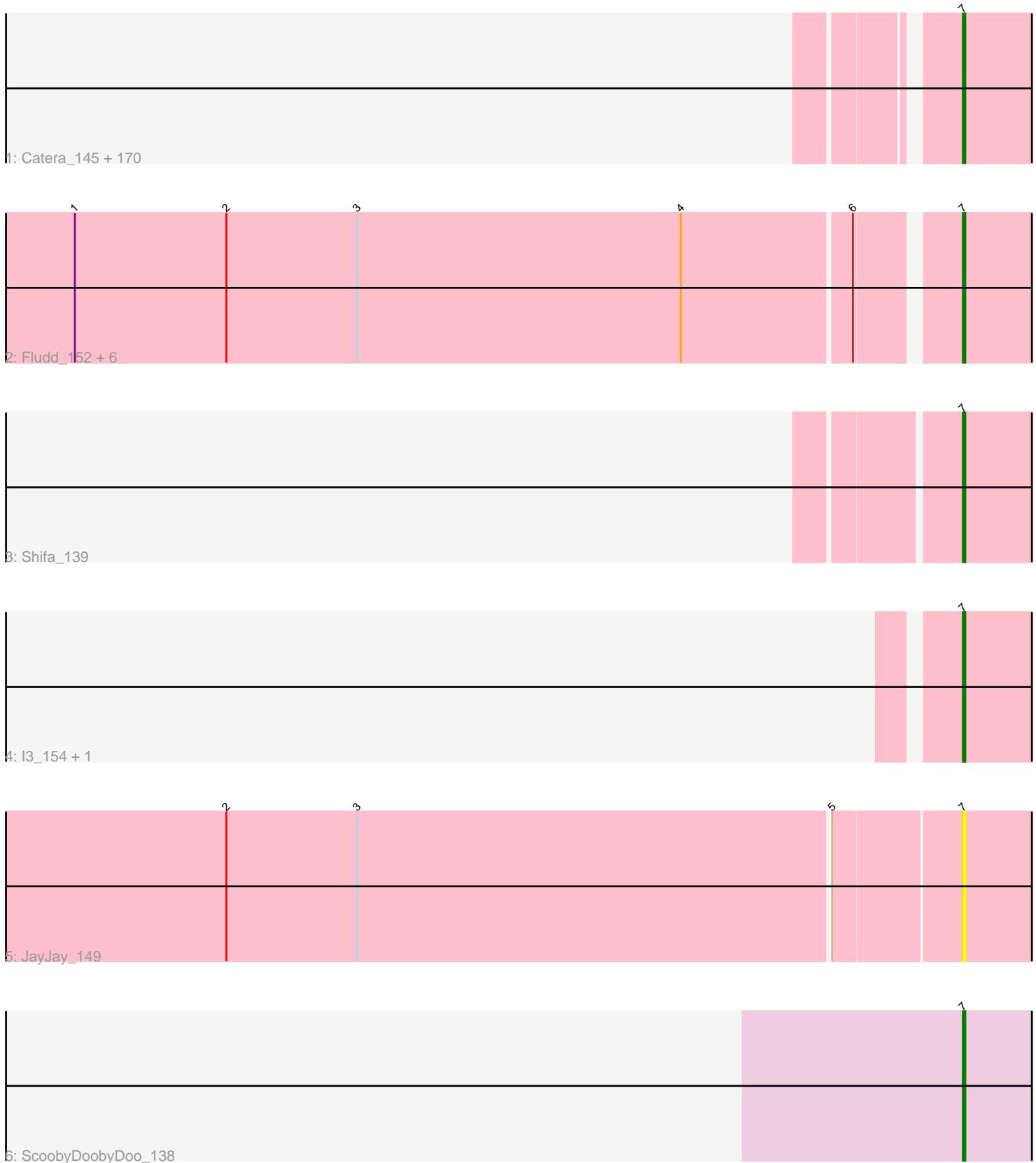


Pham 495



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 495 Report

This analysis was run 04/05/24 on database version 557.

Pham number 495 has 183 members, 15 are drafts.

Phages represented in each track:

- Track 1 : Catera_145, Flabslab_145, Basquiat_146, Zeenon_150, Jemmno_149, Pier_153, Shaqnato_143, Megamind_148, Jaygup_149, Sauce_149, EmToTheThree_151, SmallFry_150, MikeLiesIn_151, Latch_150, Ngannou_146, ET08_137, Shnickers_149, Bread_148, Lukilu_140, Atlantean_149, Blackbrain_146, Caravan_143, Tortoise16_146, Kamryn_149, Gabriel_149, Delilah_149, Ava3_150, Nappy_151, LRRHood_143, Janiyra_153, InigoMontoya_153, StubbySaigey_153, Norm_150, Blubba_143, Morizzled23_150, FrayBell_154, NoodleTree_156, JustHall_147, Capablanca_153, Phusco_149, ParkTD_150, Phox_147, Jedediah_152, Nidhogg_151, Guwapp_148, Adlitam_150, Zalkecks_150, Daffodil_154, LifeSavor_147, BananaFence_148, Salacia_153, JulietS_144, McWolfish_147, SilverDipper_152, Cane17_142, Littleton_149, Asterius_146, Iota_144, Cactojaque_146, Yucca_148, Bxz1_147, Izajani_149, Bigswole_152, Bonray_150, Bangla1971_150, Babyland_152, Chomp_148, Ronan_143, Teardrop_149, Concombre_155, JPickles_146, Colt_141, Darko_149, LordLeafolot_153, Pio_154, YemiJoy2021_150, Audrick_153, Matsumoto_147, Essence_146, PurduePete_149, Dandelion_155, LinStu_147, Shrimp_149, Grungle_136, Lee7_147, FoxtrotP1_149, Khaleesi_148, Specks_154, IkeLoa_143, Bipolarisk_148, Rizal_144, CindyLou_152, Patter_150, BadAgartude_145, Gamgam_150, Delylah_152, Drazdys_147, Naija_150, BigCity_157, HyRo_141, Tonenili_163, ShiaLabeouf_148, Willis_150, InterFolia_155, BeanWater_141, Issimir_148, NedWong_150, Naval22_154, Ewok_151, DTDevon_150, Pivoine_150, EasyJones_153, CharlieB_147, ArcherS7_148, Roots515_148, ErnieJ_144, NuevoMundo_154, Koguma_147, Jessibeth14_149, QBert_143, Tyke_150, Loanshark_148, Sebata_150, SrishMeg2525_148, Shelob_152, Ghost_149, ChaylaJr_146, Astraea_145, EggyFarm_157, Derek_148, Yassified_146, Kboogie_153, Sprinklers_145, Breenieme_149, Stubby_142, Spec_145, LolaVinca_150, Grasshills_156, Mikro_146, Ading_150, FudgeTart_147, ValleyTerrace_150, Pleione_152, Pinkcreek_140, DirtMonster_144, Spud_148, Gizmo_154, Burrough_150, Trinitium_148, ScottMcG_145, StephanieG_147, Cali_145, Rahel_148, RoMag_145, Rabinovish_149, Wally_148, Napoleon13_146, Maby2021_149, BackyardAgain_146, Amataga_150, YoungMoneyMata_151, Chargie21_146, DrPhinkDaddy_148, Momo_149, Zygotaiga_147, TinyTim_149, Quasimodo_152, Alice_142, Phlegm_154, MoMoMixon_149, Erdmann_149
- Track 2 : Fludd_152, Turret_146, EmmaElysia_150, Melpomini_144, McGee_152, Dietrick_142, ChickenPhender_147
- Track 3 : Shifa_139
- Track 4 : I3_154, Mangeria_150

- Track 5 : JayJay_149
- Track 6 : ScoobyDoobyDoo_138

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

The start number called the most often in the published annotations is 7, it was called in 168 of the 168 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Ading_150, Adlitam_150, Alice_142, Amataga_150, ArcherS7_148, Asterius_146, Astraea_145, Atlantean_149, Audrick_153, Ava3_150, Babyland_152, BackyardAgain_146, BadAgartude_145, BananaFence_148, Bangla1971_150, Basquiat_146, BeanWater_141, BigCity_157, Bigswole_152, Bipolarisk_148, Blackbrain_146, Blubba_143, Bonray_150, Bread_148, Breeniome_149, Burrough_150, Bxz1_147, Cactojaque_146, Cali_145, Cane17_142, Capablanca_153, Caravan_143, Catera_145, Charge21_146, CharlieB_147, ChaylaJr_146, ChickenPhender_147, Chomp_148, CindyLou_152, Colt_141, Concombre_155, DTDevon_150, Daffodil_154, Dandelion_155, Darko_149, Delilah_149, Delylah_152, Derek_148, Dietrick_142, DirtMonster_144, DrPhinkDaddy_148, Drazdys_147, ET08_137, EasyJones_153, EggyFarm_157, EmToTheThree_151, EmmaElysia_150, Erdmann_149, ErnieJ_144, Essence_146, Ewok_151, Flabslab_145, Fludd_152, FoxtrotP1_149, FrayBell_154, FudgeTart_147, Gabriel_149, Gamgam_150, Ghost_149, Gizmo_154, Grasshills_156, Grungle_136, Guwapp_148, HyRo_141, I3_154, IkeLoa_143, InigoMontoya_153, InterFolia_155, Iota_144, Issimir_148, Izajani_149, JPickles_146, Janiyra_153, JayJay_149, Jaygup_149, Jedediah_152, Jemmno_149, Jessibeth14_149, JulietS_144, JustHall_147, Kamryn_149, Kboogie_153, Khaleesi_148, Koguma_147, LRRHood_143, Latch_150, Lee7_147, LifeSavor_147, LinStu_147, Littleton_149, Loanshark_148, LolaVinca_150, LordLeafolot_153, Lukilu_140, Maby2021_149, Mangeria_150, Matsumoto_147, McGee_152, McWolfish_147, Megamind_148, Melpomini_144, MikeLiesIn_151, Mikro_146, MoMoMixon_149, Momo_149, Morizzled23_150, Naija_150, Napoleon13_146, Nappy_151, Naval22_154, NedWong_150, Ngannou_146, Nidhogg_151, NoodleTree_156, Norm_150, NuevoMundo_154, ParkTD_150, Patter_150, Phlegm_154, Phox_147, Phusco_149, Pier_153, Pinkcreek_140, Pio_154, Pivoine_150, Pleione_152, PurduePete_149, QBert_143, Quasimodo_152, Rabinovich_149, Rahel_148, Rizal_144, RoMag_145, Ronan_143, Roots515_148, Salacia_153, Sauce_149, ScoobyDoobyDoo_138, ScottMcG_145, Sebata_150, Shaqnato_143, Shelob_152, ShiaLabeouf_148, Shifa_139, Shnickers_149, Shrimp_149, SilverDipper_152, SmallFry_150, Spec_145, Specks_154, Sprinklers_145, Spud_148, SrishMeg2525_148, StephanieG_147, StubbySaigey_153, Stubby_142, Teardrop_149, TinyTim_149, Tonenili_163, Tortoise16_146, Trinitium_148, Turret_146, Tyke_150, ValleyTerrace_150, Wally_148, Willis_150, Yassified_146, YemiJoy2021_150, YoungMoneyMata_151, Yucca_148, Zalkecks_150, Zeenon_150, ZygoTaiga_147,

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

-

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

-

Summary by start number:

Start 7:

- Found in 183 of 183 (100.0%) of genes in pham
- Manual Annotations of this start: 168 of 168
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ading_150 (C1), Adlitam_150 (C1), Alice_142 (C1), Amataga_150 (C1), ArcherS7_148 (C1), Asterius_146 (C1), Astraea_145 (C1), Atlantean_149 (C1), Audrick_153 (C1), Ava3_150 (C1), Babyland_152 (C1), BackyardAgain_146 (C1), BadAgartude_145 (C1), BananaFence_148 (C1), Bangla1971_150 (C1), Basquiat_146 (C1), BeanWater_141 (C1), BigCity_157 (C1), Bigswole_152 (C1), Bipolarisk_148 (C1), Blackbrain_146 (C1), Blubba_143 (C1), Bonray_150 (C1), Bread_148 (C1), Breeniome_149 (C1), Burrough_150 (C1), Bxz1_147 (C1), Cactojaque_146 (C1), Cali_145 (C1), Cane17_142 (C1), Capablanca_153 (C1), Caravan_143 (C1), Catera_145 (C1), Charge21_146 (C1), CharlieB_147 (C1), ChaylaJr_146 (C1), ChickenPhender_147 (C1), Chomp_148 (C1), CindyLou_152 (C1), Colt_141 (C1), Concombre_155 (C1), DTDevon_150 (C1), Daffodil_154 (C1), Dandelion_155 (C1), Darko_149 (C1), Delilah_149 (C1), Delylah_152 (C1), Derek_148 (C1), Dietrick_142 (C1), DirtMonster_144 (C1), DrPhinkDaddy_148 (C1), Drazdys_147 (C1), ET08_137 (C1), EasyJones_153 (C1), EggyFarm_157 (C1), EmToTheThree_151 (C1), EmmaElysia_150 (C1), Erdmann_149 (C1), ErnieJ_144 (C1), Essence_146 (C1), Ewok_151 (C1), Flabslab_145 (C1), Fludd_152 (C1), FoxtrotP1_149 (C1), FrayBell_154 (C1), FudgeTart_147 (C1), Gabriel_149 (C1), Gamgam_150 (C1), Ghost_149 (C1), Gizmo_154 (C1), Grasshills_156 (C1), Grungle_136 (C1), Guwapp_148 (C1), HyRo_141 (C1), I3_154 (C1), IkeLoa_143 (C1), InigoMontoya_153 (C1), InterFolia_155 (C1), Iota_144 (C1), Issimir_148 (C1), Izajani_149 (C1), JPickles_146 (C1), Janiyra_153 (C1), JayJay_149 (C1), Jaygup_149 (C1), Jedediah_152 (C1), Jemmno_149 (C1), Jessibeth14_149 (C1), JulietS_144 (C1), JustHall_147 (C1), Kamryn_149 (C1), Kboogie_153 (C1), Khaleesi_148 (C1), Koguma_147 (C1), LRRHood_143 (C1), Latch_150 (C1), Lee7_147 (C1), LifeSavor_147 (C1), LinStu_147 (C1), Littleton_149 (C1), Loanshark_148 (C1), LolaVinca_150 (C1), LordLeafolot_153 (C1), Lukilu_140 (C1), Maby2021_149 (C1), Mangeria_150 (C1), Matsumoto_147 (C1), McGee_152 (C1), McWolfish_147 (C1), Megamind_148 (C1), Melpomini_144 (C1), MikeLiesln_151 (C1), Mikro_146 (C1), MoMoMixon_149 (C1), Momo_149 (C1), Morizzled23_150 (C1), Naija_150 (C1), Napoleon13_146 (C1), Nappy_151 (C1), Naval22_154 (C1), NedWong_150 (C1), Ngannou_146 (C1), Nidhogg_151 (C1), NoodleTree_156 (C1), Norm_150 (C1), NuevoMundo_154 (C1), ParkTD_150 (C1), Patter_150 (C1), Phlegm_154 (C1), Phox_147 (C1), Phusco_149 (C1), Pier_153 (C1), Pinkcreek_140 (C1), Pio_154 (C1), Pivoine_150 (C1), Pleione_152 (C1), PurduePete_149 (C1), QBert_143 (C1), Quasimodo_152 (C1), Rabinovish_149 (C1), Rahel_148 (C1), Rizal_144 (C1), RoMag_145 (C1), Ronan_143 (C1), Roots515_148 (C1), Salacia_153 (C1), Sauce_149 (C1), ScoobyDoobyDoo_138 (C2), ScottMcG_145 (C1), Sebata_150 (C1), Shaqnato_143 (C1), Shelob_152 (C1), ShiaLabeouf_148 (C1), Shifa_139 (C1), Shnickers_149 (C1), Shrimp_149 (C1), SilverDipper_152 (C1), SmallFry_150 (C1), Spec_145 (C1), Specks_154 (C1), Sprinklers_145 (C1), Spud_148 (C1), SrishMeg2525_148 (C1), StephanieG_147 (C1), StubbySaigey_153 (C1), Stubby_142 (C1), Teardrop_149 (C1), TinyTim_149 (C1), Tonenili_163 (C1), Tortoise16_146 (C1), Trinitium_148 (C1), Turret_146 (C1), Tyke_150 (C1), ValleyTerrace_150 (C1), Wally_148 (C1), Willis_150 (C1), Yassified_146 (C1), YemiJoy2021_150 (C1), YoungMoneyMata_151 (C1), Yucca_148 (C1),

Zalkecks_150 (C1), Zeenon_150 (C1), ZygoTaiga_147 (C1),

Summary by clusters:

There are 2 clusters represented in this pham: C2, C1,

Info for manual annotations of cluster C1:

- Start number 7 was manually annotated 167 times for cluster C1.

Info for manual annotations of cluster C2:

- Start number 7 was manually annotated 1 time for cluster C2.

Gene Information:

Gene: Ading_150 Start: 90511, Stop: 90654, Start Num: 7

Candidate Starts for Ading_150:

(Start: 7 @90511 has 168 MA's),

Gene: Adlitam_150 Start: 90406, Stop: 90549, Start Num: 7

Candidate Starts for Adlitam_150:

(Start: 7 @90406 has 168 MA's),

Gene: Alice_142 Start: 89631, Stop: 89774, Start Num: 7

Candidate Starts for Alice_142:

(Start: 7 @89631 has 168 MA's),

Gene: Amataga_150 Start: 89549, Stop: 89692, Start Num: 7

Candidate Starts for Amataga_150:

(Start: 7 @89549 has 168 MA's),

Gene: ArcherS7_148 Start: 89388, Stop: 89531, Start Num: 7

Candidate Starts for ArcherS7_148:

(Start: 7 @89388 has 168 MA's),

Gene: Asterius_146 Start: 90114, Stop: 90257, Start Num: 7

Candidate Starts for Asterius_146:

(Start: 7 @90114 has 168 MA's),

Gene: Astraea_145 Start: 88949, Stop: 89092, Start Num: 7

Candidate Starts for Astraea_145:

(Start: 7 @88949 has 168 MA's),

Gene: Atlantean_149 Start: 89549, Stop: 89692, Start Num: 7

Candidate Starts for Atlantean_149:

(Start: 7 @89549 has 168 MA's),

Gene: Audrick_153 Start: 90231, Stop: 90374, Start Num: 7

Candidate Starts for Audrick_153:

(Start: 7 @90231 has 168 MA's),

Gene: Ava3_150 Start: 90022, Stop: 90165, Start Num: 7

Candidate Starts for Ava3_150:
(Start: 7 @90022 has 168 MA's),

Gene: Babyland_152 Start: 90326, Stop: 90469, Start Num: 7
Candidate Starts for Babyland_152:
(Start: 7 @90326 has 168 MA's),

Gene: BackyardAgain_146 Start: 89025, Stop: 89168, Start Num: 7
Candidate Starts for BackyardAgain_146:
(Start: 7 @89025 has 168 MA's),

Gene: BadAgartude_145 Start: 90377, Stop: 90520, Start Num: 7
Candidate Starts for BadAgartude_145:
(Start: 7 @90377 has 168 MA's),

Gene: BananaFence_148 Start: 90229, Stop: 90372, Start Num: 7
Candidate Starts for BananaFence_148:
(Start: 7 @90229 has 168 MA's),

Gene: Bangla1971_150 Start: 89515, Stop: 89658, Start Num: 7
Candidate Starts for Bangla1971_150:
(Start: 7 @89515 has 168 MA's),

Gene: Basquiat_146 Start: 89229, Stop: 89372, Start Num: 7
Candidate Starts for Basquiat_146:
(Start: 7 @89229 has 168 MA's),

Gene: BeanWater_141 Start: 89876, Stop: 90019, Start Num: 7
Candidate Starts for BeanWater_141:
(Start: 7 @89876 has 168 MA's),

Gene: BigCity_157 Start: 92499, Stop: 92642, Start Num: 7
Candidate Starts for BigCity_157:
(Start: 7 @92499 has 168 MA's),

Gene: Bigswole_152 Start: 91781, Stop: 91924, Start Num: 7
Candidate Starts for Bigswole_152:
(Start: 7 @91781 has 168 MA's),

Gene: Bipolarisk_148 Start: 90290, Stop: 90433, Start Num: 7
Candidate Starts for Bipolarisk_148:
(Start: 7 @90290 has 168 MA's),

Gene: Blackbrain_146 Start: 89764, Stop: 89907, Start Num: 7
Candidate Starts for Blackbrain_146:
(Start: 7 @89764 has 168 MA's),

Gene: Blubba_143 Start: 91549, Stop: 91692, Start Num: 7
Candidate Starts for Blubba_143:
(Start: 7 @91549 has 168 MA's),

Gene: Bonray_150 Start: 90879, Stop: 91022, Start Num: 7
Candidate Starts for Bonray_150:

(Start: 7 @90879 has 168 MA's),

Gene: Bread_148 Start: 90162, Stop: 90305, Start Num: 7

Candidate Starts for Bread_148:

(Start: 7 @90162 has 168 MA's),

Gene: Breeniome_149 Start: 88821, Stop: 88964, Start Num: 7

Candidate Starts for Breeniome_149:

(Start: 7 @88821 has 168 MA's),

Gene: Burrough_150 Start: 90972, Stop: 91115, Start Num: 7

Candidate Starts for Burrough_150:

(Start: 7 @90972 has 168 MA's),

Gene: Bxz1_147 Start: 92171, Stop: 92314, Start Num: 7

Candidate Starts for Bxz1_147:

(Start: 7 @92171 has 168 MA's),

Gene: Cactojaque_146 Start: 89871, Stop: 90014, Start Num: 7

Candidate Starts for Cactojaque_146:

(Start: 7 @89871 has 168 MA's),

Gene: Cali_145 Start: 91023, Stop: 91166, Start Num: 7

Candidate Starts for Cali_145:

(Start: 7 @91023 has 168 MA's),

Gene: Cane17_142 Start: 91958, Stop: 92101, Start Num: 7

Candidate Starts for Cane17_142:

(Start: 7 @91958 has 168 MA's),

Gene: Capablanca_153 Start: 91998, Stop: 92141, Start Num: 7

Candidate Starts for Capablanca_153:

(Start: 7 @91998 has 168 MA's),

Gene: Caravan_143 Start: 89927, Stop: 90070, Start Num: 7

Candidate Starts for Caravan_143:

(Start: 7 @89927 has 168 MA's),

Gene: Catera_145 Start: 88883, Stop: 89026, Start Num: 7

Candidate Starts for Catera_145:

(Start: 7 @88883 has 168 MA's),

Gene: Charge21_146 Start: 89229, Stop: 89372, Start Num: 7

Candidate Starts for Charge21_146:

(Start: 7 @89229 has 168 MA's),

Gene: CharlieB_147 Start: 89906, Stop: 90049, Start Num: 7

Candidate Starts for CharlieB_147:

(Start: 7 @89906 has 168 MA's),

Gene: ChaylaJr_146 Start: 89687, Stop: 89830, Start Num: 7

Candidate Starts for ChaylaJr_146:

(Start: 7 @89687 has 168 MA's),

Gene: ChickenPhender_147 Start: 89988, Stop: 90131, Start Num: 7
Candidate Starts for ChickenPhender_147:
(1, 89613), (2, 89679), (3, 89736), (4, 89877), (6, 89949), (Start: 7 @89988 has 168 MA's),

Gene: Chomp_148 Start: 90838, Stop: 90981, Start Num: 7
Candidate Starts for Chomp_148:
(Start: 7 @90838 has 168 MA's),

Gene: CindyLou_152 Start: 91581, Stop: 91724, Start Num: 7
Candidate Starts for CindyLou_152:
(Start: 7 @91581 has 168 MA's),

Gene: Colt_141 Start: 91545, Stop: 91688, Start Num: 7
Candidate Starts for Colt_141:
(Start: 7 @91545 has 168 MA's),

Gene: Concombre_155 Start: 92733, Stop: 92876, Start Num: 7
Candidate Starts for Concombre_155:
(Start: 7 @92733 has 168 MA's),

Gene: DTDevon_150 Start: 91303, Stop: 91446, Start Num: 7
Candidate Starts for DTDevon_150:
(Start: 7 @91303 has 168 MA's),

Gene: Daffodil_154 Start: 90590, Stop: 90733, Start Num: 7
Candidate Starts for Daffodil_154:
(Start: 7 @90590 has 168 MA's),

Gene: Dandelion_155 Start: 93566, Stop: 93709, Start Num: 7
Candidate Starts for Dandelion_155:
(Start: 7 @93566 has 168 MA's),

Gene: Darko_149 Start: 90233, Stop: 90376, Start Num: 7
Candidate Starts for Darko_149:
(Start: 7 @90233 has 168 MA's),

Gene: Delilah_149 Start: 90695, Stop: 90838, Start Num: 7
Candidate Starts for Delilah_149:
(Start: 7 @90695 has 168 MA's),

Gene: Delylah_152 Start: 90283, Stop: 90426, Start Num: 7
Candidate Starts for Delylah_152:
(Start: 7 @90283 has 168 MA's),

Gene: Derek_148 Start: 90262, Stop: 90405, Start Num: 7
Candidate Starts for Derek_148:
(Start: 7 @90262 has 168 MA's),

Gene: Dietrick_142 Start: 88989, Stop: 89132, Start Num: 7
Candidate Starts for Dietrick_142:
(1, 88614), (2, 88680), (3, 88737), (4, 88878), (6, 88950), (Start: 7 @88989 has 168 MA's),

Gene: DirtMonster_144 Start: 90268, Stop: 90411, Start Num: 7
Candidate Starts for DirtMonster_144:
(Start: 7 @90268 has 168 MA's),

Gene: DrPhinkDaddy_148 Start: 90802, Stop: 90945, Start Num: 7
Candidate Starts for DrPhinkDaddy_148:
(Start: 7 @90802 has 168 MA's),

Gene: Drazdys_147 Start: 89224, Stop: 89367, Start Num: 7
Candidate Starts for Drazdys_147:
(Start: 7 @89224 has 168 MA's),

Gene: ET08_137 Start: 89263, Stop: 89406, Start Num: 7
Candidate Starts for ET08_137:
(Start: 7 @89263 has 168 MA's),

Gene: EasyJones_153 Start: 90533, Stop: 90676, Start Num: 7
Candidate Starts for EasyJones_153:
(Start: 7 @90533 has 168 MA's),

Gene: EggFarm_157 Start: 92499, Stop: 92642, Start Num: 7
Candidate Starts for EggFarm_157:
(Start: 7 @92499 has 168 MA's),

Gene: EmToTheThree_151 Start: 91493, Stop: 91636, Start Num: 7
Candidate Starts for EmToTheThree_151:
(Start: 7 @91493 has 168 MA's),

Gene: EmmaElysia_150 Start: 89890, Stop: 90033, Start Num: 7
Candidate Starts for EmmaElysia_150:
(1, 89515), (2, 89581), (3, 89638), (4, 89779), (6, 89851), (Start: 7 @89890 has 168 MA's),

Gene: Erdmann_149 Start: 90542, Stop: 90685, Start Num: 7
Candidate Starts for Erdmann_149:
(Start: 7 @90542 has 168 MA's),

Gene: ErnieJ_144 Start: 89263, Stop: 89406, Start Num: 7
Candidate Starts for ErnieJ_144:
(Start: 7 @89263 has 168 MA's),

Gene: Essence_146 Start: 89492, Stop: 89635, Start Num: 7
Candidate Starts for Essence_146:
(Start: 7 @89492 has 168 MA's),

Gene: Ewok_151 Start: 90618, Stop: 90761, Start Num: 7
Candidate Starts for Ewok_151:
(Start: 7 @90618 has 168 MA's),

Gene: Flabslab_145 Start: 88855, Stop: 88998, Start Num: 7
Candidate Starts for Flabslab_145:
(Start: 7 @88855 has 168 MA's),

Gene: Fludd_152 Start: 90796, Stop: 90939, Start Num: 7

Candidate Starts for Fludd_152:
(1, 90421), (2, 90487), (3, 90544), (4, 90685), (6, 90757), (Start: 7 @90796 has 168 MA's),

Gene: FoxtrotP1_149 Start: 91702, Stop: 91845, Start Num: 7
Candidate Starts for FoxtrotP1_149:
(Start: 7 @91702 has 168 MA's),

Gene: FrayBell_154 Start: 90867, Stop: 91010, Start Num: 7
Candidate Starts for FrayBell_154:
(Start: 7 @90867 has 168 MA's),

Gene: FudgeTart_147 Start: 89675, Stop: 89818, Start Num: 7
Candidate Starts for FudgeTart_147:
(Start: 7 @89675 has 168 MA's),

Gene: Gabriel_149 Start: 88796, Stop: 88939, Start Num: 7
Candidate Starts for Gabriel_149:
(Start: 7 @88796 has 168 MA's),

Gene: Gamgam_150 Start: 89539, Stop: 89682, Start Num: 7
Candidate Starts for Gamgam_150:
(Start: 7 @89539 has 168 MA's),

Gene: Ghost_149 Start: 90252, Stop: 90395, Start Num: 7
Candidate Starts for Ghost_149:
(Start: 7 @90252 has 168 MA's),

Gene: Gizmo_154 Start: 92171, Stop: 92314, Start Num: 7
Candidate Starts for Gizmo_154:
(Start: 7 @92171 has 168 MA's),

Gene: Grasshills_156 Start: 92499, Stop: 92642, Start Num: 7
Candidate Starts for Grasshills_156:
(Start: 7 @92499 has 168 MA's),

Gene: Grungle_136 Start: 87572, Stop: 87715, Start Num: 7
Candidate Starts for Grungle_136:
(Start: 7 @87572 has 168 MA's),

Gene: Guwapp_148 Start: 89063, Stop: 89206, Start Num: 7
Candidate Starts for Guwapp_148:
(Start: 7 @89063 has 168 MA's),

Gene: HyRo_141 Start: 89945, Stop: 90088, Start Num: 7
Candidate Starts for HyRo_141:
(Start: 7 @89945 has 168 MA's),

Gene: I3_154 Start: 91025, Stop: 91168, Start Num: 7
Candidate Starts for I3_154:
(Start: 7 @91025 has 168 MA's),

Gene: IkeLoa_143 Start: 89496, Stop: 89639, Start Num: 7
Candidate Starts for IkeLoa_143:

(Start: 7 @89496 has 168 MA's),

Gene: InigoMontoya_153 Start: 90213, Stop: 90356, Start Num: 7

Candidate Starts for InigoMontoya_153:

(Start: 7 @90213 has 168 MA's),

Gene: InterFolia_155 Start: 91872, Stop: 92015, Start Num: 7

Candidate Starts for InterFolia_155:

(Start: 7 @91872 has 168 MA's),

Gene: Iota_144 Start: 89547, Stop: 89690, Start Num: 7

Candidate Starts for Iota_144:

(Start: 7 @89547 has 168 MA's),

Gene: Issimir_148 Start: 90506, Stop: 90649, Start Num: 7

Candidate Starts for Issimir_148:

(Start: 7 @90506 has 168 MA's),

Gene: Izajani_149 Start: 90758, Stop: 90901, Start Num: 7

Candidate Starts for Izajani_149:

(Start: 7 @90758 has 168 MA's),

Gene: JPickles_146 Start: 88403, Stop: 88546, Start Num: 7

Candidate Starts for JPickles_146:

(Start: 7 @88403 has 168 MA's),

Gene: Janiyra_153 Start: 91228, Stop: 91371, Start Num: 7

Candidate Starts for Janiyra_153:

(Start: 7 @91228 has 168 MA's),

Gene: JayJay_149 Start: 91563, Stop: 91706, Start Num: 7

Candidate Starts for JayJay_149:

(2, 91248), (3, 91305), (5, 91509), (Start: 7 @91563 has 168 MA's),

Gene: Jaygup_149 Start: 89928, Stop: 90071, Start Num: 7

Candidate Starts for Jaygup_149:

(Start: 7 @89928 has 168 MA's),

Gene: Jedediah_152 Start: 90461, Stop: 90604, Start Num: 7

Candidate Starts for Jedediah_152:

(Start: 7 @90461 has 168 MA's),

Gene: Jemmno_149 Start: 89908, Stop: 90051, Start Num: 7

Candidate Starts for Jemmno_149:

(Start: 7 @89908 has 168 MA's),

Gene: Jessibeth14_149 Start: 90791, Stop: 90934, Start Num: 7

Candidate Starts for Jessibeth14_149:

(Start: 7 @90791 has 168 MA's),

Gene: JulietS_144 Start: 87742, Stop: 87885, Start Num: 7

Candidate Starts for JulietS_144:

(Start: 7 @87742 has 168 MA's),

Gene: JustHall_147 Start: 90433, Stop: 90576, Start Num: 7

Candidate Starts for JustHall_147:

(Start: 7 @90433 has 168 MA's),

Gene: Kamryn_149 Start: 91246, Stop: 91389, Start Num: 7

Candidate Starts for Kamryn_149:

(Start: 7 @91246 has 168 MA's),

Gene: Kboogie_153 Start: 89601, Stop: 89744, Start Num: 7

Candidate Starts for Kboogie_153:

(Start: 7 @89601 has 168 MA's),

Gene: Khaleesi_148 Start: 90543, Stop: 90686, Start Num: 7

Candidate Starts for Khaleesi_148:

(Start: 7 @90543 has 168 MA's),

Gene: Koguma_147 Start: 88429, Stop: 88572, Start Num: 7

Candidate Starts for Koguma_147:

(Start: 7 @88429 has 168 MA's),

Gene: LRRHood_143 Start: 90290, Stop: 90433, Start Num: 7

Candidate Starts for LRRHood_143:

(Start: 7 @90290 has 168 MA's),

Gene: Latch_150 Start: 89549, Stop: 89692, Start Num: 7

Candidate Starts for Latch_150:

(Start: 7 @89549 has 168 MA's),

Gene: Lee7_147 Start: 91168, Stop: 91311, Start Num: 7

Candidate Starts for Lee7_147:

(Start: 7 @91168 has 168 MA's),

Gene: LifeSavor_147 Start: 89809, Stop: 89952, Start Num: 7

Candidate Starts for LifeSavor_147:

(Start: 7 @89809 has 168 MA's),

Gene: LinStu_147 Start: 90442, Stop: 90585, Start Num: 7

Candidate Starts for LinStu_147:

(Start: 7 @90442 has 168 MA's),

Gene: Littleton_149 Start: 89878, Stop: 90021, Start Num: 7

Candidate Starts for Littleton_149:

(Start: 7 @89878 has 168 MA's),

Gene: Loanshark_148 Start: 90409, Stop: 90552, Start Num: 7

Candidate Starts for Loanshark_148:

(Start: 7 @90409 has 168 MA's),

Gene: LolaVinca_150 Start: 91209, Stop: 91352, Start Num: 7

Candidate Starts for LolaVinca_150:

(Start: 7 @91209 has 168 MA's),

Gene: LordLeafolot_153 Start: 91715, Stop: 91858, Start Num: 7
Candidate Starts for LordLeafolot_153:
(Start: 7 @91715 has 168 MA's),

Gene: Lukilu_140 Start: 91300, Stop: 91443, Start Num: 7
Candidate Starts for Lukilu_140:
(Start: 7 @91300 has 168 MA's),

Gene: Maby2021_149 Start: 90628, Stop: 90771, Start Num: 7
Candidate Starts for Maby2021_149:
(Start: 7 @90628 has 168 MA's),

Gene: Mangeria_150 Start: 91050, Stop: 91193, Start Num: 7
Candidate Starts for Mangeria_150:
(Start: 7 @91050 has 168 MA's),

Gene: Matsumoto_147 Start: 90140, Stop: 90283, Start Num: 7
Candidate Starts for Matsumoto_147:
(Start: 7 @90140 has 168 MA's),

Gene: McGee_152 Start: 89965, Stop: 90108, Start Num: 7
Candidate Starts for McGee_152:
(1, 89590), (2, 89656), (3, 89713), (4, 89854), (6, 89926), (Start: 7 @89965 has 168 MA's),

Gene: McWolfish_147 Start: 90314, Stop: 90457, Start Num: 7
Candidate Starts for McWolfish_147:
(Start: 7 @90314 has 168 MA's),

Gene: Megamind_148 Start: 90248, Stop: 90391, Start Num: 7
Candidate Starts for Megamind_148:
(Start: 7 @90248 has 168 MA's),

Gene: Melpomini_144 Start: 88489, Stop: 88632, Start Num: 7
Candidate Starts for Melpomini_144:
(1, 88114), (2, 88180), (3, 88237), (4, 88378), (6, 88450), (Start: 7 @88489 has 168 MA's),

Gene: MikeLiesIn_151 Start: 90959, Stop: 91102, Start Num: 7
Candidate Starts for MikeLiesIn_151:
(Start: 7 @90959 has 168 MA's),

Gene: Mikro_146 Start: 91870, Stop: 92013, Start Num: 7
Candidate Starts for Mikro_146:
(Start: 7 @91870 has 168 MA's),

Gene: MoMoMixon_149 Start: 90031, Stop: 90174, Start Num: 7
Candidate Starts for MoMoMixon_149:
(Start: 7 @90031 has 168 MA's),

Gene: Momo_149 Start: 89549, Stop: 89692, Start Num: 7
Candidate Starts for Momo_149:
(Start: 7 @89549 has 168 MA's),

Gene: Morizzled23_150 Start: 90003, Stop: 90146, Start Num: 7

Candidate Starts for Morizzled23_150:
(Start: 7 @90003 has 168 MA's),

Gene: Naija_150 Start: 90252, Stop: 90395, Start Num: 7
Candidate Starts for Naija_150:
(Start: 7 @90252 has 168 MA's),

Gene: Napoleon13_146 Start: 88926, Stop: 89069, Start Num: 7
Candidate Starts for Napoleon13_146:
(Start: 7 @88926 has 168 MA's),

Gene: Nappy_151 Start: 91462, Stop: 91605, Start Num: 7
Candidate Starts for Nappy_151:
(Start: 7 @91462 has 168 MA's),

Gene: Naval22_154 Start: 91998, Stop: 92141, Start Num: 7
Candidate Starts for Naval22_154:
(Start: 7 @91998 has 168 MA's),

Gene: NedWong_150 Start: 90635, Stop: 90778, Start Num: 7
Candidate Starts for NedWong_150:
(Start: 7 @90635 has 168 MA's),

Gene: Ngannou_146 Start: 88531, Stop: 88674, Start Num: 7
Candidate Starts for Ngannou_146:
(Start: 7 @88531 has 168 MA's),

Gene: Nidhogg_151 Start: 90755, Stop: 90898, Start Num: 7
Candidate Starts for Nidhogg_151:
(Start: 7 @90755 has 168 MA's),

Gene: NoodleTree_156 Start: 90621, Stop: 90764, Start Num: 7
Candidate Starts for NoodleTree_156:
(Start: 7 @90621 has 168 MA's),

Gene: Norm_150 Start: 91276, Stop: 91419, Start Num: 7
Candidate Starts for Norm_150:
(Start: 7 @91276 has 168 MA's),

Gene: NuevoMundo_154 Start: 92804, Stop: 92947, Start Num: 7
Candidate Starts for NuevoMundo_154:
(Start: 7 @92804 has 168 MA's),

Gene: ParkTD_150 Start: 90587, Stop: 90730, Start Num: 7
Candidate Starts for ParkTD_150:
(Start: 7 @90587 has 168 MA's),

Gene: Patter_150 Start: 89566, Stop: 89709, Start Num: 7
Candidate Starts for Patter_150:
(Start: 7 @89566 has 168 MA's),

Gene: Phlegm_154 Start: 90252, Stop: 90395, Start Num: 7
Candidate Starts for Phlegm_154:

(Start: 7 @90252 has 168 MA's),

Gene: Phox_147 Start: 91324, Stop: 91467, Start Num: 7

Candidate Starts for Phox_147:

(Start: 7 @91324 has 168 MA's),

Gene: Phusco_149 Start: 89874, Stop: 90017, Start Num: 7

Candidate Starts for Phusco_149:

(Start: 7 @89874 has 168 MA's),

Gene: Pier_153 Start: 92811, Stop: 92954, Start Num: 7

Candidate Starts for Pier_153:

(Start: 7 @92811 has 168 MA's),

Gene: Pinkcreek_140 Start: 89231, Stop: 89374, Start Num: 7

Candidate Starts for Pinkcreek_140:

(Start: 7 @89231 has 168 MA's),

Gene: Pio_154 Start: 92827, Stop: 92970, Start Num: 7

Candidate Starts for Pio_154:

(Start: 7 @92827 has 168 MA's),

Gene: Pivoine_150 Start: 90252, Stop: 90395, Start Num: 7

Candidate Starts for Pivoine_150:

(Start: 7 @90252 has 168 MA's),

Gene: Pleione_152 Start: 90705, Stop: 90848, Start Num: 7

Candidate Starts for Pleione_152:

(Start: 7 @90705 has 168 MA's),

Gene: PurduePete_149 Start: 91001, Stop: 91144, Start Num: 7

Candidate Starts for PurduePete_149:

(Start: 7 @91001 has 168 MA's),

Gene: QBert_143 Start: 89591, Stop: 89734, Start Num: 7

Candidate Starts for QBert_143:

(Start: 7 @89591 has 168 MA's),

Gene: Quasimodo_152 Start: 91670, Stop: 91813, Start Num: 7

Candidate Starts for Quasimodo_152:

(Start: 7 @91670 has 168 MA's),

Gene: Rabinovish_149 Start: 91656, Stop: 91799, Start Num: 7

Candidate Starts for Rabinovish_149:

(Start: 7 @91656 has 168 MA's),

Gene: Rahel_148 Start: 89424, Stop: 89567, Start Num: 7

Candidate Starts for Rahel_148:

(Start: 7 @89424 has 168 MA's),

Gene: Rizal_144 Start: 88624, Stop: 88767, Start Num: 7

Candidate Starts for Rizal_144:

(Start: 7 @88624 has 168 MA's),

Gene: RoMag_145 Start: 90438, Stop: 90581, Start Num: 7

Candidate Starts for RoMag_145:

(Start: 7 @90438 has 168 MA's),

Gene: Ronan_143 Start: 87737, Stop: 87880, Start Num: 7

Candidate Starts for Ronan_143:

(Start: 7 @87737 has 168 MA's),

Gene: Roots515_148 Start: 91204, Stop: 91347, Start Num: 7

Candidate Starts for Roots515_148:

(Start: 7 @91204 has 168 MA's),

Gene: Salacia_153 Start: 90866, Stop: 91009, Start Num: 7

Candidate Starts for Salacia_153:

(Start: 7 @90866 has 168 MA's),

Gene: Sauce_149 Start: 89531, Stop: 89674, Start Num: 7

Candidate Starts for Sauce_149:

(Start: 7 @89531 has 168 MA's),

Gene: ScoobyDoobyDoo_138 Start: 88573, Stop: 88716, Start Num: 7

Candidate Starts for ScoobyDoobyDoo_138:

(Start: 7 @88573 has 168 MA's),

Gene: ScottMcG_145 Start: 89609, Stop: 89752, Start Num: 7

Candidate Starts for ScottMcG_145:

(Start: 7 @89609 has 168 MA's),

Gene: Sebata_150 Start: 91703, Stop: 91846, Start Num: 7

Candidate Starts for Sebata_150:

(Start: 7 @91703 has 168 MA's),

Gene: Shaqnato_143 Start: 88985, Stop: 89128, Start Num: 7

Candidate Starts for Shaqnato_143:

(Start: 7 @88985 has 168 MA's),

Gene: Shelob_152 Start: 91840, Stop: 91983, Start Num: 7

Candidate Starts for Shelob_152:

(Start: 7 @91840 has 168 MA's),

Gene: ShiaLabeouf_148 Start: 89964, Stop: 90107, Start Num: 7

Candidate Starts for ShiaLabeouf_148:

(Start: 7 @89964 has 168 MA's),

Gene: Shifa_139 Start: 89216, Stop: 89359, Start Num: 7

Candidate Starts for Shifa_139:

(Start: 7 @89216 has 168 MA's),

Gene: Shnickers_149 Start: 89928, Stop: 90071, Start Num: 7

Candidate Starts for Shnickers_149:

(Start: 7 @89928 has 168 MA's),

Gene: Shrimp_149 Start: 90542, Stop: 90685, Start Num: 7

Candidate Starts for Shrimp_149:

(Start: 7 @90542 has 168 MA's),

Gene: SilverDipper_152 Start: 90248, Stop: 90391, Start Num: 7

Candidate Starts for SilverDipper_152:

(Start: 7 @90248 has 168 MA's),

Gene: SmallFry_150 Start: 89750, Stop: 89893, Start Num: 7

Candidate Starts for SmallFry_150:

(Start: 7 @89750 has 168 MA's),

Gene: Spec_145 Start: 89693, Stop: 89836, Start Num: 7

Candidate Starts for Spec_145:

(Start: 7 @89693 has 168 MA's),

Gene: Specks_154 Start: 91716, Stop: 91859, Start Num: 7

Candidate Starts for Specks_154:

(Start: 7 @91716 has 168 MA's),

Gene: Sprinklers_145 Start: 89156, Stop: 89299, Start Num: 7

Candidate Starts for Sprinklers_145:

(Start: 7 @89156 has 168 MA's),

Gene: Spud_148 Start: 90711, Stop: 90854, Start Num: 7

Candidate Starts for Spud_148:

(Start: 7 @90711 has 168 MA's),

Gene: SrishMeg2525_148 Start: 90737, Stop: 90880, Start Num: 7

Candidate Starts for SrishMeg2525_148:

(Start: 7 @90737 has 168 MA's),

Gene: StephanieG_147 Start: 91493, Stop: 91636, Start Num: 7

Candidate Starts for StephanieG_147:

(Start: 7 @91493 has 168 MA's),

Gene: Stubby_142 Start: 89176, Stop: 89319, Start Num: 7

Candidate Starts for Stubby_142:

(Start: 7 @89176 has 168 MA's),

Gene: StubbySaigey_153 Start: 89758, Stop: 89901, Start Num: 7

Candidate Starts for StubbySaigey_153:

(Start: 7 @89758 has 168 MA's),

Gene: Teardrop_149 Start: 89444, Stop: 89587, Start Num: 7

Candidate Starts for Teardrop_149:

(Start: 7 @89444 has 168 MA's),

Gene: TinyTim_149 Start: 90292, Stop: 90435, Start Num: 7

Candidate Starts for TinyTim_149:

(Start: 7 @90292 has 168 MA's),

Gene: Tonenili_163 Start: 93282, Stop: 93425, Start Num: 7

Candidate Starts for Tonenili_163:
(Start: 7 @93282 has 168 MA's),

Gene: Tortoise16_146 Start: 89651, Stop: 89794, Start Num: 7
Candidate Starts for Tortoise16_146:
(Start: 7 @89651 has 168 MA's),

Gene: Trinitium_148 Start: 90176, Stop: 90319, Start Num: 7
Candidate Starts for Trinitium_148:
(Start: 7 @90176 has 168 MA's),

Gene: Turret_146 Start: 89745, Stop: 89888, Start Num: 7
Candidate Starts for Turret_146:
(1, 89370), (2, 89436), (3, 89493), (4, 89634), (6, 89706), (Start: 7 @89745 has 168 MA's),

Gene: Tyke_150 Start: 91699, Stop: 91842, Start Num: 7
Candidate Starts for Tyke_150:
(Start: 7 @91699 has 168 MA's),

Gene: ValleyTerrace_150 Start: 89549, Stop: 89692, Start Num: 7
Candidate Starts for ValleyTerrace_150:
(Start: 7 @89549 has 168 MA's),

Gene: Wally_148 Start: 89119, Stop: 89262, Start Num: 7
Candidate Starts for Wally_148:
(Start: 7 @89119 has 168 MA's),

Gene: Willis_150 Start: 90486, Stop: 90629, Start Num: 7
Candidate Starts for Willis_150:
(Start: 7 @90486 has 168 MA's),

Gene: Yassified_146 Start: 89249, Stop: 89392, Start Num: 7
Candidate Starts for Yassified_146:
(Start: 7 @89249 has 168 MA's),

Gene: YemiJoy2021_150 Start: 90632, Stop: 90775, Start Num: 7
Candidate Starts for YemiJoy2021_150:
(Start: 7 @90632 has 168 MA's),

Gene: YoungMoneyMata_151 Start: 90274, Stop: 90417, Start Num: 7
Candidate Starts for YoungMoneyMata_151:
(Start: 7 @90274 has 168 MA's),

Gene: Yucca_148 Start: 90314, Stop: 90457, Start Num: 7
Candidate Starts for Yucca_148:
(Start: 7 @90314 has 168 MA's),

Gene: Zalkecks_150 Start: 90315, Stop: 90458, Start Num: 7
Candidate Starts for Zalkecks_150:
(Start: 7 @90315 has 168 MA's),

Gene: Zeenon_150 Start: 90400, Stop: 90543, Start Num: 7
Candidate Starts for Zeenon_150:

(Start: 7 @90400 has 168 MA's),

Gene: ZygoTaiga_147 Start: 91506, Stop: 91649, Start Num: 7

Candidate Starts for ZygoTaiga_147:

(Start: 7 @91506 has 168 MA's),