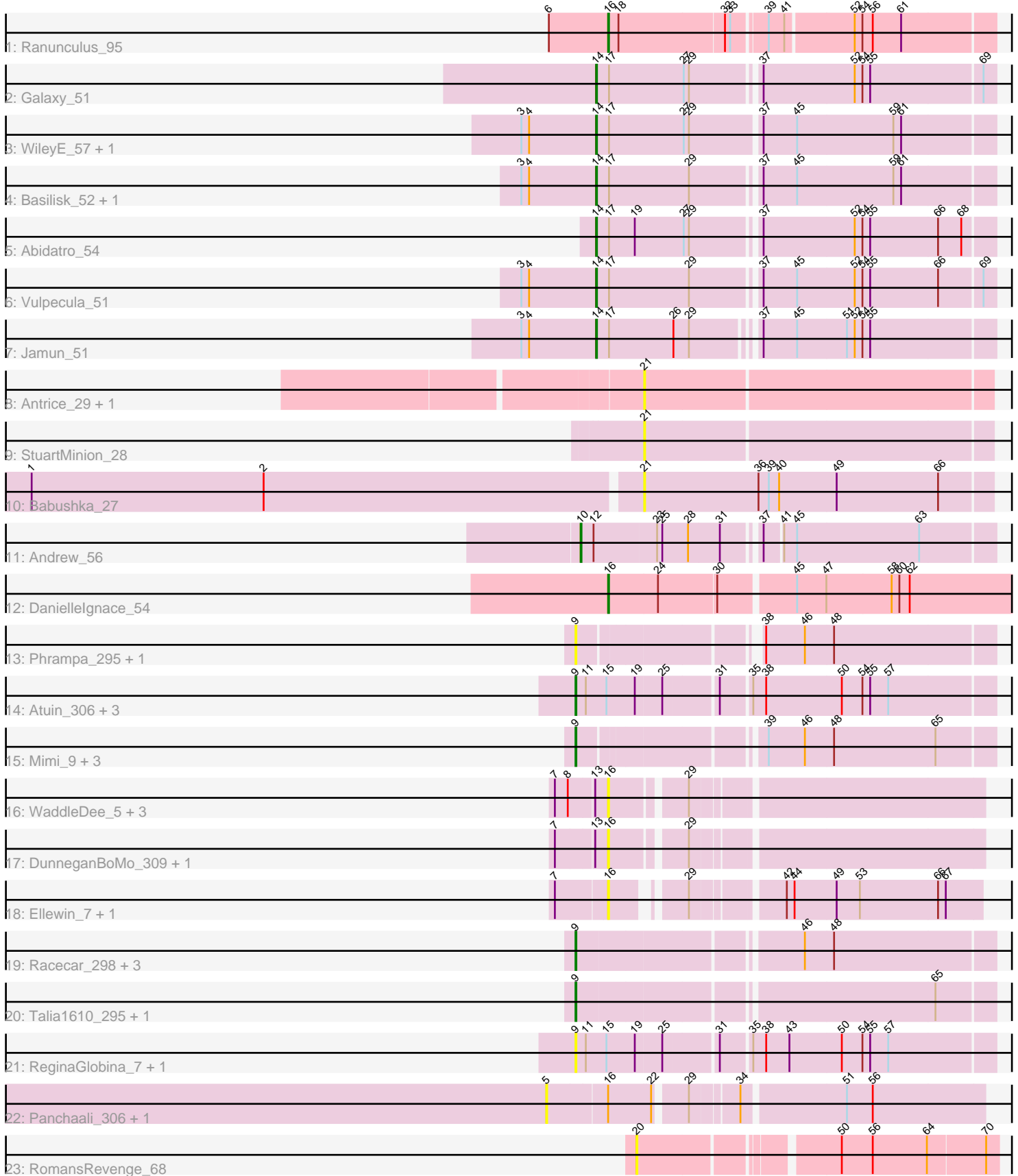


Pham 223234



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 223234 Report

This analysis was run 03/28/25 on database version 593.

Pham number 223234 has 44 members, 26 are drafts.

Phages represented in each track:

- Track 1 : Ranunculus_95
- Track 2 : Galaxy_51
- Track 3 : WileyE_57, Chickaboom_53
- Track 4 : Basilisk_52, Ruchi_51
- Track 5 : Abidatro_54
- Track 6 : Vulpecula_51
- Track 7 : Jamun_51
- Track 8 : Antrice_29, Cygnet_29
- Track 9 : StuartMinion_28
- Track 10 : Babushka_27
- Track 11 : Andrew_56
- Track 12 : DanielleIgnace_54
- Track 13 : Phrampa_295, Phrampa_10
- Track 14 : Atuin_306, Atuin_6, LeoJr_322, LeoJr_9
- Track 15 : Mimi_9, Patbob_9, Mimi_294, Patbob_299
- Track 16 : WaddleDee_5, KSunshine22_8, KSunshine22_300, WaddleDee_307
- Track 17 : DunneganBoMo_309, DunneganBoMo_6
- Track 18 : Ellewin_7, Ellewin_306
- Track 19 : Racecar_298, Bloom_296, Racecar_9, Bloom_9
- Track 20 : Talia1610_295, Talia1610_9
- Track 21 : ReginaGlobina_7, ReginaGlobina_318
- Track 22 : Panchaali_306, Panchaali_7
- Track 23 : RomansRevenge_68

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

The start number called the most often in the published annotations is 9, it was called in 8 of the 18 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Atuin_306, Atuin_6, Bloom_296, Bloom_9, LeoJr_322, LeoJr_9, Mimi_294, Mimi_9, Patbob_299, Patbob_9, Phrampa_10, Phrampa_295, Racecar_298, Racecar_9, ReginaGlobina_318, ReginaGlobina_7, Talia1610_295, Talia1610_9,

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

-

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

- Abidatro_54, Andrew_56, Antrice_29, Babushka_27, Basilisk_52, Chickaboom_53, Cygnet_29, DanielleIgnace_54, DunneganBoMo_309, DunneganBoMo_6, Ellewin_306, Ellewin_7, Galaxy_51, Jamun_51, KSunshine22_300, KSunshine22_8, Panchaali_306, Panchaali_7, Ranunculus_95, RomansRevenge_68, Ruchi_51, StuartMinion_28, Vulpecula_51, WaddleDee_307, WaddleDee_5, WileyE_57,

Summary by start number:

Start 5:

- Found in 2 of 44 (4.5%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Panchaali_306 (FC), Panchaali_7 (FC),

Start 9:

- Found in 18 of 44 (40.9%) of genes in pham
- Manual Annotations of this start: 8 of 18
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Atuin_306 (FC), Atuin_6 (FC), Bloom_296 (FC), Bloom_9 (FC), LeoJr_322 (FC), LeoJr_9 (FC), Mimi_294 (FC), Mimi_9 (FC), Patbob_299 (FC), Patbob_9 (FC), Phrampa_10 (FC), Phrampa_295 (FC), Racecar_298 (FC), Racecar_9 (FC), ReginaGlobina_318 (FC), ReginaGlobina_7 (FC), Talia1610_295 (FC), Talia1610_9 (FC),

Start 10:

- Found in 1 of 44 (2.3%) of genes in pham
- Manual Annotations of this start: 1 of 18
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Andrew_56 (AS3),

Start 14:

- Found in 8 of 44 (18.2%) of genes in pham
- Manual Annotations of this start: 7 of 18
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abidatro_54 (AS1), Basilisk_52 (AS1), Chickaboom_53 (AS1), Galaxy_51 (AS1), Jamun_51 (AS1), Ruchi_51 (AS1), Vulpecula_51 (AS1), WileyE_57 (AS1),

Start 16:

- Found in 12 of 44 (27.3%) of genes in pham
- Manual Annotations of this start: 2 of 18
- Called 83.3% of time when present
- Phage (with cluster) where this start called: DanielleIgnace_54 (AT), DunneganBoMo_309 (FC), DunneganBoMo_6 (FC), Ellewin_306 (FC), Ellewin_7 (FC), KSunshine22_300 (FC), KSunshine22_8 (FC), Ranunculus_95 (AP), WaddleDee_307 (FC), WaddleDee_5 (FC),

Start 20:

- Found in 1 of 44 (2.3%) of genes in pham

- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: RomansRevenge_68 (singleton),

Start 21:

- Found in 4 of 44 (9.1%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Antrice_29 (AS2), Babushka_27 (AS3), Cygnet_29 (AS2), StuartMinion_28 (AS3),

Summary by clusters:

There are 7 clusters represented in this pham: AS3, AS2, singleton, AS1, AP, FC, AT,

Info for manual annotations of cluster AP:

- Start number 16 was manually annotated 1 time for cluster AP.

Info for manual annotations of cluster AS1:

- Start number 14 was manually annotated 7 times for cluster AS1.

Info for manual annotations of cluster AS3:

- Start number 10 was manually annotated 1 time for cluster AS3.

Info for manual annotations of cluster AT:

- Start number 16 was manually annotated 1 time for cluster AT.

Info for manual annotations of cluster FC:

- Start number 9 was manually annotated 8 times for cluster FC.

Gene Information:

Gene: Abidatro_54 Start: 34175, Stop: 34618, Start Num: 14

Candidate Starts for Abidatro_54:

(Start: 14 @34175 has 7 MA's), (17, 34190), (19, 34220), (27, 34277), (29, 34283), (37, 34355), (52, 34460), (54, 34469), (55, 34478), (66, 34556), (68, 34583),

Gene: Andrew_56 Start: 33399, Stop: 33848, Start Num: 10

Candidate Starts for Andrew_56:

(Start: 10 @33399 has 1 MA's), (12, 33414), (23, 33486), (25, 33489), (28, 33519), (31, 33555), (37, 33591), (41, 33609), (45, 33624), (63, 33765),

Gene: Antrice_29 Start: 20135, Stop: 19743, Start Num: 21

Candidate Starts for Antrice_29:

(21, 20135),

Gene: Atuin_306 Start: 181029, Stop: 181493, Start Num: 9

Candidate Starts for Atuin_306:

(Start: 9 @181029 has 8 MA's), (11, 181041), (15, 181065), (19, 181098), (25, 181128), (31, 181185), (35, 181218), (38, 181233), (50, 181320), (54, 181344), (55, 181353), (57, 181374),

Gene: Atuin_6 Start: 4141, Stop: 4605, Start Num: 9

Candidate Starts for Atuin_6:

(Start: 9 @4141 has 8 MA's), (11, 4153), (15, 4177), (19, 4210), (25, 4240), (31, 4297), (35, 4330), (38, 4345), (50, 4432), (54, 4456), (55, 4465), (57, 4486),

Gene: Babushka_27 Start: 18964, Stop: 18566, Start Num: 21

Candidate Starts for Babushka_27:

(1, 19663), (2, 19393), (21, 18964), (36, 18832), (39, 18820), (40, 18808), (49, 18742), (66, 18625),

Gene: Basilisk_52 Start: 33395, Stop: 33838, Start Num: 14

Candidate Starts for Basilisk_52:

(3, 33308), (4, 33317), (Start: 14 @33395 has 7 MA's), (17, 33410), (29, 33503), (37, 33575), (45, 33614), (59, 33725), (61, 33734),

Gene: Bloom_296 Start: 178410, Stop: 178865, Start Num: 9

Candidate Starts for Bloom_296:

(Start: 9 @178410 has 8 MA's), (46, 178650), (48, 178683),

Gene: Bloom_9 Start: 4935, Stop: 5390, Start Num: 9

Candidate Starts for Bloom_9:

(Start: 9 @4935 has 8 MA's), (46, 5175), (48, 5208),

Gene: Chickaboom_53 Start: 33728, Stop: 34177, Start Num: 14

Candidate Starts for Chickaboom_53:

(3, 33641), (4, 33650), (Start: 14 @33728 has 7 MA's), (17, 33743), (27, 33830), (29, 33836), (37, 33914), (45, 33953), (59, 34064), (61, 34073),

Gene: Cygnet_29 Start: 20124, Stop: 19732, Start Num: 21

Candidate Starts for Cygnet_29:

(21, 20124),

Gene: DanielleIgnace_54 Start: 37055, Stop: 37522, Start Num: 16

Candidate Starts for DanielleIgnace_54:

(Start: 16 @37055 has 2 MA's), (24, 37112), (30, 37178), (45, 37259), (47, 37292), (58, 37367), (60, 37376), (62, 37388),

Gene: DunneganBoMo_309 Start: 182848, Stop: 183246, Start Num: 16

Candidate Starts for DunneganBoMo_309:

(7, 182791), (13, 182833), (Start: 16 @182848 has 2 MA's), (29, 182926),

Gene: DunneganBoMo_6 Start: 3436, Stop: 3834, Start Num: 16

Candidate Starts for DunneganBoMo_6:

(7, 3379), (13, 3421), (Start: 16 @3436 has 2 MA's), (29, 3514),

Gene: Ellewin_7 Start: 3366, Stop: 3749, Start Num: 16

Candidate Starts for Ellewin_7:

(7, 3309), (Start: 16 @3366 has 2 MA's), (29, 3432), (42, 3525), (44, 3534), (49, 3582), (53, 3609), (66, 3699), (67, 3708),

Gene: Ellewin_306 Start: 182480, Stop: 182863, Start Num: 16

Candidate Starts for Ellewin_306:

(7, 182423), (Start: 16 @182480 has 2 MA's), (29, 182546), (42, 182639), (44, 182648), (49, 182696), (53, 182723), (66, 182813), (67, 182822),

Gene: Galaxy_51 Start: 32590, Stop: 33033, Start Num: 14

Candidate Starts for Galaxy_51:

(Start: 14 @32590 has 7 MA's), (17, 32605), (27, 32692), (29, 32698), (37, 32770), (52, 32875), (54, 32884), (55, 32893), (69, 33019),

Gene: Jamun_51 Start: 33828, Stop: 34265, Start Num: 14

Candidate Starts for Jamun_51:

(3, 33741), (4, 33750), (Start: 14 @33828 has 7 MA's), (17, 33843), (26, 33918), (29, 33936), (37, 34002), (45, 34041), (51, 34098), (52, 34107), (54, 34116), (55, 34125),

Gene: KSunshine22_8 Start: 4026, Stop: 4424, Start Num: 16

Candidate Starts for KSunshine22_8:

(7, 3969), (8, 3984), (13, 4011), (Start: 16 @4026 has 2 MA's), (29, 4104),

Gene: KSunshine22_300 Start: 180927, Stop: 181325, Start Num: 16

Candidate Starts for KSunshine22_300:

(7, 180870), (8, 180885), (13, 180912), (Start: 16 @180927 has 2 MA's), (29, 181005),

Gene: LeoJr_322 Start: 181598, Stop: 182062, Start Num: 9

Candidate Starts for LeoJr_322:

(Start: 9 @181598 has 8 MA's), (11, 181610), (15, 181634), (19, 181667), (25, 181697), (31, 181754), (35, 181787), (38, 181802), (50, 181889), (54, 181913), (55, 181922), (57, 181943),

Gene: LeoJr_9 Start: 4295, Stop: 4759, Start Num: 9

Candidate Starts for LeoJr_9:

(Start: 9 @4295 has 8 MA's), (11, 4307), (15, 4331), (19, 4364), (25, 4394), (31, 4451), (35, 4484), (38, 4499), (50, 4586), (54, 4610), (55, 4619), (57, 4640),

Gene: Mimi_9 Start: 4877, Stop: 5323, Start Num: 9

Candidate Starts for Mimi_9:

(Start: 9 @4877 has 8 MA's), (39, 5066), (46, 5108), (48, 5141), (65, 5258),

Gene: Mimi_294 Start: 177537, Stop: 177983, Start Num: 9

Candidate Starts for Mimi_294:

(Start: 9 @177537 has 8 MA's), (39, 177726), (46, 177768), (48, 177801), (65, 177918),

Gene: Panchaali_306 Start: 182503, Stop: 182970, Start Num: 5

Candidate Starts for Panchaali_306:

(5, 182503), (Start: 16 @182569 has 2 MA's), (22, 182617), (29, 182650), (34, 182701), (51, 182812), (56, 182842),

Gene: Panchaali_7 Start: 3445, Stop: 3912, Start Num: 5

Candidate Starts for Panchaali_7:

(5, 3445), (Start: 16 @3511 has 2 MA's), (22, 3559), (29, 3592), (34, 3643), (51, 3754), (56, 3784),

Gene: Patbob_9 Start: 5127, Stop: 5579, Start Num: 9

Candidate Starts for Patbob_9:

(Start: 9 @5127 has 8 MA's), (39, 5322), (46, 5364), (48, 5397), (65, 5514),

Gene: Patbob_299 Start: 180586, Stop: 181038, Start Num: 9

Candidate Starts for Patbob_299:

(Start: 9 @180586 has 8 MA's), (39, 180781), (46, 180823), (48, 180856), (65, 180973),

Gene: Phrampa_295 Start: 181581, Stop: 182024, Start Num: 9

Candidate Starts for Phrampa_295:

(Start: 9 @181581 has 8 MA's), (38, 181764), (46, 181809), (48, 181842),

Gene: Phrampa_10 Start: 5210, Stop: 5653, Start Num: 9

Candidate Starts for Phrampa_10:

(Start: 9 @5210 has 8 MA's), (38, 5393), (46, 5438), (48, 5471),

Gene: Racecar_298 Start: 178644, Stop: 179099, Start Num: 9

Candidate Starts for Racecar_298:

(Start: 9 @178644 has 8 MA's), (46, 178884), (48, 178917),

Gene: Racecar_9 Start: 4935, Stop: 5390, Start Num: 9

Candidate Starts for Racecar_9:

(Start: 9 @4935 has 8 MA's), (46, 5175), (48, 5208),

Gene: Ranunculus_95 Start: 63522, Stop: 63097, Start Num: 16

Candidate Starts for Ranunculus_95:

(6, 63591), (Start: 16 @63522 has 2 MA's), (18, 63510), (32, 63390), (33, 63384), (39, 63348), (41, 63330), (52, 63255), (54, 63246), (56, 63234), (61, 63201),

Gene: ReginaGlobina_7 Start: 4147, Stop: 4611, Start Num: 9

Candidate Starts for ReginaGlobina_7:

(Start: 9 @4147 has 8 MA's), (11, 4159), (15, 4183), (19, 4216), (25, 4246), (31, 4303), (35, 4336), (38, 4351), (43, 4378), (50, 4438), (54, 4462), (55, 4471), (57, 4492),

Gene: ReginaGlobina_318 Start: 181594, Stop: 182058, Start Num: 9

Candidate Starts for ReginaGlobina_318:

(Start: 9 @181594 has 8 MA's), (11, 181606), (15, 181630), (19, 181663), (25, 181693), (31, 181750), (35, 181783), (38, 181798), (43, 181825), (50, 181885), (54, 181909), (55, 181918), (57, 181939),

Gene: RomansRevenge_68 Start: 47203, Stop: 46820, Start Num: 20

Candidate Starts for RomansRevenge_68:

(20, 47203), (50, 46996), (56, 46960), (64, 46897), (70, 46834),

Gene: Ruchi_51 Start: 33317, Stop: 33760, Start Num: 14

Candidate Starts for Ruchi_51:

(3, 33230), (4, 33239), (Start: 14 @33317 has 7 MA's), (17, 33332), (29, 33425), (37, 33497), (45, 33536), (59, 33647), (61, 33656),

Gene: StuartMinion_28 Start: 18898, Stop: 18506, Start Num: 21

Candidate Starts for StuartMinion_28:

(21, 18898),

Gene: Talia1610_295 Start: 179358, Stop: 179813, Start Num: 9

Candidate Starts for Talia1610_295:

(Start: 9 @179358 has 8 MA's), (65, 179748),

Gene: Talia1610_9 Start: 4886, Stop: 5341, Start Num: 9

Candidate Starts for Talia1610_9:

(Start: 9 @4886 has 8 MA's), (65, 5276),

Gene: Vulpecula_51 Start: 32977, Stop: 33420, Start Num: 14

Candidate Starts for Vulpecula_51:

(3, 32890), (4, 32899), (Start: 14 @32977 has 7 MA's), (17, 32992), (29, 33085), (37, 33157), (45, 33196), (52, 33262), (54, 33271), (55, 33280), (66, 33358), (69, 33406),

Gene: WaddleDee_5 Start: 3436, Stop: 3834, Start Num: 16

Candidate Starts for WaddleDee_5:

(7, 3379), (8, 3394), (13, 3421), (Start: 16 @3436 has 2 MA's), (29, 3514),

Gene: WaddleDee_307 Start: 181631, Stop: 182029, Start Num: 16

Candidate Starts for WaddleDee_307:

(7, 181574), (8, 181589), (13, 181616), (Start: 16 @181631 has 2 MA's), (29, 181709),

Gene: WileyE_57 Start: 33728, Stop: 34177, Start Num: 14

Candidate Starts for WileyE_57:

(3, 33641), (4, 33650), (Start: 14 @33728 has 7 MA's), (17, 33743), (27, 33830), (29, 33836), (37, 33914), (45, 33953), (59, 34064), (61, 34073),