidate Starts for BilboSwaggins_63:
(Start: 15 @43607 has 86 MA's),

Gene: Bobby_137 Start: 78377, Stop: 78655, Start Num: 18
Candidate Starts for Bobby_137:
(8, 78320), (17, 78368), (Start: 18 @78377 has 29 MA's), (32, 78593), (33, 78617), (34, 78629),

Gene: Bombitas_135 Start: 75918, Stop: 76196, Start Num: 18
Candidate Starts for Bombitas_135:
(8, 75861), (17, 75909), (Start: 18 @75918 has 29 MA's), (24, 76008), (33, 76158), (34, 76170),

Gene: Cardigan_121 Start: 69125, Stop: 69379, Start Num: 20
Candidate Starts for Cardigan_121:
(2, 68960), (11, 69089), (20, 69125), (23, 69167), (26, 69287), (28, 69296), (29, 69299),

Gene: ChosenOne_64 Start: 42626, Stop: 42859, Start Num: 15
Candidate Starts for ChosenOne_64:
(Start: 15 @42626 has 86 MA's),

Gene: ChotaBhai_62 Start: 42643, Stop: 42876, Start Num: 15

Candidate Starts for ChotaBhai_62:

(4, 42565), (Start: 15 @42643 has 86 MA's),

Gene: Command613_65 Start: 43365, Stop: 43598, Start Num: 15

Candidate Starts for Command613_65:

(4, 43287), (Start: 15 @43365 has 86 MA's),

Gene: Constella_141 Start: 77160, Stop: 77438, Start Num: 18

Candidate Starts for Constella_141:

(8, 77103), (17, 77151), (Start: 18 @77160 has 29 MA's), (24, 77250), (33, 77400), (34, 77412),

Gene: Cookies_60 Start: 42494, Stop: 42727, Start Num: 15

Candidate Starts for Cookies_60:

(4, 42416), (Start: 15 @42494 has 86 MA's),

Gene: Courthouse_139 Start: 73141, Stop: 73413, Start Num: 21

Candidate Starts for Courthouse_139:

(Start: 21 @73141 has 7 MA's), (23, 73183), (27, 73297), (30, 73336), (34, 73387),

Gene: CrystalP_63 Start: 43607, Stop: 43840, Start Num: 15

Candidate Starts for CrystalP_63:

(Start: 15 @43607 has 86 MA's),

Gene: Daikon_65 Start: 43452, Stop: 43685, Start Num: 15

Candidate Starts for Daikon_65:

(4, 43374), (Start: 15 @43452 has 86 MA's),

Gene: Dallas_148 Start: 77974, Stop: 78252, Start Num: 18

Candidate Starts for Dallas_148:

(8, 77917), (17, 77965), (Start: 18 @77974 has 29 MA's), (24, 78064), (33, 78214), (34, 78226),

Gene: Delrey21_58 Start: 47732, Stop: 47980, Start Num: 12

Candidate Starts for Delrey21_58:

(Start: 12 @47732 has 8 MA's),

Gene: DmpstrDiver_148 Start: 77893, Stop: 78171, Start Num: 18

Candidate Starts for DmpstrDiver_148:

(8, 77836), (17, 77884), (Start: 18 @77893 has 29 MA's), (24, 77983), (33, 78133), (34, 78145),

Gene: DoctorDiddles_62 Start: 42684, Stop: 42917, Start Num: 15

Candidate Starts for DoctorDiddles_62:

(Start: 15 @42684 has 86 MA's),

Gene: DoctorFroggo_58 Start: 47732, Stop: 47980, Start Num: 12

Candidate Starts for DoctorFroggo_58:

(Start: 12 @47732 has 8 MA's),

Gene: Dove_133 Start: 73492, Stop: 73770, Start Num: 18

Candidate Starts for Dove_133:

(8, 73435), (17, 73483), (Start: 18 @73492 has 29 MA's), (33, 73732), (34, 73744),

Gene: Duke13_143 Start: 75194, Stop: 75472, Start Num: 18

Candidate Starts for Duke13_143:
(8, 75137), (17, 75185), (Start: 18 @75194 has 29 MA's), (24, 75284), (33, 75434), (34, 75446),

Gene: Dumbo_63 Start: 42531, Stop: 42764, Start Num: 15
Candidate Starts for Dumbo_63:
(Start: 15 @42531 has 86 MA's),

Gene: Dusk_61 Start: 42828, Stop: 43061, Start Num: 15
Candidate Starts for Dusk_61:
(Start: 15 @42828 has 86 MA's),

Gene: Easy2Say_65 Start: 44069, Stop: 44302, Start Num: 15
Candidate Starts for Easy2Say_65:
(Start: 15 @44069 has 86 MA's),

Gene: Ejimix_140 Start: 78042, Stop: 78320, Start Num: 18
Candidate Starts for Ejimix_140:
(8, 77985), (17, 78033), (Start: 18 @78042 has 29 MA's), (24, 78132), (33, 78282), (34, 78294),

Gene: Elite2014_63 Start: 42625, Stop: 42858, Start Num: 15
Candidate Starts for Elite2014_63:
(Start: 15 @42625 has 86 MA's),

Gene: Emmina_64 Start: 42532, Stop: 42765, Start Num: 15
Candidate Starts for Emmina_64:
(Start: 15 @42532 has 86 MA's),

Gene: EricMillard_139 Start: 76546, Stop: 76824, Start Num: 18
Candidate Starts for EricMillard_139:
(8, 76489), (17, 76537), (Start: 18 @76546 has 29 MA's), (24, 76636), (33, 76786), (34, 76798),

Gene: Eureka_62 Start: 43096, Stop: 43329, Start Num: 15
Candidate Starts for Eureka_62:
(Start: 15 @43096 has 86 MA's),

Gene: FairyPath_63 Start: 43443, Stop: 43676, Start Num: 15
Candidate Starts for FairyPath_63:
(4, 43365), (Start: 15 @43443 has 86 MA's),

Gene: Filch_65 Start: 42557, Stop: 42790, Start Num: 15
Candidate Starts for Filch_65:
(Start: 15 @42557 has 86 MA's),

Gene: Flypotenuse_59 Start: 42315, Stop: 42548, Start Num: 15
Candidate Starts for Flypotenuse_59:
(4, 42237), (Start: 15 @42315 has 86 MA's),

Gene: Gage_65 Start: 43105, Stop: 43338, Start Num: 15
Candidate Starts for Gage_65:
(Start: 15 @43105 has 86 MA's),

Gene: Gator_62 Start: 43459, Stop: 43692, Start Num: 15
Candidate Starts for Gator_62:

(Start: 15 @43459 has 86 MA's),

Gene: Gemini_68 Start: 43622, Stop: 43855, Start Num: 15

Candidate Starts for Gemini_68:

(Start: 15 @43622 has 86 MA's),

Gene: Geodirt_57 Start: 47622, Stop: 47852, Start Num: 16

Candidate Starts for Geodirt_57:

(3, 47505), (Start: 16 @47622 has 8 MA's),

Gene: Glexan_62 Start: 43442, Stop: 43675, Start Num: 15

Candidate Starts for Glexan_62:

(4, 43364), (Start: 15 @43442 has 86 MA's),

Gene: Goku_62 Start: 42825, Stop: 43058, Start Num: 15

Candidate Starts for Goku_62:

(Start: 15 @42825 has 86 MA's),

Gene: GoldenSpark_67 Start: 43105, Stop: 43338, Start Num: 15

Candidate Starts for GoldenSpark_67:

(Start: 15 @43105 has 86 MA's),

Gene: Goldilocks_66 Start: 42607, Stop: 42840, Start Num: 15

Candidate Starts for Goldilocks_66:

(Start: 15 @42607 has 86 MA's),

Gene: Gonephishing_138 Start: 73676, Stop: 73948, Start Num: 21

Candidate Starts for Gonephishing_138:

(Start: 21 @73676 has 7 MA's), (23, 73718), (27, 73832), (34, 73922),

Gene: GooberAzure_66 Start: 43105, Stop: 43338, Start Num: 15

Candidate Starts for GooberAzure_66:

(Start: 15 @43105 has 86 MA's),

Gene: Gustavo_56 Start: 45880, Stop: 46119, Start Num: 16

Candidate Starts for Gustavo_56:

(Start: 16 @45880 has 8 MA's),

Gene: Halley_149 Start: 78358, Stop: 78636, Start Num: 18

Candidate Starts for Halley_149:

(8, 78301), (17, 78349), (Start: 18 @78358 has 29 MA's), (24, 78448), (33, 78598), (34, 78610),

Gene: HanKaySha_63 Start: 42415, Stop: 42648, Start Num: 15

Candidate Starts for HanKaySha_63:

(4, 42337), (Start: 15 @42415 has 86 MA's),

Gene: Hannaconda_137 Start: 73890, Stop: 74162, Start Num: 21

Candidate Starts for Hannaconda_137:

(Start: 21 @73890 has 7 MA's), (23, 73932), (27, 74046), (30, 74085), (34, 74136),

Gene: Harella_63 Start: 43958, Stop: 44191, Start Num: 15

Candidate Starts for Harella_63:

(4, 43880), (Start: 15 @43958 has 86 MA's),

Gene: Henry_62 Start: 43047, Stop: 43280, Start Num: 15

Candidate Starts for Henry_62:

(Start: 15 @43047 has 86 MA's),

Gene: HokkenD_140 Start: 77517, Stop: 77795, Start Num: 18

Candidate Starts for HokkenD_140:

(8, 77460), (17, 77508), (Start: 18 @77517 has 29 MA's), (33, 77757), (34, 77769),

Gene: Holt_68 Start: 43519, Stop: 43752, Start Num: 15

Candidate Starts for Holt_68:

(Start: 15 @43519 has 86 MA's),

Gene: Hoonter_66 Start: 43105, Stop: 43338, Start Num: 15

Candidate Starts for Hoonter_66:

(Start: 15 @43105 has 86 MA's),

Gene: Hughesyang_146 Start: 78128, Stop: 78406, Start Num: 18

Candidate Starts for Hughesyang_146:

(8, 78071), (17, 78119), (Start: 18 @78128 has 29 MA's), (24, 78218), (33, 78368), (34, 78380),

Gene: IHOP_62 Start: 43171, Stop: 43404, Start Num: 15

Candidate Starts for IHOP_62:

(Start: 15 @43171 has 86 MA's),

Gene: Inca_61 Start: 41696, Stop: 41929, Start Num: 15

Candidate Starts for Inca_61:

(Start: 15 @41696 has 86 MA's),

Gene: JKSyngboy_54 Start: 46472, Stop: 46711, Start Num: 16

Candidate Starts for JKSyngboy_54:

(Start: 16 @46472 has 8 MA's),

Gene: Jace_41 Start: 29901, Stop: 30098, Start Num: 21

Candidate Starts for Jace_41:

(1, 29718), (6, 29808), (10, 29853), (Start: 21 @29901 has 7 MA's), (23, 29943), (25, 30003), (28, 30054),

Gene: JeTaime_63 Start: 43599, Stop: 43832, Start Num: 15

Candidate Starts for JeTaime_63:

(Start: 15 @43599 has 86 MA's),

Gene: JuicyJay_143 Start: 79643, Stop: 79921, Start Num: 18

Candidate Starts for JuicyJay_143:

(8, 79586), (17, 79634), (Start: 18 @79643 has 29 MA's), (24, 79733), (33, 79883), (34, 79895),

Gene: Kalah2_138 Start: 77249, Stop: 77527, Start Num: 18

Candidate Starts for Kalah2_138:

(8, 77192), (17, 77240), (Start: 18 @77249 has 29 MA's), (33, 77489), (34, 77501),

Gene: Kamashten_56 Start: 46214, Stop: 46444, Start Num: 16

Candidate Starts for Kamashten_56:

(3, 46097), (Start: 16 @46214 has 8 MA's),

Gene: Kanye_60 Start: 42454, Stop: 42687, Start Num: 15

Candidate Starts for Kanye_60:

(4, 42376), (Start: 15 @42454 has 86 MA's),

Gene: KashFlow_146 Start: 76549, Stop: 76827, Start Num: 18

Candidate Starts for KashFlow_146:

(8, 76492), (17, 76540), (Start: 18 @76549 has 29 MA's), (33, 76789), (34, 76801),

Gene: Kimchi_67 Start: 43108, Stop: 43341, Start Num: 15

Candidate Starts for Kimchi_67:

(Start: 15 @43108 has 86 MA's),

Gene: Klein_145 Start: 75851, Stop: 76129, Start Num: 18

Candidate Starts for Klein_145:

(8, 75794), (17, 75842), (Start: 18 @75851 has 29 MA's), (24, 75941), (33, 76091), (34, 76103),

Gene: Kostya_64 Start: 43270, Stop: 43503, Start Num: 15

Candidate Starts for Kostya_64:

(Start: 15 @43270 has 86 MA's),

Gene: Kwobi_57 Start: 46585, Stop: 46824, Start Num: 16

Candidate Starts for Kwobi_57:

(Start: 16 @46585 has 8 MA's),

Gene: Lilpickle_63 Start: 42625, Stop: 42858, Start Num: 15

Candidate Starts for Lilpickle_63:

(Start: 15 @42625 has 86 MA's),

Gene: LittleE_147 Start: 76532, Stop: 76804, Start Num: 21

Candidate Starts for LittleE_147:

(Start: 21 @76532 has 7 MA's), (23, 76574), (27, 76688), (34, 76778),

Gene: Lucky2013_139 Start: 73595, Stop: 73873, Start Num: 18

Candidate Starts for Lucky2013_139:

(8, 73538), (17, 73586), (Start: 18 @73595 has 29 MA's), (33, 73835), (34, 73847),

Gene: MadamMonkfish_64 Start: 42349, Stop: 42582, Start Num: 15

Candidate Starts for MadamMonkfish_64:

(4, 42271), (Start: 15 @42349 has 86 MA's),

Gene: Manda_64 Start: 43630, Stop: 43863, Start Num: 15

Candidate Starts for Manda_64:

(Start: 15 @43630 has 86 MA's),

Gene: Marleymoo_131 Start: 74123, Stop: 74401, Start Num: 18

Candidate Starts for Marleymoo_131:

(8, 74066), (17, 74114), (Start: 18 @74123 has 29 MA's), (32, 74339), (33, 74363), (34, 74375),

Gene: MiaZeal_146 Start: 74742, Stop: 75020, Start Num: 18

Candidate Starts for MiaZeal_146:

(8, 74685), (17, 74733), (Start: 18 @74742 has 29 MA's), (33, 74982), (34, 74994),

Gene: Mindy_63 Start: 42213, Stop: 42446, Start Num: 15
Candidate Starts for Mindy_63:
(Start: 15 @42213 has 86 MA's),

Gene: Minerva_146 Start: 77113, Stop: 77388, Start Num: 19
Candidate Starts for Minerva_146:
(9, 77062), (Start: 19 @77113 has 4 MA's), (30, 77311), (33, 77350), (34, 77362),

Gene: Miniwave_59 Start: 42666, Stop: 42899, Start Num: 15
Candidate Starts for Miniwave_59:
(Start: 15 @42666 has 86 MA's),

Gene: Moldemort_67 Start: 43222, Stop: 43455, Start Num: 15
Candidate Starts for Moldemort_67:
(Start: 15 @43222 has 86 MA's),

Gene: Myrale_63 Start: 43465, Stop: 43698, Start Num: 15
Candidate Starts for Myrale_63:
(4, 43387), (Start: 15 @43465 has 86 MA's),

Gene: Nekros_142 Start: 76782, Stop: 77054, Start Num: 21
Candidate Starts for Nekros_142:
(Start: 21 @76782 has 7 MA's), (23, 76824), (27, 76938), (34, 77028),

Gene: NelitzaMV_61 Start: 42414, Stop: 42647, Start Num: 15
Candidate Starts for NelitzaMV_61:
(Start: 15 @42414 has 86 MA's),

Gene: NihilNomen_149 Start: 77588, Stop: 77866, Start Num: 18
Candidate Starts for NihilNomen_149:
(8, 77531), (17, 77579), (Start: 18 @77588 has 29 MA's), (33, 77828), (34, 77840),

Gene: NoSleep_65 Start: 42970, Stop: 43203, Start Num: 15
Candidate Starts for NoSleep_65:
(Start: 15 @42970 has 86 MA's),

Gene: Nordenberg_54 Start: 46353, Stop: 46583, Start Num: 16
Candidate Starts for Nordenberg_54:
(3, 46236), (Start: 16 @46353 has 8 MA's),

Gene: Odette_151 Start: 79731, Stop: 80009, Start Num: 18
Candidate Starts for Odette_151:
(8, 79674), (17, 79722), (Start: 18 @79731 has 29 MA's), (30, 79932), (33, 79971), (34, 79983),

Gene: Omega_151 Start: 77610, Stop: 77882, Start Num: 21
Candidate Starts for Omega_151:
(Start: 21 @77610 has 7 MA's), (23, 77652), (27, 77766), (30, 77805), (34, 77856),

Gene: Optimus_138 Start: 74868, Stop: 75146, Start Num: 18
Candidate Starts for Optimus_138:
(8, 74811), (17, 74859), (Start: 18 @74868 has 29 MA's), (24, 74958), (33, 75108), (34, 75120),

Gene: OrionPax_62 Start: 42421, Stop: 42654, Start Num: 15

Candidate Starts for OrionPax_62:
(Start: 15 @42421 has 86 MA's),

Gene: Paperbeatsrock_63 Start: 43344, Stop: 43577, Start Num: 15
Candidate Starts for Paperbeatsrock_63:
(Start: 15 @43344 has 86 MA's),

Gene: Pat3_61 Start: 41569, Stop: 41802, Start Num: 15
Candidate Starts for Pat3_61:
(4, 41491), (Start: 15 @41569 has 86 MA's),

Gene: Phaja_62 Start: 43170, Stop: 43403, Start Num: 15
Candidate Starts for Phaja_62:
(Start: 15 @43170 has 86 MA's),

Gene: Pharsalus_61 Start: 43144, Stop: 43377, Start Num: 15
Candidate Starts for Pharsalus_61:
(Start: 15 @43144 has 86 MA's),

Gene: Phoebus_147 Start: 79482, Stop: 79760, Start Num: 18
Candidate Starts for Phoebus_147:
(8, 79425), (17, 79473), (Start: 18 @79482 has 29 MA's), (24, 79572), (33, 79722), (34, 79734),

Gene: Porcelain_143 Start: 74541, Stop: 74819, Start Num: 18
Candidate Starts for Porcelain_143:
(8, 74484), (17, 74532), (Start: 18 @74541 has 29 MA's), (33, 74781), (34, 74793),

Gene: Porky_63 Start: 42540, Stop: 42773, Start Num: 15
Candidate Starts for Porky_63:
(Start: 15 @42540 has 86 MA's),

Gene: Pound_139 Start: 77301, Stop: 77579, Start Num: 18
Candidate Starts for Pound_139:
(8, 77244), (17, 77292), (Start: 18 @77301 has 29 MA's), (24, 77391), (33, 77541), (34, 77553),

Gene: Pumpkin_66 Start: 43471, Stop: 43704, Start Num: 15
Candidate Starts for Pumpkin_66:
(Start: 15 @43471 has 86 MA's),

Gene: Quallification_64 Start: 43454, Stop: 43687, Start Num: 15
Candidate Starts for Quallification_64:
(4, 43376), (Start: 15 @43454 has 86 MA's),

Gene: Rakim_65 Start: 43221, Stop: 43454, Start Num: 15
Candidate Starts for Rakim_65:
(Start: 15 @43221 has 86 MA's),

Gene: Rearden_143 Start: 76191, Stop: 76463, Start Num: 14
Candidate Starts for Rearden_143:
(7, 76140), (Start: 14 @76191 has 1 MA's), (22, 76218), (27, 76347), (34, 76437),

Gene: Redno2_142 Start: 75590, Stop: 75868, Start Num: 18
Candidate Starts for Redno2_142:

(8, 75533), (17, 75581), (Start: 18 @75590 has 29 MA's), (33, 75830), (34, 75842),

Gene: Sampson_58 Start: 46948, Stop: 47196, Start Num: 12

Candidate Starts for Sampson_58:

(Start: 12 @46948 has 8 MA's),

Gene: Saronaya_56 Start: 45880, Stop: 46119, Start Num: 16

Candidate Starts for Saronaya_56:

(Start: 16 @45880 has 8 MA's),

Gene: Sassay_58 Start: 41087, Stop: 41320, Start Num: 15

Candidate Starts for Sassay_58:

(4, 41009), (Start: 15 @41087 has 86 MA's),

Gene: Schatzie_143 Start: 78150, Stop: 78428, Start Num: 18

Candidate Starts for Schatzie_143:

(8, 78093), (17, 78141), (Start: 18 @78150 has 29 MA's), (24, 78240), (33, 78390), (34, 78402),

Gene: Shaboozey_144 Start: 74979, Stop: 75251, Start Num: 21

Candidate Starts for Shaboozey_144:

(Start: 21 @74979 has 7 MA's), (23, 75021), (27, 75135), (34, 75225),

Gene: Shagrat_103 Start: 54533, Stop: 54778, Start Num: 13

Candidate Starts for Shagrat_103:

(5, 54452), (Start: 13 @54533 has 1 MA's), (31, 54749),

Gene: ShamWow_64 Start: 43607, Stop: 43840, Start Num: 15

Candidate Starts for ShamWow_64:

(Start: 15 @43607 has 86 MA's),

Gene: ShereKhan_62 Start: 43378, Stop: 43611, Start Num: 15

Candidate Starts for ShereKhan_62:

(4, 43300), (Start: 15 @43378 has 86 MA's),

Gene: Simpliphy_63 Start: 42688, Stop: 42921, Start Num: 15

Candidate Starts for Simpliphy_63:

(Start: 15 @42688 has 86 MA's),

Gene: SirDuracell_62 Start: 41661, Stop: 41894, Start Num: 15

Candidate Starts for SirDuracell_62:

(4, 41583), (Start: 15 @41661 has 86 MA's),

Gene: Sitar_58 Start: 48071, Stop: 48301, Start Num: 16

Candidate Starts for Sitar_58:

(3, 47954), (Start: 16 @48071 has 8 MA's),

Gene: SophKB_61 Start: 42363, Stop: 42596, Start Num: 15

Candidate Starts for SophKB_61:

(Start: 15 @42363 has 86 MA's),

Gene: Squint_138 Start: 73681, Stop: 73953, Start Num: 14

Candidate Starts for Squint_138:

(7, 73630), (Start: 14 @73681 has 1 MA's), (27, 73837), (30, 73876), (34, 73927),

Gene: Stank_67 Start: 43621, Stop: 43854, Start Num: 15
Candidate Starts for Stank_67:
(Start: 15 @43621 has 86 MA's),

Gene: Stark_64 Start: 42876, Stop: 43109, Start Num: 15
Candidate Starts for Stark_64:
(4, 42798), (Start: 15 @42876 has 86 MA's),

Gene: StellaBean_62 Start: 42931, Stop: 43164, Start Num: 15
Candidate Starts for StellaBean_62:
(Start: 15 @42931 has 86 MA's),

Gene: StolenFromERC_66 Start: 43105, Stop: 43338, Start Num: 15
Candidate Starts for StolenFromERC_66:
(Start: 15 @43105 has 86 MA's),

Gene: Superphikiman_141 Start: 73423, Stop: 73695, Start Num: 21
Candidate Starts for Superphikiman_141:
(Start: 21 @73423 has 7 MA's), (23, 73465), (27, 73579), (30, 73618), (34, 73669),

Gene: TBrady12_67 Start: 43105, Stop: 43338, Start Num: 15
Candidate Starts for TBrady12_67:
(Start: 15 @43105 has 86 MA's),

Gene: Tangerine_55 Start: 45291, Stop: 45530, Start Num: 16
Candidate Starts for Tangerine_55:
(Start: 16 @45291 has 8 MA's),

Gene: Tardus_60 Start: 46703, Stop: 46951, Start Num: 12
Candidate Starts for Tardus_60:
(Start: 12 @46703 has 8 MA's),

Gene: Tarkin_63 Start: 43353, Stop: 43586, Start Num: 15
Candidate Starts for Tarkin_63:
(Start: 15 @43353 has 86 MA's),

Gene: TeardropMSU_60 Start: 42353, Stop: 42586, Start Num: 15
Candidate Starts for TeardropMSU_60:
(Start: 15 @42353 has 86 MA's),

Gene: Teaspoon_65 Start: 43247, Stop: 43480, Start Num: 15
Candidate Starts for Teaspoon_65:
(Start: 15 @43247 has 86 MA's),

Gene: Thibault_129 Start: 74298, Stop: 74573, Start Num: 19
Candidate Starts for Thibault_129:
(9, 74247), (Start: 19 @74298 has 4 MA's), (34, 74547),

Gene: Thimble_65 Start: 42287, Stop: 42520, Start Num: 15
Candidate Starts for Thimble_65:
(Start: 15 @42287 has 86 MA's),

Gene: ThreeRngTarjay_142 Start: 78073, Stop: 78351, Start Num: 18
Candidate Starts for ThreeRngTarjay_142:
(8, 78016), (17, 78064), (Start: 18 @78073 has 29 MA's), (24, 78163), (33, 78313), (34, 78325),

Gene: Thresher_66 Start: 44230, Stop: 44463, Start Num: 15
Candidate Starts for Thresher_66:
(Start: 15 @44230 has 86 MA's),

Gene: Toto_62 Start: 43607, Stop: 43840, Start Num: 15
Candidate Starts for Toto_62:
(Start: 15 @43607 has 86 MA's),

Gene: Traaww1_60 Start: 42788, Stop: 43021, Start Num: 15
Candidate Starts for Traaww1_60:
(Start: 15 @42788 has 86 MA's),

Gene: Tuco_65 Start: 44115, Stop: 44348, Start Num: 15
Candidate Starts for Tuco_65:
(Start: 15 @44115 has 86 MA's),

Gene: Ukulele_59 Start: 42501, Stop: 42734, Start Num: 15
Candidate Starts for Ukulele_59:
(4, 42423), (Start: 15 @42501 has 86 MA's),

Gene: Verity_58 Start: 47732, Stop: 47980, Start Num: 12
Candidate Starts for Verity_58:
(Start: 12 @47732 has 8 MA's),

Gene: ViaConlectus_58 Start: 45658, Stop: 45906, Start Num: 12
Candidate Starts for ViaConlectus_58:
(Start: 12 @45658 has 8 MA's),

Gene: Wanda_146 Start: 75593, Stop: 75868, Start Num: 19
Candidate Starts for Wanda_146:
(9, 75542), (Start: 19 @75593 has 4 MA's), (30, 75791), (33, 75830), (34, 75842),

Gene: Wiggin_66 Start: 43189, Stop: 43422, Start Num: 15
Candidate Starts for Wiggin_66:
(Start: 15 @43189 has 86 MA's),

Gene: Willez_58 Start: 41087, Stop: 41320, Start Num: 15
Candidate Starts for Willez_58:
(4, 41009), (Start: 15 @41087 has 86 MA's),

Gene: Xandras_63 Start: 42600, Stop: 42833, Start Num: 15
Candidate Starts for Xandras_63:
(Start: 15 @42600 has 86 MA's),

Gene: YassJohnny_60 Start: 42261, Stop: 42494, Start Num: 15
Candidate Starts for YassJohnny_60:
(4, 42183), (Start: 15 @42261 has 86 MA's),

Gene: Yeet_141 Start: 77546, Stop: 77824, Start Num: 18

Candidate Starts for Yeet_141:

(8, 77489), (17, 77537), (Start: 18 @77546 has 29 MA's), (33, 77786), (34, 77798),

Gene: Zelink_141 Start: 78405, Stop: 78680, Start Num: 19

Candidate Starts for Zelink_141:

(9, 78354), (Start: 19 @78405 has 4 MA's), (30, 78603), (33, 78642), (34, 78654),

Gene: Zipp_59 Start: 47656, Stop: 47904, Start Num: 12

Candidate Starts for Zipp_59:

(Start: 12 @47656 has 8 MA's),