

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 296278 Report

This analysis was run 04/25/26 on database version 644.

Pham number 296278 has 180 members, 28 are drafts.

Phages represented in each track:

- Track 1 : BeanWater_237, ValleyTerrace_245, Labradorite_241, Gamgam_246, Bxz1_230, Wally_242, Matsumoto_242, Duckfeet_238, Pivoine_245, JulietS_233, Teardrop_242, DTDevon_245, Lukilu_233, Asterius_244, Grasshills_251, Ghost_244, JPickles_241, LRRHood_236, QBert_236, Phlegm_249, Naija_245, Jessibeth14_244, IkeLoa_238, Kboogie_248, Atlantean_244, Domi_238, Drazdys_241, EasyJones_245, Adlitam_244, Blackbrain_242, Darko_243, Dietrick_233, Phusco_243, Momo_246, Jaygup_241, Ablatia_243, Quasimodo_247, ChaylaJr_243, Shnickers_243, Chargie21_241, Basquiat_241, Ading_246, Amataga_245, Audrick_247, ArcherS7_245, Catera_233, SVoro_239, Bowman_241, EggyFarm_252, Sauce_241, Rocha_240, Ngannou_239, Turret_235, Belieber_236, ShiaLabeouf_242, Guwapp_240, EmmaElysia_249, Melpomini_239, Sprinklers_242, Cali_234, Burrough_245, McGee_245, SmallFry_245, Rahel_246, Jedediah_246, BananaFence_241, StubbySaigey_250, Trinitium_240, LookingGlass_242, ChickenPhender_240, Bezza_232, Dessert_241, CharlieB_239, Specks_248, RoMag_239, Shaqato_235, Derek_240, Astraea_239, Demodog_250, Gabriel_247, InigoMontoya_248, Pio_251, Fixie_243, Khaleesi_243, Fludd_244, Cactojaque_238, Chomp_243, JustHall_238, PurduePete_244, BadAgartude_238, ErnieJ_237, BackyardAgain_239, Bangla1971_245, McWolfish_241, CindyLou_245, Latch_244, StephanieG_238, GlutenPhree_245, Littleton_248, Concombre_249, Janiyra_247, NoodleTree_240, BigCity_252, Morizzled23_241, LifeSavor_245, SilverDipper_249, Napoleon13_241, BobaPhatt_235, Spud_236, Blackdragon_239, EmToTheThree_244, Babyland_247, Jemmno_244, Rizal_233, Primadonna_238, Substance289_240, Pupusa_247, Fongie_244
- Track 2 : Naval22_249, TinyTim_242, Maby2021_244, Pleione_248, Delylah_246, Erdmann_245, Shrimp_246, Bread_240, Gizmo_249, MoMoMixon_240, Iota_241, Yucca_244, JigglyPuff_250, Caravan_234, FoxtrotP1_242
- Track 3 : YemiJoy2021_245, Pier_243, Ewok_243, Issimir_237, ET08_230, OrediggerDelux_239, Zalkecks_243, Daffodil_250, DrPhinkDaddy_241, Shelob_245, Loanshark_241, NedWong_243, Capablanca_249, Megamind_241, Roots515_247, Bipolarisk_242, MikeLiesIn_245, Yassified_240, ParkTD_243, Jezreel_241, Nidhogg_245, Ronan_240, Norm_244, Cleatunium_236, Bonray_246, Zeenon_245, FudgeTart_239, Delilah_242, Salacia_245, ZygoTaiga_240, Ava3_241, SrishMeg2525_241, Lee7_243, Izajani_240, Phox_245, Willis_245
- Track 4 : Kamryn_243
- Track 5 : Tortoise16_242
- Track 6 : Vortrix_262, Tonenili_266
- Track 7 : Essence_242

- Track 8 : Pherobrine_70
- Track 9 : Fazel_71
- Track 10 : Hortihabitatio_71
- Track 11 : Mysticmoon_71
- Track 12 : Schwartz33_69
- Track 13 : Secretariat_68

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

The start number called the most often in the published annotations is 4, it was called in 146 of the 152 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Ablatia_243, Ading_246, Adlitam_244, Amataga_245, ArcherS7_245, Asterius_244, Astraea_239, Atlantean_244, Audrick_247, Ava3_241, Babyland_247, BackyardAgain_239, BadAgartude_238, BananaFence_241, Bangla1971_245, Basquiat_241, BeanWater_237, Belieber_236, Bezza_232, BigCity_252, Bipolarisk_242, Blackbrain_242, Blackdragon_239, BobaPhatt_235, Bonray_246, Bowman_241, Bread_240, Burrough_245, Bxz1_230, Cactojaque_238, Cali_234, Capablanca_249, Caravan_234, Catera_233, Chargie21_241, CharlieB_239, ChaylaJr_243, ChickenPhender_240, Chomp_243, CindyLou_245, Cleatunium_236, Concombre_249, DTDevon_245, Daffodil_250, Darko_243, Delilah_242, Delylah_246, Demodog_250, Derek_240, Dessert_241, Dietrick_233, Domi_238, DrPhinkDaddy_241, Drazdys_241, Duckfeet_238, ET08_230, EasyJones_245, EggyFarm_252, EmToTheThree_244, EmmaElysia_249, Erdmann_245, ErnieJ_237, Essence_242, Ewok_243, Fixie_243, Fludd_244, Fongie_244, FoxtrotP1_242, FudgeTart_239, Gabriel_247, Gamgam_246, Ghost_244, Gizmo_249, GlutenPhree_245, Grasshills_251, Guwapp_240, IkeLoa_238, InigoMontoya_248, Iota_241, Issimir_237, Izajani_240, JPickles_241, Janiyra_247, Jaygup_241, Jedediah_246, Jemmno_244, Jessibeth14_244, Jezreel_241, JigglyPuff_250, JulietS_233, JustHall_238, Kamryn_243, Kboogie_248, Khaleesi_243, LRRHood_236, Labradorite_241, Latch_244, Lee7_243, LifeSavor_245, Littleton_248, Loanshark_241, LookingGlass_242, Lukilu_233, Maby2021_244, Matsumoto_242, McGee_245, McWolfish_241, Megamind_241, Melpomini_239, MikeLiesIn_245, MoMoMixon_240, Momo_246, Morizzled23_241, Naija_245, Napoleon13_241, Naval22_249, NedWong_243, Ngannou_239, Nidhogg_245, NoodleTree_240, Norm_244, OrediggerDelux_239, ParkTD_243, Phlegm_249, Phox_245, Phusco_243, Pier_243, Pio_251, Pivoine_245, Pleione_248, Primadonna_238, Pupusa_247, PurduePete_244, QBert_236, Quasimodo_247, Rahel_246, Rizal_233, RoMag_239, Rocha_240, Ronan_240, Roots515_247, SVoro_239, Salacia_245, Sauce_241, Shaqnato_235, Shelob_245, ShiaLabeouf_242, Shnickers_243, Shrimp_246, SilverDipper_249, SmallFry_245, Specks_248, Sprinklers_242, Spud_236, SrishMeg2525_241, StephanieG_238, StubbySaigey_250, Substance289_240, Teardrop_242, TinyTim_242, Tonenili_266, Trinitium_240, Turret_235, ValleyTerrace_245, Vortrix_262, Wally_242, Willis_245, Yassified_240, YemiJoy2021_245, Yucca_244, Zalkecks_243, Zeenon_245, ZygoTaiga_240,

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

- Tortoise16_242,

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

- Fazel_71, Hortihabitatio_71, Mysticmoon_71, Pherobriner_70, Schwartz33_69, Secretariat_68,

Summary by start number:

Start 4:

- Found in 174 of 180 (96.7%) of genes in pham
- Manual Annotations of this start: 146 of 152
- Called 99.4% of time when present
- Phage (with cluster) where this start called: Ablatia_243 (C1), Ading_246 (C1), Adlitam_244 (C1), Amataga_245 (C1), ArcherS7_245 (C1), Asterius_244 (C1), Astraea_239 (C1), Atlantean_244 (C1), Audrick_247 (C1), Ava3_241 (C1), Babyland_247 (C1), BackyardAgain_239 (C1), BadAgartude_238 (C1), BananaFence_241 (C1), Bangla1971_245 (C1), Basquiat_241 (C1), BeanWater_237 (C1), Belieber_236 (C1), Bezza_232 (C1), BigCity_252 (C1), Bipolarisk_242 (C1), Blackbrain_242 (C1), Blackdragon_239 (C1), BobaPhatt_235 (C1), Bonray_246 (C1), Bowman_241 (C1), Bread_240 (C1), Burrough_245 (C1), Bxz1_230 (C1), Cactojaque_238 (C1), Cali_234 (C1), Capablanca_249 (C1), Caravan_234 (C1), Catera_233 (C1), Chargie21_241 (C1), CharlieB_239 (C1), ChaylaJr_243 (C1), ChickenPhender_240 (C1), Chomp_243 (C1), CindyLou_245 (C1), Cleatunium_236 (C1), Concombre_249 (C1), DTDevon_245 (C1), Daffodil_250 (C1), Darko_243 (C1), Delilah_242 (C1), Delylah_246 (C1), Demodog_250 (C1), Derek_240 (C1), Dessert_241 (C1), Dietrick_233 (C1), Domi_238 (C1), DrPhinkDaddy_241 (C1), Drazdys_241 (C1), Duckfeet_238 (C1), ET08_230 (C1), EasyJones_245 (C1), EggyFarm_252 (C1), EmToTheThree_244 (C1), EmmaElysia_249 (C1), Erdmann_245 (C1), ErnieJ_237 (C1), Essence_242 (C1), Ewok_243 (C1), Fixie_243 (C1), Fludd_244 (C1), Fongie_244 (C1), FoxtrotP1_242 (C1), FudgeTart_239 (C1), Gabriel_247 (C1), Gamgam_246 (C1), Ghost_244 (C1), Gizmo_249 (C1), GlutenPhree_245 (C1), Grasshills_251 (C1), Guwapp_240 (C1), IkeLoa_238 (C1), InigoMontoya_248 (C1), Iota_241 (C1), Issimir_237 (C1), Izajani_240 (C1), JPickles_241 (C1), Janiyra_247 (C1), Jaygup_241 (C1), Jedediah_246 (C1), Jemmno_244 (C1), Jessibeth14_244 (C1), Jezreel_241 (C1), JigglyPuff_250 (C1), JulietS_233 (C1), JustHall_238 (C1), Kamryn_243 (C1), Kboogie_248 (C1), Khaleesi_243 (C1), LRRHood_236 (C1), Labradorite_241 (C1), Latch_244 (C1), Lee7_243 (C1), LifeSavor_245 (C1), Littleton_248 (C1), Loanshark_241 (C1), LookingGlass_242 (C1), Lukilu_233 (C1), Maby2021_244 (C1), Matsumoto_242 (C1), McGee_245 (C1), McWolfish_241 (C1), Megamind_241 (C1), Melpomini_239 (C1), MikeLiesIn_245 (C1), MoMoMixon_240 (C1), Momo_246 (C1), Morizzled23_241 (C1), Naija_245 (C1), Napoleon13_241 (C1), Naval22_249 (C1), NedWong_243 (C1), Ngannou_239 (C1), Nidhogg_245 (C1), NoodleTree_240 (C1), Norm_244 (C1), OrediggerDelux_239 (C1), ParkTD_243 (C1), Phlegm_249 (C1), Phox_245 (C1), Phusco_243 (C1), Pier_243 (C1), Pio_251 (C1), Pivoine_245 (C1), Pleione_248 (C1), Primadonna_238 (C1), Pupusa_247 (C1), PurduePete_244 (C1), QBert_236 (C1), Quasimodo_247 (C1), Rahel_246 (C1), Rizal_233 (C1), RoMag_239 (C1), Rocha_240 (C1), Ronan_240 (C1), Roots515_247 (C1), SVoro_239 (C1), Salacia_245 (C1), Sauce_241 (C1), Shaqnato_235 (C1), Shelob_245 (C1), ShiaLabeouf_242 (C1), Shnickers_243 (C1), Shrimp_246 (C1), SilverDipper_249 (C1), SmallFry_245 (C1), Specks_248 (C1), Sprinklers_242 (C1), Spud_236 (C1), SrishMeg2525_241 (C1), StephanieG_238 (C1), StubbySaigey_250 (C1), Substance289_240 (C1), Teardrop_242 (C1), TinyTim_242 (C1), Tonenili_266 (C1), Trinitium_240 (C1), Turret_235 (C1), ValleyTerrace_245 (C1), Vortrix_262 (C1),

Wally_242 (C1), Willis_245 (C1), Yassified_240 (C1), YemiJoy2021_245 (C1), Yucca_244 (C1), Zalkecks_243 (C1), Zeenon_245 (C1), ZygoTaiga_240 (C1),

Start 5:

- Found in 1 of 180 (0.6%) of genes in pham
- Manual Annotations of this start: 1 of 152
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Schwartz33_69 (DJ),

Start 7:

- Found in 4 of 180 (2.2%) of genes in pham
- Manual Annotations of this start: 3 of 152
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Fazel_71 (DJ), Hortihabitatio_71 (DJ), Mysticmoon_71 (DJ), Pherobrine_70 (DJ),

Start 8:

- Found in 1 of 180 (0.6%) of genes in pham
- Manual Annotations of this start: 1 of 152
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Secretariat_68 (DJ),

Start 10:

- Found in 135 of 180 (75.0%) of genes in pham
- Manual Annotations of this start: 1 of 152
- Called 0.7% of time when present
- Phage (with cluster) where this start called: Tortoise16_242 (C1),

Summary by clusters:

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

Info for manual annotations of cluster C1:

- Start number 4 was manually annotated 146 times for cluster C1.
- Start number 10 was manually annotated 1 time for cluster C1.

Info for manual annotations of cluster DJ:

- Start number 5 was manually annotated 1 time for cluster DJ.
- Start number 7 was manually annotated 3 times for cluster DJ.
- Start number 8 was manually annotated 1 time for cluster DJ.

Gene Information:

Gene: Ablatia_243 Start: 134421, Stop: 134723, Start Num: 4

Candidate Starts for Ablatia_243:

(2, 134379), (Start: 4 @134421 has 146 MA's), (Start: 10 @134448 has 1 MA's), (14, 134517), (16, 134583), (19, 134601), (22, 134616), (24, 134655),

Gene: Ading_246 Start: 136854, Stop: 137156, Start Num: 4

Candidate Starts for Ading_246:

(2, 136812), (Start: 4 @136854 has 146 MA's), (Start: 10 @136881 has 1 MA's), (14, 136950), (16, 137016), (19, 137034), (22, 137049), (24, 137088),

Gene: Adlitam_244 Start: 135458, Stop: 135760, Start Num: 4

Candidate Starts for Adlitam_244:

(2, 135416), (Start: 4 @135458 has 146 MA's), (Start: 10 @135485 has 1 MA's), (14, 135554), (16, 135620), (19, 135638), (22, 135653), (24, 135692),

Gene: Amataga_245 Start: 134457, Stop: 134759, Start Num: 4

Candidate Starts for Amataga_245:

(2, 134415), (Start: 4 @134457 has 146 MA's), (Start: 10 @134484 has 1 MA's), (14, 134553), (16, 134619), (19, 134637), (22, 134652), (24, 134691),

Gene: ArcherS7_245 Start: 136202, Stop: 136504, Start Num: 4

Candidate Starts for ArcherS7_245:

(2, 136160), (Start: 4 @136202 has 146 MA's), (Start: 10 @136229 has 1 MA's), (14, 136298), (16, 136364), (19, 136382), (22, 136397), (24, 136436),

Gene: Asterius_244 Start: 134866, Stop: 135168, Start Num: 4

Candidate Starts for Asterius_244:

(2, 134824), (Start: 4 @134866 has 146 MA's), (Start: 10 @134893 has 1 MA's), (14, 134962), (16, 135028), (19, 135046), (22, 135061), (24, 135100),

Gene: Astraea_239 Start: 134061, Stop: 134363, Start Num: 4

Candidate Starts for Astraea_239:

(2, 134019), (Start: 4 @134061 has 146 MA's), (Start: 10 @134088 has 1 MA's), (14, 134157), (16, 134223), (19, 134241), (22, 134256), (24, 134295),

Gene: Atlantean_244 Start: 134457, Stop: 134759, Start Num: 4

Candidate Starts for Atlantean_244:

(2, 134415), (Start: 4 @134457 has 146 MA's), (Start: 10 @134484 has 1 MA's), (14, 134553), (16, 134619), (19, 134637), (22, 134652), (24, 134691),

Gene: Audrick_247 Start: 134347, Stop: 134649, Start Num: 4

Candidate Starts for Audrick_247:

(2, 134305), (Start: 4 @134347 has 146 MA's), (Start: 10 @134374 has 1 MA's), (14, 134443), (16, 134509), (19, 134527), (22, 134542), (24, 134581),

Gene: Ava3_241 Start: 134917, Stop: 135219, Start Num: 4

Candidate Starts for Ava3_241:

(2, 134875), (Start: 4 @134917 has 146 MA's), (11, 134953), (12, 134959), (16, 135079), (19, 135097), (22, 135112), (24, 135151),

Gene: Babyland_247 Start: 135234, Stop: 135536, Start Num: 4

Candidate Starts for Babyland_247:

(2, 135192), (Start: 4 @135234 has 146 MA's), (Start: 10 @135261 has 1 MA's), (14, 135330), (16, 135396), (19, 135414), (22, 135429), (24, 135468),

Gene: BackyardAgain_239 Start: 132607, Stop: 132909, Start Num: 4

Candidate Starts for BackyardAgain_239:

(2, 132565), (Start: 4 @132607 has 146 MA's), (Start: 10 @132634 has 1 MA's), (14, 132703), (16, 132769), (19, 132787), (22, 132802), (24, 132841),

Gene: BadAgartude_238 Start: 134559, Stop: 134861, Start Num: 4
Candidate Starts for BadAgartude_238:
(2, 134517), (Start: 4 @134559 has 146 MA's), (Start: 10 @134586 has 1 MA's), (14, 134655), (16, 134721), (19, 134739), (22, 134754), (24, 134793),

Gene: BananaFence_241 Start: 134690, Stop: 134992, Start Num: 4
Candidate Starts for BananaFence_241:
(2, 134648), (Start: 4 @134690 has 146 MA's), (Start: 10 @134717 has 1 MA's), (14, 134786), (16, 134852), (19, 134870), (22, 134885), (24, 134924),

Gene: Bangla1971_245 Start: 135166, Stop: 135468, Start Num: 4
Candidate Starts for Bangla1971_245:
(2, 135124), (Start: 4 @135166 has 146 MA's), (Start: 10 @135193 has 1 MA's), (14, 135262), (16, 135328), (19, 135346), (22, 135361), (24, 135400),

Gene: Basquiat_241 Start: 132976, Stop: 133278, Start Num: 4
Candidate Starts for Basquiat_241:
(2, 132934), (Start: 4 @132976 has 146 MA's), (Start: 10 @133003 has 1 MA's), (14, 133072), (16, 133138), (19, 133156), (22, 133171), (24, 133210),

Gene: BeanWater_237 Start: 134303, Stop: 134605, Start Num: 4
Candidate Starts for BeanWater_237:
(2, 134261), (Start: 4 @134303 has 146 MA's), (Start: 10 @134330 has 1 MA's), (14, 134399), (16, 134465), (19, 134483), (22, 134498), (24, 134537),

Gene: Belieber_236 Start: 133103, Stop: 133405, Start Num: 4
Candidate Starts for Belieber_236:
(2, 133061), (Start: 4 @133103 has 146 MA's), (Start: 10 @133130 has 1 MA's), (14, 133199), (16, 133265), (19, 133283), (22, 133298), (24, 133337),

Gene: Bezza_232 Start: 134002, Stop: 134304, Start Num: 4
Candidate Starts for Bezza_232:
(2, 133960), (Start: 4 @134002 has 146 MA's), (Start: 10 @134029 has 1 MA's), (14, 134098), (16, 134164), (19, 134182), (22, 134197), (24, 134236),

Gene: BigCity_252 Start: 137063, Stop: 137365, Start Num: 4
Candidate Starts for BigCity_252:
(2, 137021), (Start: 4 @137063 has 146 MA's), (Start: 10 @137090 has 1 MA's), (14, 137159), (16, 137225), (19, 137243), (22, 137258), (24, 137297),

Gene: Bipolarisk_242 Start: 135185, Stop: 135487, Start Num: 4
Candidate Starts for Bipolarisk_242:
(2, 135143), (Start: 4 @135185 has 146 MA's), (11, 135221), (12, 135227), (16, 135347), (19, 135365), (22, 135380), (24, 135419),

Gene: Blackbrain_242 Start: 134753, Stop: 135055, Start Num: 4
Candidate Starts for Blackbrain_242:
(2, 134711), (Start: 4 @134753 has 146 MA's), (Start: 10 @134780 has 1 MA's), (14, 134849), (16, 134915), (19, 134933), (22, 134948), (24, 134987),

Gene: Blackdragon_239 Start: 134790, Stop: 135092, Start Num: 4
Candidate Starts for Blackdragon_239:

(2, 134748), (Start: 4 @134790 has 146 MA's), (Start: 10 @134817 has 1 MA's), (14, 134886), (16, 134952), (19, 134970), (22, 134985), (24, 135024),

Gene: BobaPhatt_235 Start: 133871, Stop: 134173, Start Num: 4

Candidate Starts for BobaPhatt_235:

(2, 133829), (Start: 4 @133871 has 146 MA's), (Start: 10 @133898 has 1 MA's), (14, 133967), (16, 134033), (19, 134051), (22, 134066), (24, 134105),

Gene: Bonray_246 Start: 136553, Stop: 136855, Start Num: 4

Candidate Starts for Bonray_246:

(2, 136511), (Start: 4 @136553 has 146 MA's), (11, 136589), (12, 136595), (16, 136715), (19, 136733), (22, 136748), (24, 136787),

Gene: Bowman_241 Start: 135668, Stop: 135970, Start Num: 4

Candidate Starts for Bowman_241:

(2, 135626), (Start: 4 @135668 has 146 MA's), (Start: 10 @135695 has 1 MA's), (14, 135764), (16, 135830), (19, 135848), (22, 135863), (24, 135902),

Gene: Bread_240 Start: 134560, Stop: 134862, Start Num: 4

Candidate Starts for Bread_240:

(2, 134518), (Start: 4 @134560 has 146 MA's), (Start: 10 @134587 has 1 MA's), (14, 134656), (19, 134740), (22, 134755), (24, 134794),

Gene: Burrough_245 Start: 136330, Stop: 136632, Start Num: 4

Candidate Starts for Burrough_245:

(2, 136288), (Start: 4 @136330 has 146 MA's), (Start: 10 @136357 has 1 MA's), (14, 136426), (16, 136492), (19, 136510), (22, 136525), (24, 136564),

Gene: Bxz1_230 Start: 136535, Stop: 136837, Start Num: 4

Candidate Starts for Bxz1_230:

(2, 136493), (Start: 4 @136535 has 146 MA's), (Start: 10 @136562 has 1 MA's), (14, 136631), (16, 136697), (19, 136715), (22, 136730), (24, 136769),

Gene: Cactojaque_238 Start: 133699, Stop: 134001, Start Num: 4

Candidate Starts for Cactojaque_238:

(2, 133657), (Start: 4 @133699 has 146 MA's), (Start: 10 @133726 has 1 MA's), (14, 133795), (16, 133861), (19, 133879), (22, 133894), (24, 133933),

Gene: Cali_234 Start: 134928, Stop: 135230, Start Num: 4

Candidate Starts for Cali_234:

(2, 134886), (Start: 4 @134928 has 146 MA's), (Start: 10 @134955 has 1 MA's), (14, 135024), (16, 135090), (19, 135108), (22, 135123), (24, 135162),

Gene: Capablanca_249 Start: 137181, Stop: 137483, Start Num: 4

Candidate Starts for Capablanca_249:

(2, 137139), (Start: 4 @137181 has 146 MA's), (11, 137217), (12, 137223), (16, 137343), (19, 137361), (22, 137376), (24, 137415),

Gene: Caravan_234 Start: 135268, Stop: 135570, Start Num: 4

Candidate Starts for Caravan_234:

(2, 135226), (Start: 4 @135268 has 146 MA's), (Start: 10 @135295 has 1 MA's), (14, 135364), (19, 135448), (22, 135463), (24, 135502),

Gene: Catera_233 Start: 133670, Stop: 133972, Start Num: 4

Candidate Starts for Catera_233:

(2, 133628), (Start: 4 @133670 has 146 MA's), (Start: 10 @133697 has 1 MA's), (14, 133766), (16, 133832), (19, 133850), (22, 133865), (24, 133904),

Gene: Chargie21_241 Start: 132976, Stop: 133278, Start Num: 4

Candidate Starts for Chargie21_241:

(2, 132934), (Start: 4 @132976 has 146 MA's), (Start: 10 @133003 has 1 MA's), (14, 133072), (16, 133138), (19, 133156), (22, 133171), (24, 133210),

Gene: CharlieB_239 Start: 134694, Stop: 134996, Start Num: 4

Candidate Starts for CharlieB_239:

(2, 134652), (Start: 4 @134694 has 146 MA's), (Start: 10 @134721 has 1 MA's), (14, 134790), (16, 134856), (19, 134874), (22, 134889), (24, 134928),

Gene: ChaylaJr_243 Start: 134367, Stop: 134669, Start Num: 4

Candidate Starts for ChaylaJr_243:

(2, 134325), (Start: 4 @134367 has 146 MA's), (Start: 10 @134394 has 1 MA's), (14, 134463), (16, 134529), (19, 134547), (22, 134562), (24, 134601),

Gene: ChickenPhender_240 Start: 133123, Stop: 133425, Start Num: 4

Candidate Starts for ChickenPhender_240:

(2, 133081), (Start: 4 @133123 has 146 MA's), (Start: 10 @133150 has 1 MA's), (14, 133219), (16, 133285), (19, 133303), (22, 133318), (24, 133357),

Gene: Chomp_243 Start: 136559, Stop: 136861, Start Num: 4

Candidate Starts for Chomp_243:

(2, 136517), (Start: 4 @136559 has 146 MA's), (Start: 10 @136586 has 1 MA's), (14, 136655), (16, 136721), (19, 136739), (22, 136754), (24, 136793),

Gene: CindyLou_245 Start: 136819, Stop: 137121, Start Num: 4

Candidate Starts for CindyLou_245:

(2, 136777), (Start: 4 @136819 has 146 MA's), (Start: 10 @136846 has 1 MA's), (14, 136915), (16, 136981), (19, 136999), (22, 137014), (24, 137053),

Gene: Cleatunium_236 Start: 134380, Stop: 134682, Start Num: 4

Candidate Starts for Cleatunium_236:

(2, 134338), (Start: 4 @134380 has 146 MA's), (11, 134416), (12, 134422), (16, 134542), (19, 134560), (22, 134575), (24, 134614),

Gene: Concombres_249 Start: 136715, Stop: 137017, Start Num: 4

Candidate Starts for Concombres_249:

(2, 136673), (Start: 4 @136715 has 146 MA's), (Start: 10 @136742 has 1 MA's), (14, 136811), (16, 136877), (19, 136895), (22, 136910), (24, 136949),

Gene: DTDevon_245 Start: 137198, Stop: 137500, Start Num: 4

Candidate Starts for DTDevon_245:

(2, 137156), (Start: 4 @137198 has 146 MA's), (Start: 10 @137225 has 1 MA's), (14, 137294), (16, 137360), (19, 137378), (22, 137393), (24, 137432),

Gene: Daffodil_250 Start: 135485, Stop: 135787, Start Num: 4

Candidate Starts for Daffodil_250:

(2, 135443), (Start: 4 @135485 has 146 MA's), (11, 135521), (12, 135527), (16, 135647), (19, 135665), (22, 135680), (24, 135719),

Gene: Darko_243 Start: 134694, Stop: 134996, Start Num: 4

Candidate Starts for Darko_243:

(2, 134652), (Start: 4 @134694 has 146 MA's), (Start: 10 @134721 has 1 MA's), (14, 134790), (16, 134856), (19, 134874), (22, 134889), (24, 134928),

Gene: Delilah_242 Start: 135578, Stop: 135880, Start Num: 4

Candidate Starts for Delilah_242:

(2, 135536), (Start: 4 @135578 has 146 MA's), (11, 135614), (12, 135620), (16, 135740), (19, 135758), (22, 135773), (24, 135812),

Gene: Delylah_246 Start: 135892, Stop: 136194, Start Num: 4

Candidate Starts for Delylah_246:

(2, 135850), (Start: 4 @135892 has 146 MA's), (Start: 10 @135919 has 1 MA's), (14, 135988), (19, 136072), (22, 136087), (24, 136126),

Gene: Demodog_250 Start: 136725, Stop: 137027, Start Num: 4

Candidate Starts for Demodog_250:

(2, 136683), (Start: 4 @136725 has 146 MA's), (Start: 10 @136752 has 1 MA's), (14, 136821), (16, 136887), (19, 136905), (22, 136920), (24, 136959),

Gene: Derek_240 Start: 135836, Stop: 136138, Start Num: 4

Candidate Starts for Derek_240:

(2, 135794), (Start: 4 @135836 has 146 MA's), (Start: 10 @135863 has 1 MA's), (14, 135932), (16, 135998), (19, 136016), (22, 136031), (24, 136070),

Gene: Dessert_241 Start: 134835, Stop: 135137, Start Num: 4

Candidate Starts for Dessert_241:

(2, 134793), (Start: 4 @134835 has 146 MA's), (Start: 10 @134862 has 1 MA's), (14, 134931), (16, 134997), (19, 135015), (22, 135030), (24, 135069),

Gene: Dietrick_233 Start: 133699, Stop: 134001, Start Num: 4

Candidate Starts for Dietrick_233:

(2, 133657), (Start: 4 @133699 has 146 MA's), (Start: 10 @133726 has 1 MA's), (14, 133795), (16, 133861), (19, 133879), (22, 133894), (24, 133933),

Gene: Domi_238 Start: 135038, Stop: 135340, Start Num: 4

Candidate Starts for Domi_238:

(2, 134996), (Start: 4 @135038 has 146 MA's), (Start: 10 @135065 has 1 MA's), (14, 135134), (16, 135200), (19, 135218), (22, 135233), (24, 135272),

Gene: DrPhinkDaddy_241 Start: 136263, Stop: 136565, Start Num: 4

Candidate Starts for DrPhinkDaddy_241:

(2, 136221), (Start: 4 @136263 has 146 MA's), (11, 136299), (12, 136305), (16, 136425), (19, 136443), (22, 136458), (24, 136497),

Gene: Drazdys_241 Start: 135843, Stop: 136145, Start Num: 4

Candidate Starts for Drazdys_241:

(2, 135801), (Start: 4 @135843 has 146 MA's), (Start: 10 @135870 has 1 MA's), (14, 135939), (16, 136005), (19, 136023), (22, 136038), (24, 136077),

Gene: Duckfeet_238 Start: 134651, Stop: 134953, Start Num: 4

Candidate Starts for Duckfeet_238:

(2, 134609), (Start: 4 @134651 has 146 MA's), (Start: 10 @134678 has 1 MA's), (14, 134747), (16, 134813), (19, 134831), (22, 134846), (24, 134885),

Gene: ET08_230 Start: 134178, Stop: 134480, Start Num: 4

Candidate Starts for ET08_230:

(2, 134136), (Start: 4 @134178 has 146 MA's), (11, 134214), (12, 134220), (16, 134340), (19, 134358), (22, 134373), (24, 134412),

Gene: EasyJones_245 Start: 134219, Stop: 134521, Start Num: 4

Candidate Starts for EasyJones_245:

(2, 134177), (Start: 4 @134219 has 146 MA's), (Start: 10 @134246 has 1 MA's), (14, 134315), (16, 134381), (19, 134399), (22, 134414), (24, 134453),

Gene: EggyFarm_252 Start: 137064, Stop: 137366, Start Num: 4

Candidate Starts for EggyFarm_252:

(2, 137022), (Start: 4 @137064 has 146 MA's), (Start: 10 @137091 has 1 MA's), (14, 137160), (16, 137226), (19, 137244), (22, 137259), (24, 137298),

Gene: EmToTheThree_244 Start: 135602, Stop: 135904, Start Num: 4

Candidate Starts for EmToTheThree_244:

(2, 135560), (Start: 4 @135602 has 146 MA's), (Start: 10 @135629 has 1 MA's), (14, 135698), (16, 135764), (19, 135782), (22, 135797), (24, 135836),

Gene: EmmaElysia_249 Start: 136714, Stop: 137016, Start Num: 4

Candidate Starts for EmmaElysia_249:

(2, 136672), (Start: 4 @136714 has 146 MA's), (Start: 10 @136741 has 1 MA's), (14, 136810), (16, 136876), (19, 136894), (22, 136909), (24, 136948),

Gene: Erdmann_245 Start: 135570, Stop: 135872, Start Num: 4

Candidate Starts for Erdmann_245:

(2, 135528), (Start: 4 @135570 has 146 MA's), (Start: 10 @135597 has 1 MA's), (14, 135666), (19, 135750), (22, 135765), (24, 135804),

Gene: ErnieJ_237 Start: 132398, Stop: 132700, Start Num: 4

Candidate Starts for ErnieJ_237:

(2, 132356), (Start: 4 @132398 has 146 MA's), (Start: 10 @132425 has 1 MA's), (14, 132494), (16, 132560), (19, 132578), (22, 132593), (24, 132632),

Gene: Essence_242 Start: 135055, Stop: 135357, Start Num: 4

Candidate Starts for Essence_242:

(1, 134989), (2, 135013), (Start: 4 @135055 has 146 MA's), (Start: 10 @135082 has 1 MA's), (14, 135151), (16, 135217), (19, 135235), (22, 135250), (24, 135289),

Gene: Ewok_243 Start: 135513, Stop: 135815, Start Num: 4

Candidate Starts for Ewok_243:

(2, 135471), (Start: 4 @135513 has 146 MA's), (11, 135549), (12, 135555), (16, 135675), (19, 135693), (22, 135708), (24, 135747),

Gene: Fazel_71 Start: 48619, Stop: 48870, Start Num: 7

Candidate Starts for Fazel_71:

(Start: 7 @48619 has 3 MA's), (12, 48655), (13, 48670), (15, 48745), (20, 48799), (23, 48838),

Gene: Fixie_243 Start: 135835, Stop: 136137, Start Num: 4

Candidate Starts for Fixie_243:

(2, 135793), (Start: 4 @135835 has 146 MA's), (Start: 10 @135862 has 1 MA's), (14, 135931), (16, 135997), (19, 136015), (22, 136030), (24, 136069),

Gene: Fludd_244 Start: 133931, Stop: 134233, Start Num: 4

Candidate Starts for Fludd_244:

(2, 133889), (Start: 4 @133931 has 146 MA's), (Start: 10 @133958 has 1 MA's), (14, 134027), (16, 134093), (19, 134111), (22, 134126), (24, 134165),

Gene: Fongie_244 Start: 135511, Stop: 135813, Start Num: 4

Candidate Starts for Fongie_244:

(2, 135469), (Start: 4 @135511 has 146 MA's), (Start: 10 @135538 has 1 MA's), (14, 135607), (16, 135673), (19, 135691), (22, 135706), (24, 135745),

Gene: FoxtrotP1_242 Start: 136156, Stop: 136458, Start Num: 4

Candidate Starts for FoxtrotP1_242:

(2, 136114), (Start: 4 @136156 has 146 MA's), (Start: 10 @136183 has 1 MA's), (14, 136252), (19, 136336), (22, 136351), (24, 136390),

Gene: FudgeTart_239 Start: 134660, Stop: 134962, Start Num: 4

Candidate Starts for FudgeTart_239:

(2, 134618), (Start: 4 @134660 has 146 MA's), (11, 134696), (12, 134702), (16, 134822), (19, 134840), (22, 134855), (24, 134894),

Gene: Gabriel_247 Start: 134090, Stop: 134392, Start Num: 4

Candidate Starts for Gabriel_247:

(2, 134048), (Start: 4 @134090 has 146 MA's), (Start: 10 @134117 has 1 MA's), (14, 134186), (16, 134252), (19, 134270), (22, 134285), (24, 134324),

Gene: Gamgam_246 Start: 134447, Stop: 134749, Start Num: 4

Candidate Starts for Gamgam_246:

(2, 134405), (Start: 4 @134447 has 146 MA's), (Start: 10 @134474 has 1 MA's), (14, 134543), (16, 134609), (19, 134627), (22, 134642), (24, 134681),

Gene: Ghost_244 Start: 135071, Stop: 135373, Start Num: 4

Candidate Starts for Ghost_244:

(2, 135029), (Start: 4 @135071 has 146 MA's), (Start: 10 @135098 has 1 MA's), (14, 135167), (16, 135233), (19, 135251), (22, 135266), (24, 135305),

Gene: Gizmo_249 Start: 137487, Stop: 137789, Start Num: 4

Candidate Starts for Gizmo_249:

(2, 137445), (Start: 4 @137487 has 146 MA's), (Start: 10 @137514 has 1 MA's), (14, 137583), (19, 137667), (22, 137682), (24, 137721),

Gene: GlutenPhree_245 Start: 134458, Stop: 134760, Start Num: 4

Candidate Starts for GlutenPhree_245:

(2, 134416), (Start: 4 @134458 has 146 MA's), (Start: 10 @134485 has 1 MA's), (14, 134554), (16, 134620), (19, 134638), (22, 134653), (24, 134692),

Gene: Grasshills_251 Start: 137063, Stop: 137365, Start Num: 4

Candidate Starts for Grasshills_251:

(2, 137021), (Start: 4 @137063 has 146 MA's), (Start: 10 @137090 has 1 MA's), (14, 137159), (16, 137225), (19, 137243), (22, 137258), (24, 137297),

Gene: Guwapp_240 Start: 133905, Stop: 134207, Start Num: 4

Candidate Starts for Guwapp_240:

(2, 133863), (Start: 4 @133905 has 146 MA's), (Start: 10 @133932 has 1 MA's), (14, 134001), (16, 134067), (19, 134085), (22, 134100), (24, 134139),

Gene: Hortihabitatio_71 Start: 48995, Stop: 49246, Start Num: 7

Candidate Starts for Hortihabitatio_71:

(6, 48992), (Start: 7 @48995 has 3 MA's), (12, 49031), (13, 49046), (15, 49121), (20, 49175), (23, 49214),

Gene: IkeLoa_238 Start: 134803, Stop: 135105, Start Num: 4

Candidate Starts for IkeLoa_238:

(2, 134761), (Start: 4 @134803 has 146 MA's), (Start: 10 @134830 has 1 MA's), (14, 134899), (16, 134965), (19, 134983), (22, 134998), (24, 135037),

Gene: InigoMontoya_248 Start: 135121, Stop: 135423, Start Num: 4

Candidate Starts for InigoMontoya_248:

(2, 135079), (Start: 4 @135121 has 146 MA's), (Start: 10 @135148 has 1 MA's), (14, 135217), (16, 135283), (19, 135301), (22, 135316), (24, 135355),

Gene: Iota_241 Start: 134833, Stop: 135135, Start Num: 4

Candidate Starts for Iota_241:

(2, 134791), (Start: 4 @134833 has 146 MA's), (Start: 10 @134860 has 1 MA's), (14, 134929), (19, 135013), (22, 135028), (24, 135067),

Gene: Issimir_237 Start: 134759, Stop: 135061, Start Num: 4

Candidate Starts for Issimir_237:

(2, 134717), (Start: 4 @134759 has 146 MA's), (11, 134795), (12, 134801), (16, 134921), (19, 134939), (22, 134954), (24, 134993),

Gene: Izajani_240 Start: 135653, Stop: 135955, Start Num: 4

Candidate Starts for Izajani_240:

(2, 135611), (Start: 4 @135653 has 146 MA's), (11, 135689), (12, 135695), (16, 135815), (19, 135833), (22, 135848), (24, 135887),

Gene: JPickles_241 Start: 133809, Stop: 134111, Start Num: 4

Candidate Starts for JPickles_241:

(2, 133767), (Start: 4 @133809 has 146 MA's), (Start: 10 @133836 has 1 MA's), (14, 133905), (16, 133971), (19, 133989), (22, 134004), (24, 134043),

Gene: Janiyra_247 Start: 135346, Stop: 135648, Start Num: 4

Candidate Starts for Janiyra_247:

(2, 135304), (Start: 4 @135346 has 146 MA's), (Start: 10 @135373 has 1 MA's), (14, 135442), (16, 135508), (19, 135526), (22, 135541), (24, 135580),

Gene: Jaygup_241 Start: 134980, Stop: 135282, Start Num: 4

Candidate Starts for Jaygup_241:

(2, 134938), (Start: 4 @134980 has 146 MA's), (Start: 10 @135007 has 1 MA's), (14, 135076), (16, 135142), (19, 135160), (22, 135175), (24, 135214),

Gene: Jedediah_246 Start: 136033, Stop: 136335, Start Num: 4

Candidate Starts for Jedediah_246:

(2, 135991), (Start: 4 @136033 has 146 MA's), (Start: 10 @136060 has 1 MA's), (14, 136129), (16, 136195), (19, 136213), (22, 136228), (24, 136267),

Gene: Jemmno_244 Start: 134752, Stop: 135054, Start Num: 4

Candidate Starts for Jemmno_244:

(2, 134710), (Start: 4 @134752 has 146 MA's), (Start: 10 @134779 has 1 MA's), (14, 134848), (16, 134914), (19, 134932), (22, 134947), (24, 134986),

Gene: Jessibeth14_244 Start: 136228, Stop: 136530, Start Num: 4

Candidate Starts for Jessibeth14_244:

(2, 136186), (Start: 4 @136228 has 146 MA's), (Start: 10 @136255 has 1 MA's), (14, 136324), (16, 136390), (19, 136408), (22, 136423), (24, 136462),

Gene: Jezreel_241 Start: 135297, Stop: 135599, Start Num: 4

Candidate Starts for Jezreel_241:

(2, 135255), (Start: 4 @135297 has 146 MA's), (11, 135333), (12, 135339), (16, 135459), (19, 135477), (22, 135492), (24, 135531),

Gene: JigglyPuff_250 Start: 136723, Stop: 137025, Start Num: 4

Candidate Starts for JigglyPuff_250:

(2, 136681), (Start: 4 @136723 has 146 MA's), (Start: 10 @136750 has 1 MA's), (14, 136819), (19, 136903), (22, 136918), (24, 136957),

Gene: JulietS_233 Start: 132332, Stop: 132634, Start Num: 4

Candidate Starts for JulietS_233:

(2, 132290), (Start: 4 @132332 has 146 MA's), (Start: 10 @132359 has 1 MA's), (14, 132428), (16, 132494), (19, 132512), (22, 132527), (24, 132566),

Gene: JustHall_238 Start: 134282, Stop: 134584, Start Num: 4

Candidate Starts for JustHall_238:

(2, 134240), (Start: 4 @134282 has 146 MA's), (Start: 10 @134309 has 1 MA's), (14, 134378), (16, 134444), (19, 134462), (22, 134477), (24, 134516),

Gene: Kamryn_243 Start: 135872, Stop: 136174, Start Num: 4

Candidate Starts for Kamryn_243:

(2, 135830), (Start: 4 @135872 has 146 MA's), (11, 135908), (12, 135914), (16, 136034), (19, 136052), (21, 136061), (22, 136067), (24, 136106),

Gene: Kboogie_248 Start: 134911, Stop: 135213, Start Num: 4

Candidate Starts for Kboogie_248:

(2, 134869), (Start: 4 @134911 has 146 MA's), (Start: 10 @134938 has 1 MA's), (14, 135007), (16, 135073), (19, 135091), (22, 135106), (24, 135145),

Gene: Khaleesi_243 Start: 135695, Stop: 135997, Start Num: 4

Candidate Starts for Khaleesi_243:

(2, 135653), (Start: 4 @135695 has 146 MA's), (Start: 10 @135722 has 1 MA's), (14, 135791), (16, 135857), (19, 135875), (22, 135890), (24, 135929),

Gene: LRRHood_236 Start: 133904, Stop: 134206, Start Num: 4

Candidate Starts for LRRHood_236:

(2, 133862), (Start: 4 @133904 has 146 MA's), (Start: 10 @133931 has 1 MA's), (14, 134000), (16, 134066), (19, 134084), (22, 134099), (24, 134138),

Gene: Labradorite_241 Start: 134471, Stop: 134773, Start Num: 4

Candidate Starts for Labradorite_241:

(2, 134429), (Start: 4 @134471 has 146 MA's), (Start: 10 @134498 has 1 MA's), (14, 134567), (16, 134633), (19, 134651), (22, 134666), (24, 134705),

Gene: Latch_244 Start: 134457, Stop: 134759, Start Num: 4

Candidate Starts for Latch_244:

(2, 134415), (Start: 4 @134457 has 146 MA's), (Start: 10 @134484 has 1 MA's), (14, 134553), (16, 134619), (19, 134637), (22, 134652), (24, 134691),

Gene: Lee7_243 Start: 137109, Stop: 137411, Start Num: 4

Candidate Starts for Lee7_243:

(2, 137067), (Start: 4 @137109 has 146 MA's), (11, 137145), (12, 137151), (16, 137271), (19, 137289), (22, 137304), (24, 137343),

Gene: LifeSavor_245 Start: 135685, Stop: 135987, Start Num: 4

Candidate Starts for LifeSavor_245:

(2, 135643), (Start: 4 @135685 has 146 MA's), (Start: 10 @135712 has 1 MA's), (14, 135781), (16, 135847), (19, 135865), (22, 135880), (24, 135919),

Gene: Littleton_248 Start: 135694, Stop: 135996, Start Num: 4

Candidate Starts for Littleton_248:

(2, 135652), (Start: 4 @135694 has 146 MA's), (Start: 10 @135721 has 1 MA's), (14, 135790), (16, 135856), (19, 135874), (22, 135889), (24, 135928),

Gene: Loanshark_241 Start: 135044, Stop: 135346, Start Num: 4

Candidate Starts for Loanshark_241:

(2, 135002), (Start: 4 @135044 has 146 MA's), (11, 135080), (12, 135086), (16, 135206), (19, 135224), (22, 135239), (24, 135278),

Gene: LookingGlass_242 Start: 135202, Stop: 135504, Start Num: 4

Candidate Starts for LookingGlass_242:

(2, 135160), (Start: 4 @135202 has 146 MA's), (Start: 10 @135229 has 1 MA's), (14, 135298), (16, 135364), (19, 135382), (22, 135397), (24, 135436),

Gene: Lukilu_233 Start: 135920, Stop: 136222, Start Num: 4

Candidate Starts for Lukilu_233:

(2, 135878), (Start: 4 @135920 has 146 MA's), (Start: 10 @135947 has 1 MA's), (14, 136016), (16, 136082), (19, 136100), (22, 136115), (24, 136154),

Gene: Maby2021_244 Start: 136148, Stop: 136450, Start Num: 4

Candidate Starts for Maby2021_244:

(2, 136106), (Start: 4 @136148 has 146 MA's), (Start: 10 @136175 has 1 MA's), (14, 136244), (19, 136328), (22, 136343), (24, 136382),

Gene: Matsumoto_242 Start: 134899, Stop: 135201, Start Num: 4

Candidate Starts for Matsumoto_242:

(2, 134857), (Start: 4 @134899 has 146 MA's), (Start: 10 @134926 has 1 MA's), (14, 134995), (16, 135061), (19, 135079), (22, 135094), (24, 135133),

Gene: McGee_245 Start: 134796, Stop: 135098, Start Num: 4

Candidate Starts for McGee_245:

(2, 134754), (Start: 4 @134796 has 146 MA's), (Start: 10 @134823 has 1 MA's), (14, 134892), (16, 134958), (19, 134976), (22, 134991), (24, 135030),

Gene: McWolfish_241 Start: 134906, Stop: 135208, Start Num: 4

Candidate Starts for McWolfish_241:

(2, 134864), (Start: 4 @134906 has 146 MA's), (Start: 10 @134933 has 1 MA's), (14, 135002), (16, 135068), (19, 135086), (22, 135101), (24, 135140),

Gene: Megamind_241 Start: 135231, Stop: 135533, Start Num: 4

Candidate Starts for Megamind_241:

(2, 135189), (Start: 4 @135231 has 146 MA's), (11, 135267), (12, 135273), (16, 135393), (19, 135411), (22, 135426), (24, 135465),

Gene: Melpomini_239 Start: 133991, Stop: 134293, Start Num: 4

Candidate Starts for Melpomini_239:

(2, 133949), (Start: 4 @133991 has 146 MA's), (Start: 10 @134018 has 1 MA's), (14, 134087), (16, 134153), (19, 134171), (22, 134186), (24, 134225),

Gene: MikeLiesIn_245 Start: 136367, Stop: 136669, Start Num: 4

Candidate Starts for MikeLiesIn_245:

(2, 136325), (Start: 4 @136367 has 146 MA's), (11, 136403), (12, 136409), (16, 136529), (19, 136547), (22, 136562), (24, 136601),

Gene: MoMoMixon_240 Start: 135372, Stop: 135674, Start Num: 4

Candidate Starts for MoMoMixon_240:

(2, 135330), (Start: 4 @135372 has 146 MA's), (Start: 10 @135399 has 1 MA's), (14, 135468), (19, 135552), (22, 135567), (24, 135606),

Gene: Momo_246 Start: 134457, Stop: 134759, Start Num: 4

Candidate Starts for Momo_246:

(2, 134415), (Start: 4 @134457 has 146 MA's), (Start: 10 @134484 has 1 MA's), (14, 134553), (16, 134619), (19, 134637), (22, 134652), (24, 134691),

Gene: Morizzled23_241 Start: 133824, Stop: 134126, Start Num: 4

Candidate Starts for Morizzled23_241:

(2, 133782), (Start: 4 @133824 has 146 MA's), (Start: 10 @133851 has 1 MA's), (14, 133920), (16, 133986), (19, 134004), (22, 134019), (24, 134058),

Gene: Mysticmoon_71 Start: 49282, Stop: 49524, Start Num: 7

Candidate Starts for Mysticmoon_71:

(Start: 7 @49282 has 3 MA's), (9, 49288), (12, 49318), (13, 49333), (15, 49408), (20, 49462),

Gene: Naija_245 Start: 135160, Stop: 135462, Start Num: 4

Candidate Starts for Naija_245:

(2, 135118), (Start: 4 @135160 has 146 MA's), (Start: 10 @135187 has 1 MA's), (14, 135256), (16, 135322), (19, 135340), (22, 135355), (24, 135394),

Gene: Napoleon13_241 Start: 134189, Stop: 134491, Start Num: 4

Candidate Starts for Napoleon13_241:

(2, 134147), (Start: 4 @134189 has 146 MA's), (Start: 10 @134216 has 1 MA's), (14, 134285), (16, 134351), (19, 134369), (22, 134384), (24, 134423),

Gene: Naval22_249 Start: 136940, Stop: 137242, Start Num: 4

Candidate Starts for Naval22_249:

(2, 136898), (Start: 4 @136940 has 146 MA's), (Start: 10 @136967 has 1 MA's), (14, 137036), (19, 137120), (22, 137135), (24, 137174),

Gene: NedWong_243 Start: 135618, Stop: 135920, Start Num: 4

Candidate Starts for NedWong_243:

(2, 135576), (Start: 4 @135618 has 146 MA's), (11, 135654), (12, 135660), (16, 135780), (19, 135798), (22, 135813), (24, 135852),

Gene: Ngannou_239 Start: 134142, Stop: 134444, Start Num: 4

Candidate Starts for Ngannou_239:

(2, 134100), (Start: 4 @134142 has 146 MA's), (Start: 10 @134169 has 1 MA's), (14, 134238), (16, 134304), (19, 134322), (22, 134337), (24, 134376),

Gene: Nidhogg_245 Start: 135986, Stop: 136288, Start Num: 4

Candidate Starts for Nidhogg_245:

(2, 135944), (Start: 4 @135986 has 146 MA's), (11, 136022), (12, 136028), (16, 136148), (19, 136166), (22, 136181), (24, 136220),

Gene: NoodleTree_240 Start: 130737, Stop: 131039, Start Num: 4

Candidate Starts for NoodleTree_240:

(2, 130695), (Start: 4 @130737 has 146 MA's), (Start: 10 @130764 has 1 MA's), (14, 130833), (16, 130899), (19, 130917), (22, 130932), (24, 130971),

Gene: Norm_244 Start: 135887, Stop: 136189, Start Num: 4

Candidate Starts for Norm_244:

(2, 135845), (Start: 4 @135887 has 146 MA's), (11, 135923), (12, 135929), (16, 136049), (19, 136067), (22, 136082), (24, 136121),

Gene: OrediggerDelux_239 Start: 136113, Stop: 136415, Start Num: 4

Candidate Starts for OrediggerDelux_239:

(2, 136071), (Start: 4 @136113 has 146 MA's), (11, 136149), (12, 136155), (16, 136275), (19, 136293), (22, 136308), (24, 136347),

Gene: ParkTD_243 Start: 135457, Stop: 135759, Start Num: 4

Candidate Starts for ParkTD_243:

(2, 135415), (Start: 4 @135457 has 146 MA's), (11, 135493), (12, 135499), (16, 135619), (19, 135637), (22, 135652), (24, 135691),

Gene: Pherobrine_70 Start: 49341, Stop: 49583, Start Num: 7

Candidate Starts for Pherobrine_70:

(Start: 7 @49341 has 3 MA's), (12, 49377), (13, 49392), (15, 49467), (20, 49521),

Gene: Phlegm_249 Start: 135863, Stop: 136165, Start Num: 4

Candidate Starts for Phlegm_249:

(2, 135821), (Start: 4 @135863 has 146 MA's), (Start: 10 @135890 has 1 MA's), (14, 135959), (16, 136025), (19, 136043), (22, 136058), (24, 136097),

Gene: Phox_245 Start: 135112, Stop: 135414, Start Num: 4

Candidate Starts for Phox_245:

(2, 135070), (Start: 4 @135112 has 146 MA's), (11, 135148), (12, 135154), (16, 135274), (19, 135292), (22, 135307), (24, 135346),

Gene: Phusco_243 Start: 134695, Stop: 134997, Start Num: 4

Candidate Starts for Phusco_243:

(2, 134653), (Start: 4 @134695 has 146 MA's), (Start: 10 @134722 has 1 MA's), (14, 134791), (16, 134857), (19, 134875), (22, 134890), (24, 134929),

Gene: Pier_243 Start: 135988, Stop: 136290, Start Num: 4

Candidate Starts for Pier_243:

(2, 135946), (Start: 4 @135988 has 146 MA's), (11, 136024), (12, 136030), (16, 136150), (19, 136168), (22, 136183), (24, 136222),

Gene: Pio_251 Start: 137191, Stop: 137493, Start Num: 4

Candidate Starts for Pio_251:

(2, 137149), (Start: 4 @137191 has 146 MA's), (Start: 10 @137218 has 1 MA's), (14, 137287), (16, 137353), (19, 137371), (22, 137386), (24, 137425),

Gene: Pivoine_245 Start: 135160, Stop: 135462, Start Num: 4

Candidate Starts for Pivoine_245:

(2, 135118), (Start: 4 @135160 has 146 MA's), (Start: 10 @135187 has 1 MA's), (14, 135256), (16, 135322), (19, 135340), (22, 135355), (24, 135394),

Gene: Pleione_248 Start: 135923, Stop: 136225, Start Num: 4

Candidate Starts for Pleione_248:

(2, 135881), (Start: 4 @135923 has 146 MA's), (Start: 10 @135950 has 1 MA's), (14, 136019), (19, 136103), (22, 136118), (24, 136157),

Gene: Primadonna_238 Start: 134823, Stop: 135125, Start Num: 4

Candidate Starts for Primadonna_238:

(2, 134781), (Start: 4 @134823 has 146 MA's), (Start: 10 @134850 has 1 MA's), (14, 134919), (16, 134985), (19, 135003), (22, 135018), (24, 135057),

Gene: Pupusa_247 Start: 136487, Stop: 136789, Start Num: 4

Candidate Starts for Pupusa_247:

(2, 136445), (Start: 4 @136487 has 146 MA's), (Start: 10 @136514 has 1 MA's), (14, 136583), (16, 136649), (19, 136667), (22, 136682), (24, 136721),

Gene: PurduePete_244 Start: 136188, Stop: 136490, Start Num: 4

Candidate Starts for PurduePete_244:

(2, 136146), (Start: 4 @136188 has 146 MA's), (Start: 10 @136215 has 1 MA's), (14, 136284), (16, 136350), (19, 136368), (22, 136383), (24, 136422),

Gene: QBert_236 Start: 133511, Stop: 133813, Start Num: 4

Candidate Starts for QBert_236:

(2, 133469), (Start: 4 @133511 has 146 MA's), (Start: 10 @133538 has 1 MA's), (14, 133607), (16, 133673), (19, 133691), (22, 133706), (24, 133745),

Gene: Quasimodo_247 Start: 135496, Stop: 135798, Start Num: 4

Candidate Starts for Quasimodo_247:

(2, 135454), (Start: 4 @135496 has 146 MA's), (Start: 10 @135523 has 1 MA's), (14, 135592), (16, 135658), (19, 135676), (22, 135691), (24, 135730),

Gene: Rahel_246 Start: 135598, Stop: 135900, Start Num: 4

Candidate Starts for Rahel_246:

(2, 135556), (Start: 4 @135598 has 146 MA's), (Start: 10 @135625 has 1 MA's), (14, 135694), (16, 135760), (19, 135778), (22, 135793), (24, 135832),

Gene: Rizal_233 Start: 133413, Stop: 133715, Start Num: 4

Candidate Starts for Rizal_233:

(2, 133371), (Start: 4 @133413 has 146 MA's), (Start: 10 @133440 has 1 MA's), (14, 133509), (16, 133575), (19, 133593), (22, 133608), (24, 133647),

Gene: RoMag_239 Start: 135194, Stop: 135496, Start Num: 4

Candidate Starts for RoMag_239:

(2, 135152), (Start: 4 @135194 has 146 MA's), (Start: 10 @135221 has 1 MA's), (14, 135290), (16, 135356), (19, 135374), (22, 135389), (24, 135428),

Gene: Rocha_240 Start: 134759, Stop: 135061, Start Num: 4

Candidate Starts for Rocha_240:

(2, 134717), (Start: 4 @134759 has 146 MA's), (Start: 10 @134786 has 1 MA's), (14, 134855), (16, 134921), (19, 134939), (22, 134954), (24, 134993),

Gene: Ronan_240 Start: 133586, Stop: 133888, Start Num: 4

Candidate Starts for Ronan_240:

(2, 133544), (Start: 4 @133586 has 146 MA's), (11, 133622), (12, 133628), (16, 133748), (19, 133766), (22, 133781), (24, 133820),

Gene: Roots515_247 Start: 136739, Stop: 137041, Start Num: 4

Candidate Starts for Roots515_247:

(2, 136697), (Start: 4 @136739 has 146 MA's), (11, 136775), (12, 136781), (16, 136901), (19, 136919), (22, 136934), (24, 136973),

Gene: SVoro_239 Start: 135496, Stop: 135798, Start Num: 4

Candidate Starts for SVoro_239:

(2, 135454), (Start: 4 @135496 has 146 MA's), (Start: 10 @135523 has 1 MA's), (14, 135592), (16, 135658), (19, 135676), (22, 135691), (24, 135730),

Gene: Salacia_245 Start: 136614, Stop: 136916, Start Num: 4

Candidate Starts for Salacia_245:

(2, 136572), (Start: 4 @136614 has 146 MA's), (11, 136650), (12, 136656), (16, 136776), (19, 136794), (22, 136809), (24, 136848),

Gene: Sauce_241 Start: 134922, Stop: 135224, Start Num: 4

Candidate Starts for Sauce_241:

(2, 134880), (Start: 4 @134922 has 146 MA's), (Start: 10 @134949 has 1 MA's), (14, 135018), (16, 135084), (19, 135102), (22, 135117), (24, 135156),

Gene: Schwartz33_69 Start: 48060, Stop: 48317, Start Num: 5

Candidate Starts for Schwartz33_69:

(Start: 5 @48060 has 1 MA's), (12, 48102), (13, 48117), (17, 48225), (18, 48237), (23, 48285),

Gene: Secretariat_68 Start: 47409, Stop: 47657, Start Num: 8

Candidate Starts for Secretariat_68:

(3, 47385), (Start: 8 @47409 has 1 MA's), (12, 47442), (13, 47457), (18, 47577), (21, 47589), (23, 47625),

Gene: Shaqnato_235 Start: 134332, Stop: 134634, Start Num: 4

Candidate Starts for Shaqnato_235:

(2, 134290), (Start: 4 @134332 has 146 MA's), (Start: 10 @134359 has 1 MA's), (14, 134428), (16, 134494), (19, 134512), (22, 134527), (24, 134566),

Gene: Shelob_245 Start: 137057, Stop: 137359, Start Num: 4

Candidate Starts for Shelob_245:

(2, 137015), (Start: 4 @137057 has 146 MA's), (11, 137093), (12, 137099), (16, 137219), (19, 137237), (22, 137252), (24, 137291),

Gene: ShiaLabeouf_242 Start: 134916, Stop: 135218, Start Num: 4

Candidate Starts for ShiaLabeouf_242:

(2, 134874), (Start: 4 @134916 has 146 MA's), (Start: 10 @134943 has 1 MA's), (14, 135012), (16, 135078), (19, 135096), (22, 135111), (24, 135150),

Gene: Shnickers_243 Start: 134980, Stop: 135282, Start Num: 4

Candidate Starts for Shnickers_243:

(2, 134938), (Start: 4 @134980 has 146 MA's), (Start: 10 @135007 has 1 MA's), (14, 135076), (16, 135142), (19, 135160), (22, 135175), (24, 135214),

Gene: Shrimp_246 Start: 136225, Stop: 136527, Start Num: 4

Candidate Starts for Shrimp_246:

(2, 136183), (Start: 4 @136225 has 146 MA's), (Start: 10 @136252 has 1 MA's), (14, 136321), (19, 136405), (22, 136420), (24, 136459),

Gene: SilverDipper_249 Start: 135716, Stop: 136018, Start Num: 4

Candidate Starts for SilverDipper_249:

(2, 135674), (Start: 4 @135716 has 146 MA's), (Start: 10 @135743 has 1 MA's), (14, 135812), (16, 135878), (19, 135896), (22, 135911), (24, 135950),

Gene: SmallFry_245 Start: 135074, Stop: 135376, Start Num: 4

Candidate Starts for SmallFry_245:

(2, 135032), (Start: 4 @135074 has 146 MA's), (Start: 10 @135101 has 1 MA's), (14, 135170), (16, 135236), (19, 135254), (22, 135269), (24, 135308),

Gene: Specks_248 Start: 135565, Stop: 135867, Start Num: 4

Candidate Starts for Specks_248:

(2, 135523), (Start: 4 @135565 has 146 MA's), (Start: 10 @135592 has 1 MA's), (14, 135661), (16, 135727), (19, 135745), (22, 135760), (24, 135799),

Gene: Sprinklers_242 Start: 134822, Stop: 135124, Start Num: 4

Candidate Starts for Sprinklers_242:

(2, 134780), (Start: 4 @134822 has 146 MA's), (Start: 10 @134849 has 1 MA's), (14, 134918), (16, 134984), (19, 135002), (22, 135017), (24, 135056),

Gene: Spud_236 Start: 134531, Stop: 134833, Start Num: 4

Candidate Starts for Spud_236:

(2, 134489), (Start: 4 @134531 has 146 MA's), (Start: 10 @134558 has 1 MA's), (14, 134627), (16, 134693), (19, 134711), (22, 134726), (24, 134765),

Gene: SrishMeg2525_241 Start: 135720, Stop: 136022, Start Num: 4

Candidate Starts for SrishMeg2525_241:

(2, 135678), (Start: 4 @135720 has 146 MA's), (11, 135756), (12, 135762), (16, 135882), (19, 135900), (22, 135915), (24, 135954),

Gene: StephanieG_238 Start: 135717, Stop: 136019, Start Num: 4

Candidate Starts for StephanieG_238:

(2, 135675), (Start: 4 @135717 has 146 MA's), (Start: 10 @135744 has 1 MA's), (14, 135813), (16, 135879), (19, 135897), (22, 135912), (24, 135951),

Gene: StubbySaigey_250 Start: 135250, Stop: 135552, Start Num: 4

Candidate Starts for StubbySaigey_250:

(2, 135208), (Start: 4 @135250 has 146 MA's), (Start: 10 @135277 has 1 MA's), (14, 135346), (16, 135412), (19, 135430), (22, 135445), (24, 135484),

Gene: Substance289_240 Start: 135122, Stop: 135424, Start Num: 4

Candidate Starts for Substance289_240:

(2, 135080), (Start: 4 @135122 has 146 MA's), (Start: 10 @135149 has 1 MA's), (14, 135218), (16, 135284), (19, 135302), (22, 135317), (24, 135356),

Gene: Teardrop_242 Start: 134577, Stop: 134879, Start Num: 4

Candidate Starts for Teardrop_242:

(2, 134535), (Start: 4 @134577 has 146 MA's), (Start: 10 @134604 has 1 MA's), (14, 134673), (16, 134739), (19, 134757), (22, 134772), (24, 134811),

Gene: TinyTim_242 Start: 134544, Stop: 134846, Start Num: 4

Candidate Starts for TinyTim_242:

(2, 134502), (Start: 4 @134544 has 146 MA's), (Start: 10 @134571 has 1 MA's), (14, 134640), (19, 134724), (22, 134739), (24, 134778),

Gene: Tonenili_266 Start: 140370, Stop: 140672, Start Num: 4

Candidate Starts for Tonenili_266:

(2, 140328), (Start: 4 @140370 has 146 MA's), (11, 140406), (12, 140412), (14, 140466), (16, 140532), (19, 140550), (22, 140565), (24, 140604),

Gene: Tortoise16_242 Start: 135033, Stop: 135308, Start Num: 10

Candidate Starts for Tortoise16_242:

(2, 134964), (Start: 4 @135006 has 146 MA's), (Start: 10 @135033 has 1 MA's), (14, 135102), (16, 135168), (19, 135186), (22, 135201), (24, 135240),

Gene: Trinitium_240 Start: 133298, Stop: 133600, Start Num: 4

Candidate Starts for Trinitium_240:

(2, 133256), (Start: 4 @133298 has 146 MA's), (Start: 10 @133325 has 1 MA's), (14, 133394), (16, 133460), (19, 133478), (22, 133493), (24, 133532),

Gene: Turret_235 Start: 132880, Stop: 133182, Start Num: 4

Candidate Starts for Turret_235:

(2, 132838), (Start: 4 @132880 has 146 MA's), (Start: 10 @132907 has 1 MA's), (14, 132976), (16, 133042), (19, 133060), (22, 133075), (24, 133114),

Gene: ValleyTerrace_245 Start: 134457, Stop: 134759, Start Num: 4

Candidate Starts for ValleyTerrace_245:

(2, 134415), (Start: 4 @134457 has 146 MA's), (Start: 10 @134484 has 1 MA's), (14, 134553), (16, 134619), (19, 134637), (22, 134652), (24, 134691),

Gene: Vortrix_262 Start: 139157, Stop: 139459, Start Num: 4

Candidate Starts for Vortrix_262:

(2, 139115), (Start: 4 @139157 has 146 MA's), (11, 139193), (12, 139199), (14, 139253), (16, 139319), (19, 139337), (22, 139352), (24, 139391),

Gene: Wally_242 Start: 134441, Stop: 134743, Start Num: 4

Candidate Starts for Wally_242:

(2, 134399), (Start: 4 @134441 has 146 MA's), (Start: 10 @134468 has 1 MA's), (14, 134537), (16, 134603), (19, 134621), (22, 134636), (24, 134675),

Gene: Willis_245 Start: 135380, Stop: 135682, Start Num: 4

Candidate Starts for Willis_245:

(2, 135338), (Start: 4 @135380 has 146 MA's), (11, 135416), (12, 135422), (16, 135542), (19, 135560), (22, 135575), (24, 135614),

Gene: Yassified_240 Start: 134587, Stop: 134889, Start Num: 4

Candidate Starts for Yassified_240:

(2, 134545), (Start: 4 @134587 has 146 MA's), (11, 134623), (12, 134629), (16, 134749), (19, 134767), (22, 134782), (24, 134821),

Gene: YemiJoy2021_245 Start: 136111, Stop: 136413, Start Num: 4

Candidate Starts for YemiJoy2021_245:

(2, 136069), (Start: 4 @136111 has 146 MA's), (11, 136147), (12, 136153), (16, 136273), (19, 136291), (22, 136306), (24, 136345),

Gene: Yucca_244 Start: 136103, Stop: 136405, Start Num: 4

Candidate Starts for Yucca_244:

(2, 136061), (Start: 4 @136103 has 146 MA's), (Start: 10 @136130 has 1 MA's), (14, 136199), (19, 136283), (22, 136298), (24, 136337),

Gene: Zalkecks_243 Start: 135209, Stop: 135511, Start Num: 4

Candidate Starts for Zalkecks_243:

(2, 135167), (Start: 4 @135209 has 146 MA's), (11, 135245), (12, 135251), (16, 135371), (19, 135389), (22, 135404), (24, 135443),

Gene: Zeenon_245 Start: 135743, Stop: 136045, Start Num: 4

Candidate Starts for Zeenon_245:

(2, 135701), (Start: 4 @135743 has 146 MA's), (11, 135779), (12, 135785), (16, 135905), (19, 135923), (22, 135938), (24, 135977),

Gene: ZygoTaiga_240 Start: 136400, Stop: 136702, Start Num: 4

Candidate Starts for ZygoTaiga_240:

(2, 136358), (Start: 4 @136400 has 146 MA's), (11, 136436), (12, 136442), (16, 136562), (19, 136580), (22, 136595), (24, 136634),