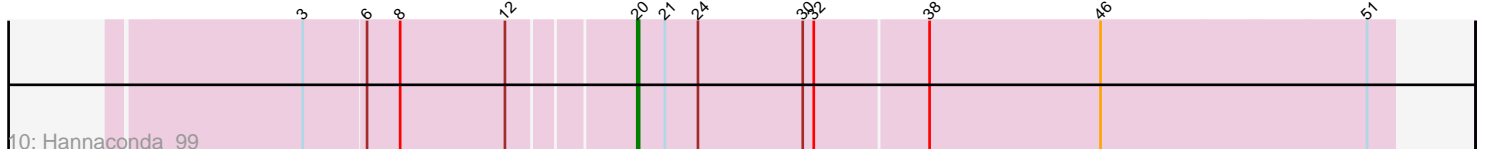
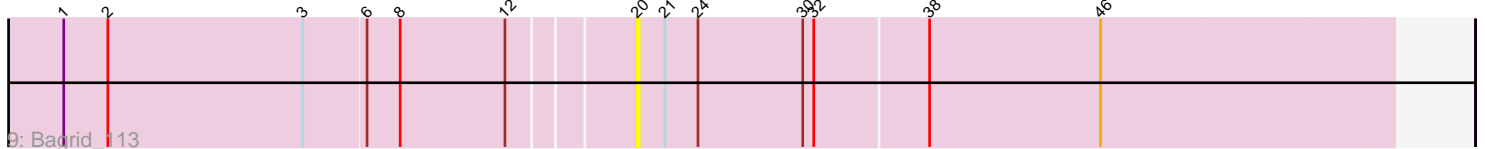
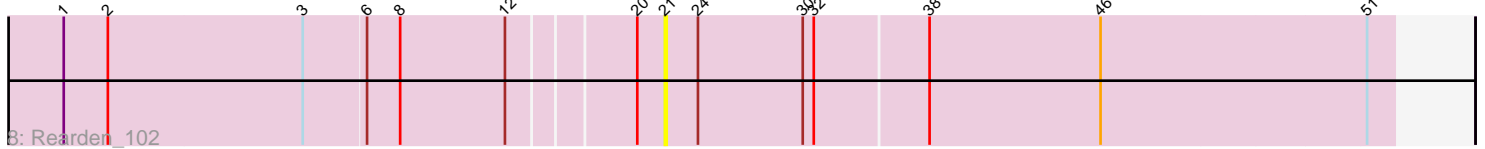
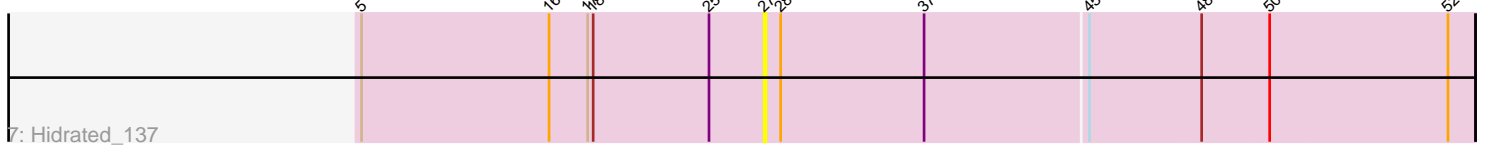
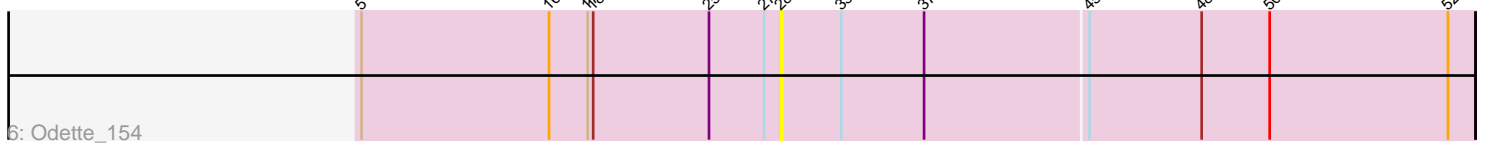
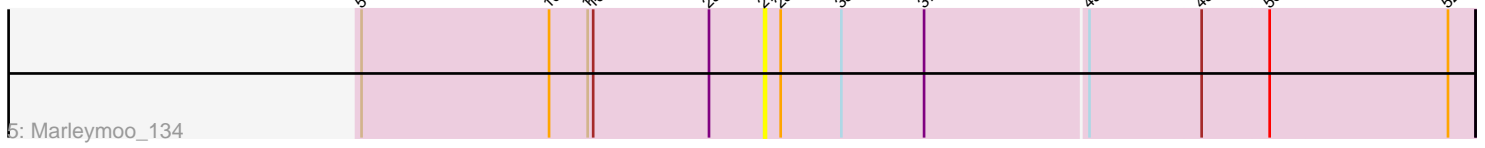
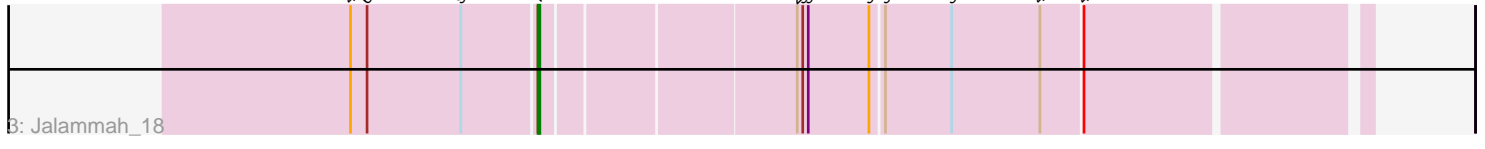
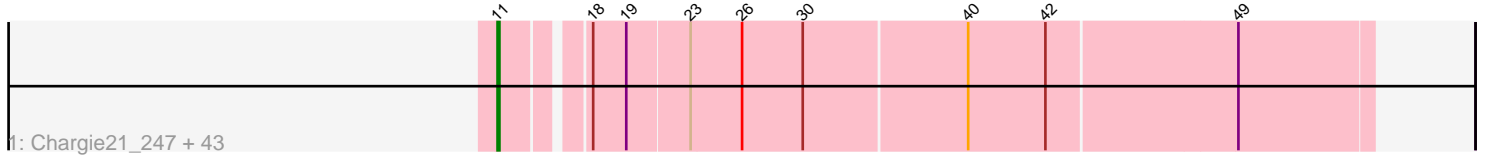


Pham 303420



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 303420 Report

This analysis was run 06/08/26 on database version 649.

Pham number 303420 has 54 members, 17 are drafts.

Phages represented in each track:

- Track 1 : Chargie21_247, Trinitium_246, JPickles_247, ZygoTaiga_246, Basquiat_247, Lee7_249, Erdmann_251, StubbySaigey_256, Darko_249, PurduePete_250, Bread_246, FudgeTart_245, Ablatia_249, Asterius_250, Gizmo_255, Bowman_247, PharkleMinkus_252, OrediggerDelux_245, Primadonna_244, BananaFence_247, McGee_251, Astraea_245, Janiyra_253, Fixie_249, Bonray_252, Cleatunium_242, Cactojaque_244, Blackbrain_248, Maby2021_250, BobaPhatt_241, SrishMeg2525_247, ErnieJ_243, Ading_252, Shrimp_252, Yucca_250, EmToTheThree_250, Teardrop_248, Issimir_243, TinyTim_248, Belieber_242, Salacia_251, Specks_254, Morizzled23_247, FoxtrotP1_248
- Track 2 : Demodog_256, Concombre_255
- Track 3 : Jalammah_18
- Track 4 : Thales_1
- Track 5 : Marleymoo_134
- Track 6 : Odette_154
- Track 7 : Hidrated_137
- Track 8 : Rearden_102
- Track 9 : Bagrid_113
- Track 10 : Hannaconda_99

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

The start number called the most often in the published annotations is 11, it was called in 35 of the 37 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Ablatia_249, Ading_252, Asterius_250, Astraea_245, BananaFence_247, Basquiat_247, Belieber_242, Blackbrain_248, BobaPhatt_241, Bonray_252, Bowman_247, Bread_246, Cactojaque_244, Chargie21_247, Cleatunium_242, Concombre_255, Darko_249, Demodog_256, EmToTheThree_250, Erdmann_251, ErnieJ_243, Fixie_249, FoxtrotP1_248, FudgeTart_245, Gizmo_255, Issimir_243, JPickles_247, Janiyra_253, Lee7_249, Maby2021_250, McGee_251, Morizzled23_247, OrediggerDelux_245, PharkleMinkus_252, Primadonna_244, PurduePete_250, Salacia_251, Shrimp_252, Specks_254, SrishMeg2525_247,

StubbySaigey_256, Teardrop_248, TinyTim_248, Trinitium_246, Yucca_250, ZygoTaiga_246,

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

-

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

• Bagrid_113, Hannaconda_99, Hidrated_137, Jalammah_18, Marleymoo_134, Odette_154, Rearden_102, Thales_1,

Summary by start number:

Start 10:

- Found in 1 of 54 (1.9%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Thales_1 (DQ),

Start 11:

- Found in 46 of 54 (85.2%) of genes in pham
- Manual Annotations of this start: 35 of 37
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ablatia_249 (C1), Ading_252 (C1), Asterius_250 (C1), Astraea_245 (C1), BananaFence_247 (C1), Basquiat_247 (C1), Belieber_242 (C1), Blackbrain_248 (C1), BobaPhatt_241 (C1), Bonray_252 (C1), Bowman_247 (C1), Bread_246 (C1), Cactojaque_244 (C1), Chargie21_247 (C1), Cleatunium_242 (C1), Concombre_255 (C1), Darko_249 (C1), Demodog_256 (C1), EmToTheThree_250 (C1), Erdmann_251 (C1), ErnieJ_243 (C1), Fixie_249 (C1), FoxtrotP1_248 (C1), FudgeTart_245 (C1), Gizmo_255 (C1), Issimir_243 (C1), JPickles_247 (C1), Janiyra_253 (C1), Lee7_249 (C1), Maby2021_250 (C1), McGee_251 (C1), Morizzled23_247 (C1), OrediggerDelux_245 (C1), PharkleMinkus_252 (C1), Primadonna_244 (C1), PurduePete_250 (C1), Salacia_251 (C1), Shrimp_252 (C1), Specks_254 (C1), SrishMeg2525_247 (C1), StubbySaigey_256 (C1), Teardrop_248 (C1), TinyTim_248 (C1), Trinitium_246 (C1), Yucca_250 (C1), ZygoTaiga_246 (C1),

Start 14:

- Found in 1 of 54 (1.9%) of genes in pham
- Manual Annotations of this start: 1 of 37
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Jalammah_18 (CV),

Start 20:

- Found in 3 of 54 (5.6%) of genes in pham
- Manual Annotations of this start: 1 of 37
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Bagrid_113 (J), Hannaconda_99 (J),

Start 21:

- Found in 3 of 54 (5.6%) of genes in pham
- No Manual Annotations of this start.
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Rearden_102 (J),

Start 27:

- Found in 3 of 54 (5.6%) of genes in pham
- No Manual Annotations of this start.
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Hidrated_137 (J), Marleymoo_134 (J),

Start 28:

- Found in 3 of 54 (5.6%) of genes in pham
- No Manual Annotations of this start.
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Odette_154 (J),

Summary by clusters:

There are 4 clusters represented in this pham: C1, J, CV, DQ,

Info for manual annotations of cluster C1:

- Start number 11 was manually annotated 35 times for cluster C1.

Info for manual annotations of cluster CV:

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

Info for manual annotations of cluster J:

- Start number 20 was manually annotated 1 time for cluster J.

Gene Information:

Gene: Ablatia_249 Start: 141923, Stop: 142372, Start Num: 11

Candidate Starts for Ablatia_249:

(Start: 11 @141923 has 35 MA's), (18, 141962), (19, 141980), (23, 142013), (26, 142040), (30, 142073), (40, 142160), (42, 142202), (49, 142301),

Gene: Ading_252 Start: 144356, Stop: 144805, Start Num: 11

Candidate Starts for Ading_252:

(Start: 11 @144356 has 35 MA's), (18, 144395), (19, 144413), (23, 144446), (26, 144473), (30, 144506), (40, 144593), (42, 144635), (49, 144734),

Gene: Asterius_250 Start: 142368, Stop: 142817, Start Num: 11

Candidate Starts for Asterius_250:

(Start: 11 @142368 has 35 MA's), (18, 142407), (19, 142425), (23, 142458), (26, 142485), (30, 142518), (40, 142605), (42, 142647), (49, 142746),

Gene: Astraea_245 Start: 141563, Stop: 142012, Start Num: 11

Candidate Starts for Astraea_245:

(Start: 11 @141563 has 35 MA's), (18, 141602), (19, 141620), (23, 141653), (26, 141680), (30, 141713), (40, 141800), (42, 141842), (49, 141941),

Gene: Bagrid_113 Start: 63671, Stop: 64075, Start Num: 20

Candidate Starts for Bagrid_113:

(1, 63371), (2, 63395), (3, 63500), (6, 63533), (8, 63551), (12, 63608), (Start: 20 @63671 has 1 MA's), (21, 63686), (24, 63704), (30, 63761), (32, 63767), (38, 63827), (46, 63920),

Gene: BananaFence_247 Start: 142192, Stop: 142641, Start Num: 11

Candidate Starts for BananaFence_247:

(Start: 11 @142192 has 35 MA's), (18, 142231), (19, 142249), (23, 142282), (26, 142309), (30, 142342), (40, 142429), (42, 142471), (49, 142570),

Gene: Basquiat_247 Start: 140478, Stop: 140927, Start Num: 11

Candidate Starts for Basquiat_247:

(Start: 11 @140478 has 35 MA's), (18, 140517), (19, 140535), (23, 140568), (26, 140595), (30, 140628), (40, 140715), (42, 140757), (49, 140856),

Gene: Belieber_242 Start: 140605, Stop: 141054, Start Num: 11

Candidate Starts for Belieber_242:

(Start: 11 @140605 has 35 MA's), (18, 140644), (19, 140662), (23, 140695), (26, 140722), (30, 140755), (40, 140842), (42, 140884), (49, 140983),

Gene: Blackbrain_248 Start: 142255, Stop: 142704, Start Num: 11

Candidate Starts for Blackbrain_248:

(Start: 11 @142255 has 35 MA's), (18, 142294), (19, 142312), (23, 142345), (26, 142372), (30, 142405), (40, 142492), (42, 142534), (49, 142633),

Gene: BobaPhatt_241 Start: 141373, Stop: 141822, Start Num: 11

Candidate Starts for BobaPhatt_241:

(Start: 11 @141373 has 35 MA's), (18, 141412), (19, 141430), (23, 141463), (26, 141490), (30, 141523), (40, 141610), (42, 141652), (49, 141751),

Gene: Bonray_252 Start: 144055, Stop: 144504, Start Num: 11

Candidate Starts for Bonray_252:

(Start: 11 @144055 has 35 MA's), (18, 144094), (19, 144112), (23, 144145), (26, 144172), (30, 144205), (40, 144292), (42, 144334), (49, 144433),

Gene: Bowman_247 Start: 143170, Stop: 143619, Start Num: 11

Candidate Starts for Bowman_247:

(Start: 11 @143170 has 35 MA's), (18, 143209), (19, 143227), (23, 143260), (26, 143287), (30, 143320), (40, 143407), (42, 143449), (49, 143548),

Gene: Bread_246 Start: 142022, Stop: 142471, Start Num: 11

Candidate Starts for Bread_246:

(Start: 11 @142022 has 35 MA's), (18, 142061), (19, 142079), (23, 142112), (26, 142139), (30, 142172), (40, 142259), (42, 142301), (49, 142400),

Gene: Cactojaque_244 Start: 141201, Stop: 141650, Start Num: 11

Candidate Starts for Cactojaque_244:

(Start: 11 @141201 has 35 MA's), (18, 141240), (19, 141258), (23, 141291), (26, 141318), (30, 141351), (40, 141438), (42, 141480), (49, 141579),

Gene: Chargie21_247 Start: 140478, Stop: 140927, Start Num: 11

Candidate Starts for Chargie21_247:

(Start: 11 @140478 has 35 MA's), (18, 140517), (19, 140535), (23, 140568), (26, 140595), (30, 140628), (40, 140715), (42, 140757), (49, 140856),

Gene: Cleatunium_242 Start: 141882, Stop: 142331, Start Num: 11
Candidate Starts for Cleatunium_242:
(Start: 11 @141882 has 35 MA's), (18, 141921), (19, 141939), (23, 141972), (26, 141999), (30, 142032), (40, 142119), (42, 142161), (49, 142260),

Gene: Concombres_255 Start: 144217, Stop: 144666, Start Num: 11
Candidate Starts for Concombres_255:
(Start: 11 @144217 has 35 MA's), (18, 144256), (19, 144274), (22, 144295), (23, 144307), (26, 144334), (30, 144367), (40, 144454),

Gene: Darko_249 Start: 142196, Stop: 142645, Start Num: 11
Candidate Starts for Darko_249:
(Start: 11 @142196 has 35 MA's), (18, 142235), (19, 142253), (23, 142286), (26, 142313), (30, 142346), (40, 142433), (42, 142475), (49, 142574),

Gene: Demodog_256 Start: 144227, Stop: 144676, Start Num: 11
Candidate Starts for Demodog_256:
(Start: 11 @144227 has 35 MA's), (18, 144266), (19, 144284), (22, 144305), (23, 144317), (26, 144344), (30, 144377), (40, 144464),

Gene: EmToTheThree_250 Start: 143104, Stop: 143553, Start Num: 11
Candidate Starts for EmToTheThree_250:
(Start: 11 @143104 has 35 MA's), (18, 143143), (19, 143161), (23, 143194), (26, 143221), (30, 143254), (40, 143341), (42, 143383), (49, 143482),

Gene: Erdmann_251 Start: 143072, Stop: 143521, Start Num: 11
Candidate Starts for Erdmann_251:
(Start: 11 @143072 has 35 MA's), (18, 143111), (19, 143129), (23, 143162), (26, 143189), (30, 143222), (40, 143309), (42, 143351), (49, 143450),

Gene: ErnieJ_243 Start: 139900, Stop: 140349, Start Num: 11
Candidate Starts for ErnieJ_243:
(Start: 11 @139900 has 35 MA's), (18, 139939), (19, 139957), (23, 139990), (26, 140017), (30, 140050), (40, 140137), (42, 140179), (49, 140278),

Gene: Fixie_249 Start: 143337, Stop: 143786, Start Num: 11
Candidate Starts for Fixie_249:
(Start: 11 @143337 has 35 MA's), (18, 143376), (19, 143394), (23, 143427), (26, 143454), (30, 143487), (40, 143574), (42, 143616), (49, 143715),

Gene: FoxtrotP1_248 Start: 143658, Stop: 144107, Start Num: 11
Candidate Starts for FoxtrotP1_248:
(Start: 11 @143658 has 35 MA's), (18, 143697), (19, 143715), (23, 143748), (26, 143775), (30, 143808), (40, 143895), (42, 143937), (49, 144036),

Gene: FudgeTart_245 Start: 142162, Stop: 142611, Start Num: 11
Candidate Starts for FudgeTart_245:
(Start: 11 @142162 has 35 MA's), (18, 142201), (19, 142219), (23, 142252), (26, 142279), (30, 142312), (40, 142399), (42, 142441), (49, 142540),

Gene: Gizmo_255 Start: 144989, Stop: 145438, Start Num: 11
Candidate Starts for Gizmo_255:

(Start: 11 @144989 has 35 MA's), (18, 145028), (19, 145046), (23, 145079), (26, 145106), (30, 145139), (40, 145226), (42, 145268), (49, 145367),

Gene: Hannaconda_99 Start: 57411, Stop: 57815, Start Num: 20

Candidate Starts for Hannaconda_99:

(3, 57240), (6, 57273), (8, 57291), (12, 57348), (Start: 20 @57411 has 1 MA's), (21, 57426), (24, 57444), (30, 57501), (32, 57507), (38, 57567), (46, 57660), (51, 57801),

Gene: Hidrated_137 Start: 78910, Stop: 79290, Start Num: 27

Candidate Starts for Hidrated_137:

(5, 78691), (16, 78793), (17, 78814), (18, 78817), (25, 78880), (27, 78910), (28, 78919), (37, 78997), (45, 79084), (48, 79144), (50, 79180), (52, 79276),

Gene: Issimir_243 Start: 142261, Stop: 142710, Start Num: 11

Candidate Starts for Issimir_243:

(Start: 11 @142261 has 35 MA's), (18, 142300), (19, 142318), (23, 142351), (26, 142378), (30, 142411), (40, 142498), (42, 142540), (49, 142639),

Gene: JPickles_247 Start: 141311, Stop: 141760, Start Num: 11

Candidate Starts for JPickles_247:

(Start: 11 @141311 has 35 MA's), (18, 141350), (19, 141368), (23, 141401), (26, 141428), (30, 141461), (40, 141548), (42, 141590), (49, 141689),

Gene: Jalammah_18 Start: 10634, Stop: 11050, Start Num: 14

Candidate Starts for Jalammah_18:

(4, 10535), (6, 10544), (9, 10595), (Start: 14 @10634 has 1 MA's), (29, 10763), (30, 10766), (31, 10769), (34, 10802), (35, 10808), (39, 10844), (41, 10892), (44, 10913),

Gene: Janiyra_253 Start: 142848, Stop: 143297, Start Num: 11

Candidate Starts for Janiyra_253:

(Start: 11 @142848 has 35 MA's), (18, 142887), (19, 142905), (23, 142938), (26, 142965), (30, 142998), (40, 143085), (42, 143127), (49, 143226),

Gene: Lee7_249 Start: 144611, Stop: 145060, Start Num: 11

Candidate Starts for Lee7_249:

(Start: 11 @144611 has 35 MA's), (18, 144650), (19, 144668), (23, 144701), (26, 144728), (30, 144761), (40, 144848), (42, 144890), (49, 144989),

Gene: Maby2021_250 Start: 143650, Stop: 144099, Start Num: 11

Candidate Starts for Maby2021_250:

(Start: 11 @143650 has 35 MA's), (18, 143689), (19, 143707), (23, 143740), (26, 143767), (30, 143800), (40, 143887), (42, 143929), (49, 144028),

Gene: Marleymoo_134 Start: 76219, Stop: 76599, Start Num: 27

Candidate Starts for Marleymoo_134:

(5, 76000), (16, 76102), (17, 76123), (18, 76126), (25, 76189), (27, 76219), (28, 76228), (33, 76261), (37, 76306), (45, 76393), (48, 76453), (50, 76489), (52, 76585),

Gene: McGee_251 Start: 142298, Stop: 142747, Start Num: 11

Candidate Starts for McGee_251:

(Start: 11 @142298 has 35 MA's), (18, 142337), (19, 142355), (23, 142388), (26, 142415), (30, 142448), (40, 142535), (42, 142577), (49, 142676),

Gene: Morizzled23_247 Start: 141326, Stop: 141775, Start Num: 11

Candidate Starts for Morizzled23_247:

(Start: 11 @141326 has 35 MA's), (18, 141365), (19, 141383), (23, 141416), (26, 141443), (30, 141476), (40, 141563), (42, 141605), (49, 141704),

Gene: Odette_154 Start: 81698, Stop: 82069, Start Num: 28

Candidate Starts for Odette_154:

(5, 81470), (16, 81572), (17, 81593), (18, 81596), (25, 81659), (27, 81689), (28, 81698), (33, 81731), (37, 81776), (45, 81863), (48, 81923), (50, 81959), (52, 82055),

Gene: OrediggerDelux_245 Start: 143615, Stop: 144064, Start Num: 11

Candidate Starts for OrediggerDelux_245:

(Start: 11 @143615 has 35 MA's), (18, 143654), (19, 143672), (23, 143705), (26, 143732), (30, 143765), (40, 143852), (42, 143894), (49, 143993),

Gene: PharkleMinkus_252 Start: 141563, Stop: 142012, Start Num: 11

Candidate Starts for PharkleMinkus_252:

(Start: 11 @141563 has 35 MA's), (18, 141602), (19, 141620), (23, 141653), (26, 141680), (30, 141713), (40, 141800), (42, 141842), (49, 141941),

Gene: Primadonna_244 Start: 142325, Stop: 142774, Start Num: 11

Candidate Starts for Primadonna_244:

(Start: 11 @142325 has 35 MA's), (18, 142364), (19, 142382), (23, 142415), (26, 142442), (30, 142475), (40, 142562), (42, 142604), (49, 142703),

Gene: PurduePete_250 Start: 143690, Stop: 144139, Start Num: 11

Candidate Starts for PurduePete_250:

(Start: 11 @143690 has 35 MA's), (18, 143729), (19, 143747), (23, 143780), (26, 143807), (30, 143840), (40, 143927), (42, 143969), (49, 144068),

Gene: Rearden_102 Start: 60176, Stop: 60565, Start Num: 21

Candidate Starts for Rearden_102:

(1, 59861), (2, 59885), (3, 59990), (6, 60023), (8, 60041), (12, 60098), (Start: 20 @60161 has 1 MA's), (21, 60176), (24, 60194), (30, 60251), (32, 60257), (38, 60317), (46, 60410), (51, 60551),

Gene: Salacia_251 Start: 144116, Stop: 144565, Start Num: 11

Candidate Starts for Salacia_251:

(Start: 11 @144116 has 35 MA's), (18, 144155), (19, 144173), (23, 144206), (26, 144233), (30, 144266), (40, 144353), (42, 144395), (49, 144494),

Gene: Shrimp_252 Start: 143727, Stop: 144176, Start Num: 11

Candidate Starts for Shrimp_252:

(Start: 11 @143727 has 35 MA's), (18, 143766), (19, 143784), (23, 143817), (26, 143844), (30, 143877), (40, 143964), (42, 144006), (49, 144105),

Gene: Specks_254 Start: 143067, Stop: 143516, Start Num: 11

Candidate Starts for Specks_254:

(Start: 11 @143067 has 35 MA's), (18, 143106), (19, 143124), (23, 143157), (26, 143184), (30, 143217), (40, 143304), (42, 143346), (49, 143445),

Gene: SrishMeg2525_247 Start: 143222, Stop: 143671, Start Num: 11

Candidate Starts for SrishMeg2525_247:

(Start: 11 @143222 has 35 MA's), (18, 143261), (19, 143279), (23, 143312), (26, 143339), (30, 143372), (40, 143459), (42, 143501), (49, 143600),

Gene: StubbySaigey_256 Start: 142752, Stop: 143201, Start Num: 11

Candidate Starts for StubbySaigey_256:

(Start: 11 @142752 has 35 MA's), (18, 142791), (19, 142809), (23, 142842), (26, 142869), (30, 142902), (40, 142989), (42, 143031), (49, 143130),

Gene: Teardrop_248 Start: 142079, Stop: 142528, Start Num: 11

Candidate Starts for Teardrop_248:

(Start: 11 @142079 has 35 MA's), (18, 142118), (19, 142136), (23, 142169), (26, 142196), (30, 142229), (40, 142316), (42, 142358), (49, 142457),

Gene: Thales_1 Start: 76, Stop: 522, Start Num: 10

Candidate Starts for Thales_1:

(4, 1), (7, 16), (10, 76), (13, 94), (15, 100), (24, 175), (25, 181), (30, 226), (36, 271), (40, 313), (41, 352), (43, 364), (47, 430),

Gene: TinyTim_248 Start: 142046, Stop: 142495, Start Num: 11

Candidate Starts for TinyTim_248:

(Start: 11 @142046 has 35 MA's), (18, 142085), (19, 142103), (23, 142136), (26, 142163), (30, 142196), (40, 142283), (42, 142325), (49, 142424),

Gene: Trinitium_246 Start: 140800, Stop: 141249, Start Num: 11

Candidate Starts for Trinitium_246:

(Start: 11 @140800 has 35 MA's), (18, 140839), (19, 140857), (23, 140890), (26, 140917), (30, 140950), (40, 141037), (42, 141079), (49, 141178),

Gene: Yucca_250 Start: 143605, Stop: 144054, Start Num: 11

Candidate Starts for Yucca_250:

(Start: 11 @143605 has 35 MA's), (18, 143644), (19, 143662), (23, 143695), (26, 143722), (30, 143755), (40, 143842), (42, 143884), (49, 143983),

Gene: ZygoTaiga_246 Start: 143902, Stop: 144351, Start Num: 11

Candidate Starts for ZygoTaiga_246:

(Start: 11 @143902 has 35 MA's), (18, 143941), (19, 143959), (23, 143992), (26, 144019), (30, 144052), (40, 144139), (42, 144181), (49, 144280),