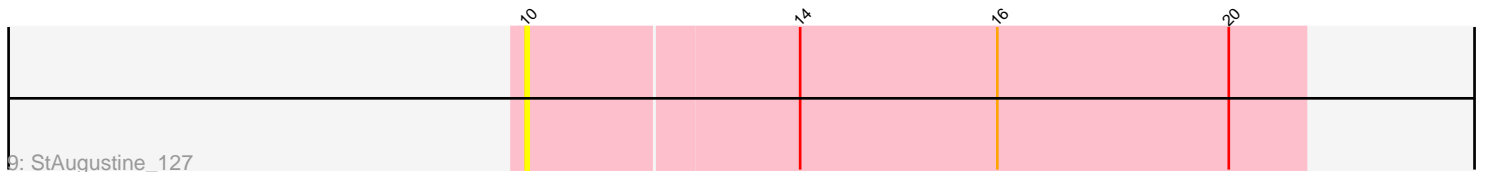
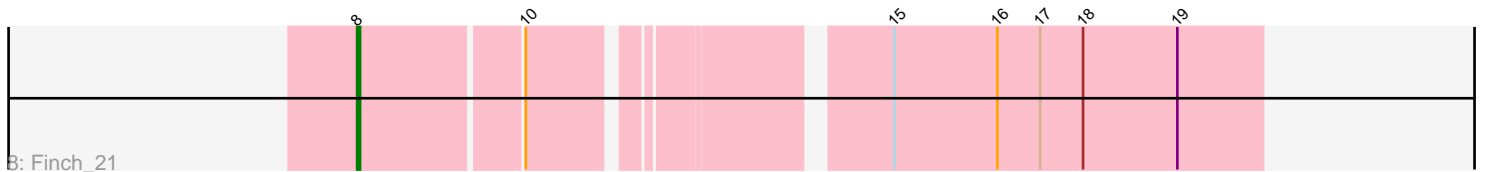
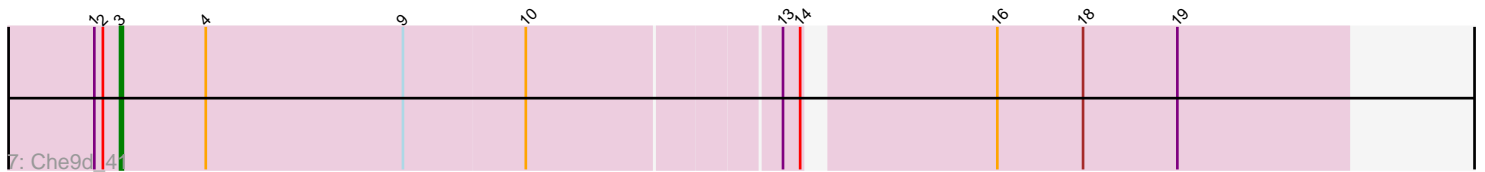
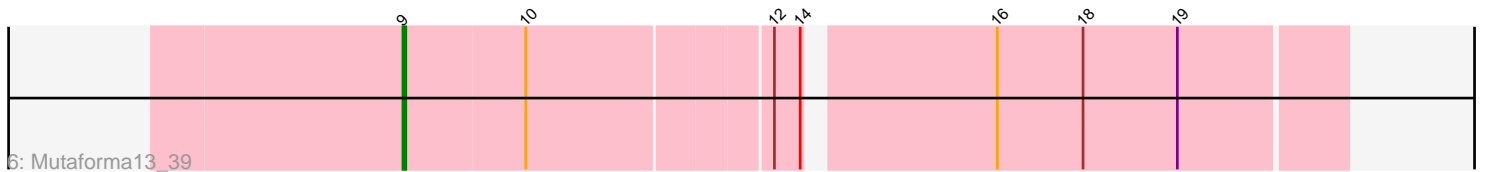
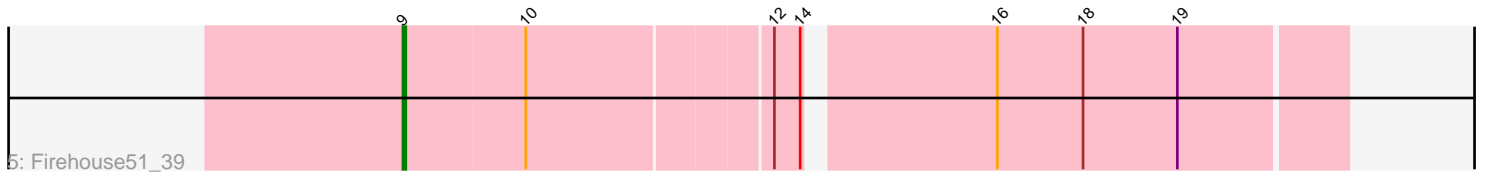
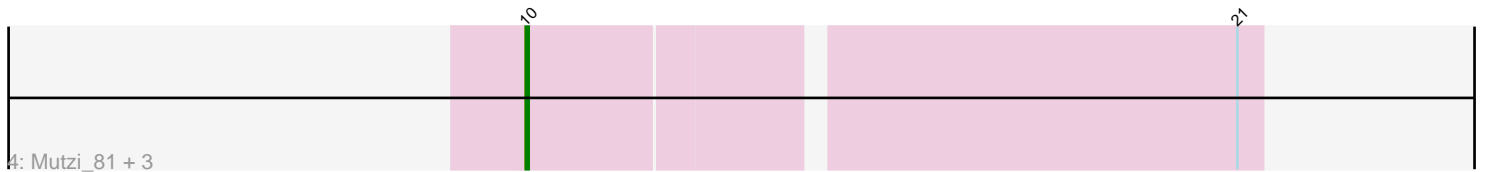
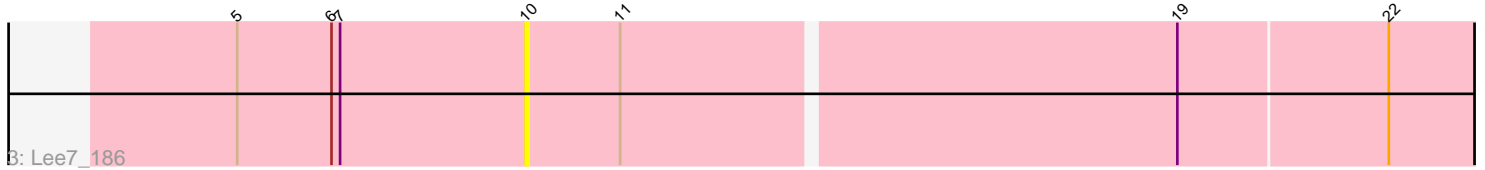
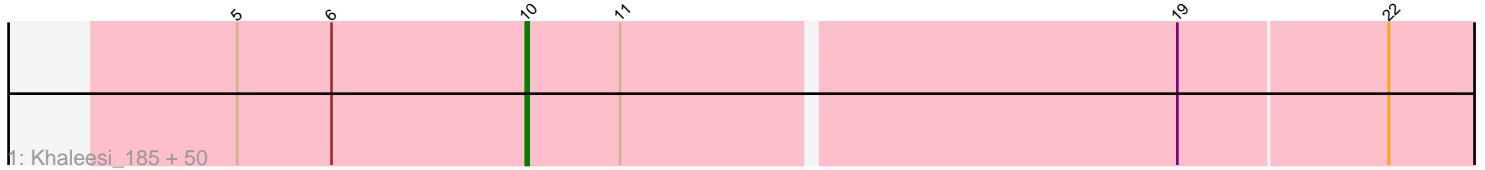


Pham 194010



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 194010 Report

This analysis was run 11/02/24 on database version 579.

Pham number 194010 has 63 members, 4 are drafts.

Phages represented in each track:

- Track 1 : Khaleesi_185, Maby2021_185, NedWong_185, Naval22_191, Cane17_177, Dietrick_176, Delylah_187, DrPhinkDaddy_183, Blubba_175, Ava3_185, Capablanca_190, Matsumoto_186, EasyJones_190, Littleton_189, YemiJoy2021_186, PurduePete_186, ZygoTaiga_182, Blackbrain_183, EmmaElysia_189, Jessibeth14_186, Pleione_190, SrishMeg2525_183, Gizmo_191, Bonray_188, Shelob_187, MoMoMixon_184, ParkTD_184, ChaylaJr_184, Nidhogg_187, Melpomini_180, Daffodil_190, Rizal_180, MikeLiesIn_187, Zalkecks_185, Flabslab_182, Zeenon_188, Catera_181, I3_194, Kboogie_190, Delilah_184, SilverDipper_189, Megamind_183, Yucca_186, Colt_177, NoodleTree_192, Izajani_184, Napoleon13_184, Bipolarisk_184, Willis_186, StubbySaigey_190, Caravan_177
- Track 2 : Nappy_186, Wally_186
- Track 3 : Lee7_186
- Track 4 : Mutzi_81, Halo3_81, YungMoney_81, Nubi_85
- Track 5 : Firehouse51_39
- Track 6 : Mutaforma13_39
- Track 7 : Che9d_41
- Track 8 : Finch_21
- Track 9 : StAugustine_127

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

The start number called the most often in the published annotations is 10, it was called in 53 of the 59 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Ava3_185, Bipolarisk_184, Blackbrain_183, Blubba_175, Bonray_188, Cane17_177, Capablanca_190, Caravan_177, Catera_181, ChaylaJr_184, Colt_177, Daffodil_190, Delilah_184, Delylah_187, Dietrick_176, DrPhinkDaddy_183, EasyJones_190, EmmaElysia_189, Flabslab_182, Gizmo_191, Halo3_81, I3_194, Izajani_184, Jessibeth14_186, Kboogie_190, Khaleesi_185, Lee7_186, Littleton_189, Maby2021_185, Matsumoto_186, Megamind_183, Melpomini_180, MikeLiesIn_187, MoMoMixon_184, Mutzi_81, Napoleon13_184, Naval22_191, NedWong_185, Nidhogg_187, NoodleTree_192, Nubi_85, ParkTD_184, Pleione_190,

PurduePete_186, Rizal_180, Shelob_187, SilverDipper_189, SrishMeg2525_183, StAugustine_127, StubbySaigey_190, Willis_186, YemiJoy2021_186, Yucca_186, YungMoney_81, Zalkecks_185, Zeenon_188, ZygoTaiga_182,

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

- Che9d_41, Finch_21, Firehouse51_39, Mutaforma13_39, Nappy_186, Wally_186,

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

-

Summary by start number:

Start 3:

- Found in 1 of 63 (1.6%) of genes in pham
- Manual Annotations of this start: 1 of 59
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Che9d_41 (F2),

Start 8:

- Found in 1 of 63 (1.6%) of genes in pham
- Manual Annotations of this start: 1 of 59
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Finch_21 (singleton),

Start 9:

- Found in 3 of 63 (4.8%) of genes in pham
- Manual Annotations of this start: 2 of 59
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Firehouse51_39 (F1), Mutaforma13_39 (F1),

Start 10:

- Found in 63 of 63 (100.0%) of genes in pham
- Manual Annotations of this start: 53 of 59
- Called 90.5% of time when present
- Phage (with cluster) where this start called: Ava3_185 (C1), Bipolarisk_184 (C1), Blackbrain_183 (C1), Blubba_175 (C1), Bonray_188 (C1), Cane17_177 (C1), Capablanca_190 (C1), Caravan_177 (C1), Catera_181 (C1), ChaylaJr_184 (C1), Colt_177 (C1), Daffodil_190 (C1), Delilah_184 (C1), Delylah_187 (C1), Dietrick_176 (C1), DrPhinkDaddy_183 (C1), EasyJones_190 (C1), EmmaElysia_189 (C1), Flabslab_182 (C1), Gizmo_191 (C1), Halo3_81 (DC1), I3_194 (C1), Izajani_184 (C1), Jessibeth14_186 (C1), Kboogie_190 (C1), Khaleesi_185 (C1), Lee7_186 (C1), Littleton_189 (C1), Maby2021_185 (C1), Matsumoto_186 (C1), Megamind_183 (C1), Melpomini_180 (C1), MikeLiesIn_187 (C1), MoMoMixon_184 (C1), Mutzi_81 (DC1), Napoleon13_184 (C1), Naval22_191 (C1), NedWong_185 (C1), Nidhogg_187 (C1), NoodleTree_192 (C1), Nubi_85 (DC1), ParkTD_184 (C1), Pleione_190 (C1), PurduePete_186 (C1), Rizal_180 (C1), Shelob_187 (C1), SilverDipper_189 (C1), SrishMeg2525_183 (C1), StAugustine_127 (singleton), StubbySaigey_190 (C1), Willis_186 (C1), YemiJoy2021_186 (C1), Yucca_186 (C1), YungMoney_81 (DC1), Zalkecks_185 (C1), Zeenon_188 (C1), ZygoTaiga_182 (C1),

Start 11:

- Found in 54 of 63 (85.7%) of genes in pham

- Manual Annotations of this start: 2 of 59
- Called 3.7% of time when present
- Phage (with cluster) where this start called: Nappy_186 (C1), Wally_186 (C1),

Summary by clusters:

There are 5 clusters represented in this pham: F2, F1, C1, singleton, DC1,

Info for manual annotations of cluster C1:

- Start number 10 was manually annotated 49 times for cluster C1.
- Start number 11 was manually annotated 2 times for cluster C1.

Info for manual annotations of cluster DC1:

- Start number 10 was manually annotated 4 times for cluster DC1.

Info for manual annotations of cluster F1:

- Start number 9 was manually annotated 2 times for cluster F1.

Info for manual annotations of cluster F2:

- Start number 3 was manually annotated 1 time for cluster F2.

Gene Information:

Gene: Ava3_185 Start: 97682, Stop: 98035, Start Num: 10

Candidate Starts for Ava3_185:

(5, 97583), (6, 97616), (Start: 10 @97682 has 53 MA's), (Start: 11 @97715 has 2 MA's), (19, 97904), (22, 97976),

Gene: Bipolarisk_184 Start: 97950, Stop: 98303, Start Num: 10

Candidate Starts for Bipolarisk_184:

(5, 97851), (6, 97884), (Start: 10 @97950 has 53 MA's), (Start: 11 @97983 has 2 MA's), (19, 98172), (22, 98244),

Gene: Blackbrain_183 Start: 97845, Stop: 98198, Start Num: 10

Candidate Starts for Blackbrain_183:

(5, 97746), (6, 97779), (Start: 10 @97845 has 53 MA's), (Start: 11 @97878 has 2 MA's), (19, 98067), (22, 98139),

Gene: Blubba_175 Start: 99745, Stop: 100098, Start Num: 10

Candidate Starts for Blubba_175:

(5, 99646), (6, 99679), (Start: 10 @99745 has 53 MA's), (Start: 11 @99778 has 2 MA's), (19, 99967), (22, 100039),

Gene: Bonray_188 Start: 99353, Stop: 99706, Start Num: 10

Candidate Starts for Bonray_188:

(5, 99254), (6, 99287), (Start: 10 @99353 has 53 MA's), (Start: 11 @99386 has 2 MA's), (19, 99575), (22, 99647),

Gene: Cane17_177 Start: 100154, Stop: 100507, Start Num: 10

Candidate Starts for Cane17_177:

(5, 100055), (6, 100088), (Start: 10 @100154 has 53 MA's), (Start: 11 @100187 has 2 MA's), (19, 100376), (22, 100448),

Gene: Capablanca_190 Start: 99948, Stop: 100301, Start Num: 10

Candidate Starts for Capablanca_190:

(5, 99849), (6, 99882), (Start: 10 @99948 has 53 MA's), (Start: 11 @99981 has 2 MA's), (19, 100170), (22, 100242),

Gene: Caravan_177 Start: 97657, Stop: 98010, Start Num: 10

Candidate Starts for Caravan_177:

(5, 97558), (6, 97591), (Start: 10 @97657 has 53 MA's), (Start: 11 @97690 has 2 MA's), (19, 97879), (22, 97951),

Gene: Catera_181 Start: 96943, Stop: 97296, Start Num: 10

Candidate Starts for Catera_181:

(5, 96844), (6, 96877), (Start: 10 @96943 has 53 MA's), (Start: 11 @96976 has 2 MA's), (19, 97165), (22, 97237),

Gene: ChaylaJr_184 Start: 97671, Stop: 98024, Start Num: 10

Candidate Starts for ChaylaJr_184:

(5, 97572), (6, 97605), (Start: 10 @97671 has 53 MA's), (Start: 11 @97704 has 2 MA's), (19, 97893), (22, 97965),

Gene: Che9d_41 Start: 29205, Stop: 29618, Start Num: 3

Candidate Starts for Che9d_41:

(1, 29196), (2, 29199), (Start: 3 @29205 has 1 MA's), (4, 29235), (Start: 9 @29304 has 2 MA's), (Start: 10 @29346 has 53 MA's), (13, 29430), (14, 29436), (16, 29496), (18, 29526), (19, 29559),

Gene: Colt_177 Start: 99385, Stop: 99738, Start Num: 10

Candidate Starts for Colt_177:

(5, 99286), (6, 99319), (Start: 10 @99385 has 53 MA's), (Start: 11 @99418 has 2 MA's), (19, 99607), (22, 99679),

Gene: Daffodil_190 Start: 98250, Stop: 98603, Start Num: 10

Candidate Starts for Daffodil_190:

(5, 98151), (6, 98184), (Start: 10 @98250 has 53 MA's), (Start: 11 @98283 has 2 MA's), (19, 98472), (22, 98544),

Gene: Delilah_184 Start: 98368, Stop: 98721, Start Num: 10

Candidate Starts for Delilah_184:

(5, 98269), (6, 98302), (Start: 10 @98368 has 53 MA's), (Start: 11 @98401 has 2 MA's), (19, 98590), (22, 98662),

Gene: Delylah_187 Start: 98348, Stop: 98701, Start Num: 10

Candidate Starts for Delylah_187:

(5, 98249), (6, 98282), (Start: 10 @98348 has 53 MA's), (Start: 11 @98381 has 2 MA's), (19, 98570), (22, 98642),

Gene: Dietrick_176 Start: 96973, Stop: 97326, Start Num: 10

Candidate Starts for Dietrick_176:

(5, 96874), (6, 96907), (Start: 10 @96973 has 53 MA's), (Start: 11 @97006 has 2 MA's), (19, 97195), (22, 97267),

Gene: DrPhinkDaddy_183 Start: 99029, Stop: 99382, Start Num: 10

Candidate Starts for DrPhinkDaddy_183:

(5, 98930), (6, 98963), (Start: 10 @99029 has 53 MA's), (Start: 11 @99062 has 2 MA's), (19, 99251), (22, 99323),

Gene: EasyJones_190 Start: 98485, Stop: 98838, Start Num: 10

Candidate Starts for EasyJones_190:

(5, 98386), (6, 98419), (Start: 10 @98485 has 53 MA's), (Start: 11 @98518 has 2 MA's), (19, 98707), (22, 98779),

Gene: EmmaElysia_189 Start: 98496, Stop: 98849, Start Num: 10

Candidate Starts for EmmaElysia_189:

(5, 98397), (6, 98430), (Start: 10 @98496 has 53 MA's), (Start: 11 @98529 has 2 MA's), (19, 98718), (22, 98790),

Gene: Finch_21 Start: 20195, Stop: 20485, Start Num: 8

Candidate Starts for Finch_21:

(Start: 8 @20195 has 1 MA's), (Start: 10 @20249 has 53 MA's), (15, 20357), (16, 20393), (17, 20408), (18, 20423), (19, 20456),

Gene: Firehouse51_39 Start: 31537, Stop: 31848, Start Num: 9

Candidate Starts for Firehouse51_39:

(Start: 9 @31537 has 2 MA's), (Start: 10 @31579 has 53 MA's), (12, 31660), (14, 31669), (16, 31729), (18, 31759), (19, 31792),

Gene: Flabslab_182 Start: 96807, Stop: 97160, Start Num: 10

Candidate Starts for Flabslab_182:

(5, 96708), (6, 96741), (Start: 10 @96807 has 53 MA's), (Start: 11 @96840 has 2 MA's), (19, 97029), (22, 97101),

Gene: Gizmo_191 Start: 100277, Stop: 100630, Start Num: 10

Candidate Starts for Gizmo_191:

(5, 100178), (6, 100211), (Start: 10 @100277 has 53 MA's), (Start: 11 @100310 has 2 MA's), (19, 100499), (22, 100571),

Gene: Halo3_81 Start: 55261, Stop: 55506, Start Num: 10

Candidate Starts for Halo3_81:

(Start: 10 @55261 has 53 MA's), (21, 55498),

Gene: I3_194 Start: 99623, Stop: 99976, Start Num: 10

Candidate Starts for I3_194:

(5, 99524), (6, 99557), (Start: 10 @99623 has 53 MA's), (Start: 11 @99656 has 2 MA's), (19, 99845), (22, 99917),

Gene: Izajani_184 Start: 98419, Stop: 98772, Start Num: 10

Candidate Starts for Izajani_184:

(5, 98320), (6, 98353), (Start: 10 @98419 has 53 MA's), (Start: 11 @98452 has 2 MA's), (19, 98641), (22, 98713),

Gene: Jessibeth14_186 Start: 99028, Stop: 99381, Start Num: 10

Candidate Starts for Jessibeth14_186:

(5, 98929), (6, 98962), (Start: 10 @99028 has 53 MA's), (Start: 11 @99061 has 2 MA's), (19, 99250), (22, 99322),

Gene: Kboogie_190 Start: 98185, Stop: 98538, Start Num: 10

Candidate Starts for Kboogie_190:

(5, 98086), (6, 98119), (Start: 10 @98185 has 53 MA's), (Start: 11 @98218 has 2 MA's), (19, 98407), (22, 98479),

Gene: Khaleesi_185 Start: 98495, Stop: 98848, Start Num: 10

Candidate Starts for Khaleesi_185:

(5, 98396), (6, 98429), (Start: 10 @98495 has 53 MA's), (Start: 11 @98528 has 2 MA's), (19, 98717), (22, 98789),

Gene: Lee7_186 Start: 99875, Stop: 100228, Start Num: 10

Candidate Starts for Lee7_186:

(5, 99776), (6, 99809), (7, 99812), (Start: 10 @99875 has 53 MA's), (Start: 11 @99908 has 2 MA's), (19, 100097), (22, 100169),

Gene: Littleton_189 Start: 98659, Stop: 99012, Start Num: 10

Candidate Starts for Littleton_189:

(5, 98560), (6, 98593), (Start: 10 @98659 has 53 MA's), (Start: 11 @98692 has 2 MA's), (19, 98881), (22, 98953),

Gene: Maby2021_185 Start: 98939, Stop: 99292, Start Num: 10

Candidate Starts for Maby2021_185:

(5, 98840), (6, 98873), (Start: 10 @98939 has 53 MA's), (Start: 11 @98972 has 2 MA's), (19, 99161), (22, 99233),

Gene: Matsumoto_186 Start: 98173, Stop: 98526, Start Num: 10

Candidate Starts for Matsumoto_186:

(5, 98074), (6, 98107), (Start: 10 @98173 has 53 MA's), (Start: 11 @98206 has 2 MA's), (19, 98395), (22, 98467),

Gene: Megamind_183 Start: 97997, Stop: 98350, Start Num: 10

Candidate Starts for Megamind_183:

(5, 97898), (6, 97931), (Start: 10 @97997 has 53 MA's), (Start: 11 @98030 has 2 MA's), (19, 98219), (22, 98291),

Gene: Melpomini_180 Start: 96473, Stop: 96826, Start Num: 10

Candidate Starts for Melpomini_180:

(5, 96374), (6, 96407), (Start: 10 @96473 has 53 MA's), (Start: 11 @96506 has 2 MA's), (19, 96695), (22, 96767),

Gene: MikeLiesIn_187 Start: 99133, Stop: 99486, Start Num: 10

Candidate Starts for MikeLiesIn_187:

(5, 99034), (6, 99067), (Start: 10 @99133 has 53 MA's), (Start: 11 @99166 has 2 MA's), (19, 99355), (22, 99427),

Gene: MoMoMixon_184 Start: 97761, Stop: 98114, Start Num: 10

Candidate Starts for MoMoMixon_184:

(5, 97662), (6, 97695), (Start: 10 @97761 has 53 MA's), (Start: 11 @97794 has 2 MA's), (19, 97983), (22, 98055),

Gene: Mutaforma13_39 Start: 31264, Stop: 31575, Start Num: 9

Candidate Starts for Mutaforma13_39:

(Start: 9 @31264 has 2 MA's), (Start: 10 @31306 has 53 MA's), (12, 31387), (14, 31396), (16, 31456), (18, 31486), (19, 31519),

Gene: Mutzi_81 Start: 55396, Stop: 55641, Start Num: 10

Candidate Starts for Mutzi_81:

(Start: 10 @55396 has 53 MA's), (21, 55633),

Gene: Napoleon13_184 Start: 97462, Stop: 97815, Start Num: 10

Candidate Starts for Napoleon13_184:

(5, 97363), (6, 97396), (Start: 10 @97462 has 53 MA's), (Start: 11 @97495 has 2 MA's), (19, 97684), (22, 97756),

Gene: Nappy_186 Start: 99377, Stop: 99697, Start Num: 11

Candidate Starts for Nappy_186:

(5, 99245), (6, 99278), (Start: 10 @99344 has 53 MA's), (Start: 11 @99377 has 2 MA's), (19, 99566), (22, 99638),

Gene: Naval22_191 Start: 99728, Stop: 100081, Start Num: 10

Candidate Starts for Naval22_191:

(5, 99629), (6, 99662), (Start: 10 @99728 has 53 MA's), (Start: 11 @99761 has 2 MA's), (19, 99950), (22, 100022),

Gene: NedWong_185 Start: 98384, Stop: 98737, Start Num: 10

Candidate Starts for NedWong_185:

(5, 98285), (6, 98318), (Start: 10 @98384 has 53 MA's), (Start: 11 @98417 has 2 MA's), (19, 98606), (22, 98678),

Gene: Nidhogg_187 Start: 98777, Stop: 99130, Start Num: 10

Candidate Starts for Nidhogg_187:

(5, 98678), (6, 98711), (Start: 10 @98777 has 53 MA's), (Start: 11 @98810 has 2 MA's), (19, 98999), (22, 99071),

Gene: NoodleTree_192 Start: 98684, Stop: 99037, Start Num: 10

Candidate Starts for NoodleTree_192:

(5, 98585), (6, 98618), (Start: 10 @98684 has 53 MA's), (Start: 11 @98717 has 2 MA's), (19, 98906), (22, 98978),

Gene: Nubi_85 Start: 54707, Stop: 54955, Start Num: 10

Candidate Starts for Nubi_85:

(Start: 10 @54707 has 53 MA's), (21, 54944),

Gene: ParkTD_184 Start: 98247, Stop: 98600, Start Num: 10

Candidate Starts for ParkTD_184:

(5, 98148), (6, 98181), (Start: 10 @98247 has 53 MA's), (Start: 11 @98280 has 2 MA's), (19, 98469), (22, 98541),

Gene: Pleione_190 Start: 98726, Stop: 99079, Start Num: 10

Candidate Starts for Pleione_190:

(5, 98627), (6, 98660), (Start: 10 @98726 has 53 MA's), (Start: 11 @98759 has 2 MA's), (19, 98948), (22, 99020),

Gene: PurduePete_186 Start: 98953, Stop: 99306, Start Num: 10

Candidate Starts for PurduePete_186:

(5, 98854), (6, 98887), (Start: 10 @98953 has 53 MA's), (Start: 11 @98986 has 2 MA's), (19, 99175), (22, 99247),

Gene: Rizal_180 Start: 96687, Stop: 97040, Start Num: 10

Candidate Starts for Rizal_180:

(5, 96588), (6, 96621), (Start: 10 @96687 has 53 MA's), (Start: 11 @96720 has 2 MA's), (19, 96909), (22, 96981),

Gene: Shelob_187 Start: 99760, Stop: 100113, Start Num: 10

Candidate Starts for Shelob_187:

(5, 99661), (6, 99694), (Start: 10 @99760 has 53 MA's), (Start: 11 @99793 has 2 MA's), (19, 99982), (22, 100054),

Gene: SilverDipper_189 Start: 98198, Stop: 98551, Start Num: 10

Candidate Starts for SilverDipper_189:

(5, 98099), (6, 98132), (Start: 10 @98198 has 53 MA's), (Start: 11 @98231 has 2 MA's), (19, 98420), (22, 98492),

Gene: SrishMeg2525_183 Start: 98486, Stop: 98839, Start Num: 10

Candidate Starts for SrishMeg2525_183:

(5, 98387), (6, 98420), (Start: 10 @98486 has 53 MA's), (Start: 11 @98519 has 2 MA's), (19, 98708), (22, 98780),

Gene: StAugustine_127 Start: 80511, Stop: 80242, Start Num: 10

Candidate Starts for StAugustine_127:

(Start: 10 @80511 has 53 MA's), (14, 80418), (16, 80349), (20, 80268),

Gene: StubbySaigey_190 Start: 97732, Stop: 98085, Start Num: 10

Candidate Starts for StubbySaigey_190:

(5, 97633), (6, 97666), (Start: 10 @97732 has 53 MA's), (Start: 11 @97765 has 2 MA's), (19, 97954), (22, 98026),

Gene: Wally_186 Start: 97748, Stop: 98068, Start Num: 11

Candidate Starts for Wally_186:

(5, 97616), (6, 97649), (Start: 10 @97715 has 53 MA's), (Start: 11 @97748 has 2 MA's), (19, 97937), (22, 98009),

Gene: Willis_186 Start: 98146, Stop: 98499, Start Num: 10

Candidate Starts for Willis_186:

(5, 98047), (6, 98080), (Start: 10 @98146 has 53 MA's), (Start: 11 @98179 has 2 MA's), (19, 98368), (22, 98440),

Gene: YemiJoy2021_186 Start: 98902, Stop: 99255, Start Num: 10

Candidate Starts for YemiJoy2021_186:

(5, 98803), (6, 98836), (Start: 10 @98902 has 53 MA's), (Start: 11 @98935 has 2 MA's), (19, 99124), (22, 99196),

Gene: Yucca_186 Start: 98893, Stop: 99246, Start Num: 10

Candidate Starts for Yucca_186:

(5, 98794), (6, 98827), (Start: 10 @98893 has 53 MA's), (Start: 11 @98926 has 2 MA's), (19, 99115), (22, 99187),

Gene: YungMoney_81 Start: 56236, Stop: 56481, Start Num: 10

Candidate Starts for YungMoney_81:
(Start: 10 @56236 has 53 MA's), (21, 56473),

Gene: Zalkecks_185 Start: 97975, Stop: 98328, Start Num: 10
Candidate Starts for Zalkecks_185:
(5, 97876), (6, 97909), (Start: 10 @97975 has 53 MA's), (Start: 11 @98008 has 2 MA's), (19, 98197),
(22, 98269),

Gene: Zeenon_188 Start: 98545, Stop: 98898, Start Num: 10
Candidate Starts for Zeenon_188:
(5, 98446), (6, 98479), (Start: 10 @98545 has 53 MA's), (Start: 11 @98578 has 2 MA's), (19, 98767),
(22, 98839),

Gene: ZygoTaiga_182 Start: 99166, Stop: 99519, Start Num: 10
Candidate Starts for ZygoTaiga_182:
(5, 99067), (6, 99100), (Start: 10 @99166 has 53 MA's), (Start: 11 @99199 has 2 MA's), (19, 99388),
(22, 99460),