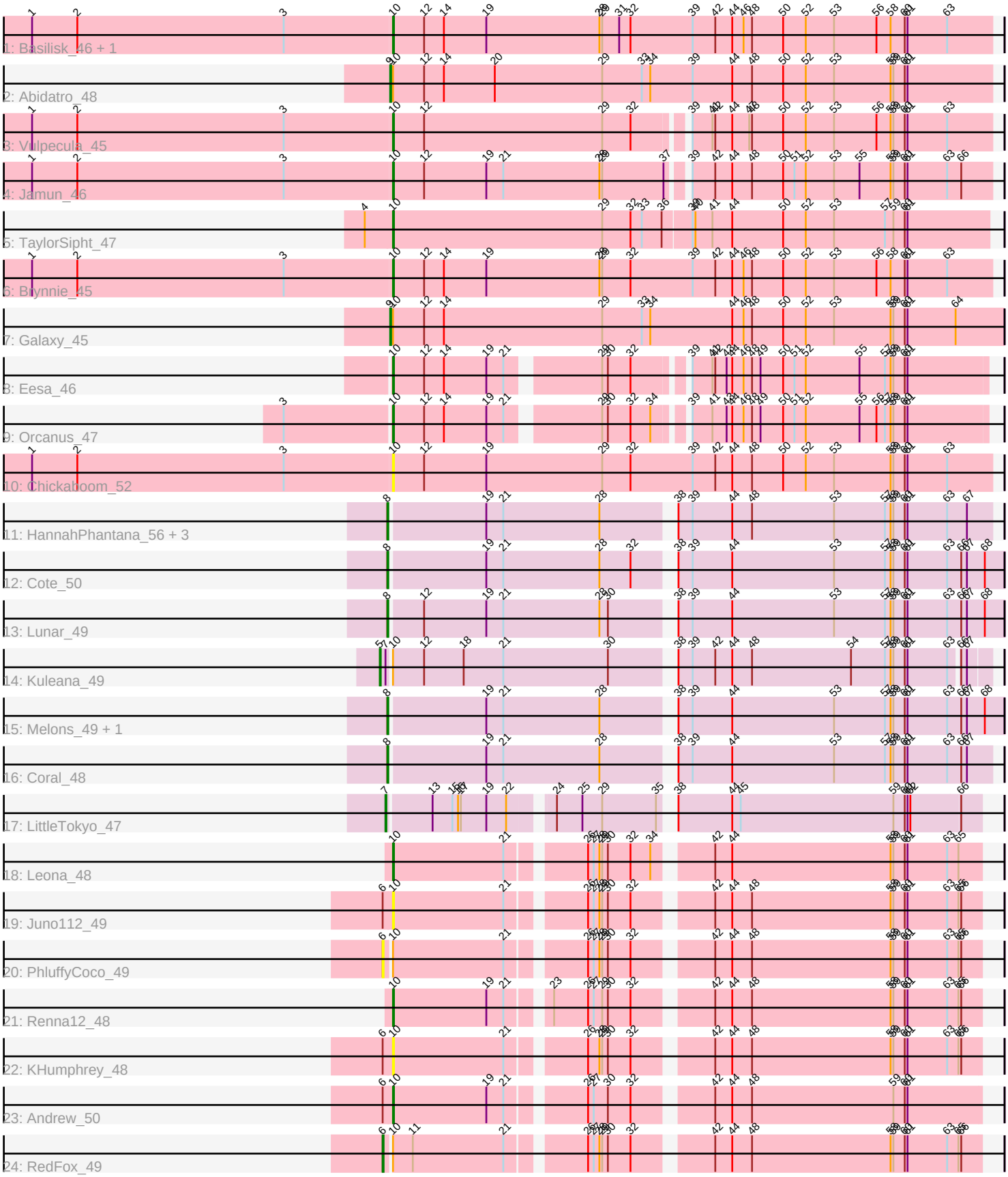
Pham 3375


1: Basilisk_46 + 1
2: Abidatro_48
3: Vulpecula_45
4: Jamun_46
5: TaylorSipht_47
6: Brynnie_45
7: Galaxy_45
8: Eesa_46
9: Orcanus_47
10: Chickaboom_52
11: HannahPhantana_56 + 3
12: Cote_50
13: Lunar_49
14: Kuleana_49
15: Melons_49 + 1
16: Coral_48
17: LittleTokyo_47
18: Leona_48
19: Juno112_49
20: PhluffyCoco_49
21: Renna12_48
22: KHumphrey_48
23: Andrew_50
24: RedFox_49

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 3375 Report

This analysis was run 04/28/24 on database version 559.

Pham number 3375 has 29 members, 5 are drafts.

Phages represented in each track:
• Track 1 : Basilisk_46, Ruchi_45
• Track 2 : Abidatro_48
• Track 3 : Vulpecula_45
• Track 4 : Jamun_46
• Track 5 : TaylorSipht_47
• Track 6 : Brynnie_45
• Track 7 : Galaxy_45
• Track 8 : Eesa_46
• Track 9 : Orcanus_47
• Track 10 : Chickaboom_52
• Track 11 : HannahPhantana_56, Kepler_49, Amelia_48, Polka_48
• Track 12 : Cote_50
• Track 13 : Lunar_49
• Track 14 : Kuleana_49
• Track 15 : Melons_49, Daob_50
• Track 16 : Coral_48
• Track 17 : LittleTokyo_47
• Track 18 : Leona_48
• Track 19 : Juno112_49
• Track 20 : PhluffyCoco_49
• Track 21 : Renna12_48
• Track 22 : KHumphrey_48
• Track 23 : Andrew_50
• Track 24 : RedFox_49

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 11 of the 24 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Andrew_50, Basilisk_46, Brynnie_45, Chickaboom_52, Eesa_46, Jamun_46, Juno112_49, KHumphrey_48, Leona_48, Orcanus_47, Renna12_48, Ruchi_45, TaylorSipht_47, Vulpecula_45,

Genes that have the "Most Annotated" start but do not call it:
• Abidatro_48, Galaxy_45, Kuleana_49, PhluffyCoco_49, RedFox_49,

Genes that do not have the "Most Annotated" start:
• Amelia_48, Coral_48, Cote_50, Daob_50, HannahPhantana_56, Kepler_49, LittleTokyo_47, Lunar_49, Melons_49, Polka_48,

Summary by start number:

Start 5:
• Found in 1 of 29 (3.4%) of genes in pham
• Manual Annotations of this start: 1 of 24
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Kuleana_49 (AS2),

Start 6:
• Found in 5 of 29 (17.2%) of genes in pham
• Manual Annotations of this start: 1 of 24
• Called 40.0% of time when present
• Phage (with cluster) where this start called: PhluffyCoco_49 (AS3), RedFox_49 (AS3),

Start 7:
• Found in 2 of 29 (6.9%) of genes in pham
• Manual Annotations of this start: 1 of 24
• Called 50.0% of time when present
• Phage (with cluster) where this start called: LittleTokyo_47 (AS2),

Start 8:
• Found in 9 of 29 (31.0%) of genes in pham
• Manual Annotations of this start: 8 of 24
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Amelia_48 (AS2), Coral_48 (AS2), Cote_50 (AS2), Daob_50 (AS2), HannahPhantana_56 (AS2), Kepler_49 (AS2), Lunar_49 (AS2), Melons_49 (AS2), Polka_48 (AS2),

Start 9:
• Found in 2 of 29 (6.9%) of genes in pham
• Manual Annotations of this start: 2 of 24
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Abidatro_48 (AS1), Galaxy_45 (AS1),

Start 10:
• Found in 19 of 29 (65.5%) of genes in pham
• Manual Annotations of this start: 11 of 24
• Called 73.7% of time when present
• Phage (with cluster) where this start called: Andrew_50 (AS3), Basilisk_46 (AS1), Brynnie_45 (AS1), Chickaboom_52 (AS1), Eesa_46 (AS1), Jamun_46 (AS1), Juno112_49 (AS3), KHumphrey_48 (AS3), Leona_48 (AS3), Orcanus_47 (AS1), Renna12_48 (AS3), Ruchi_45 (AS1), TaylorSipht_47 (AS1), Vulpecula_45 (AS1),

Summary by clusters:

There are 3 clusters represented in this pham: AS3, AS2, AS1,

Info for manual annotations of cluster AS1:
•Start number 9 was manually annotated 2 times for cluster AS1.
•Start number 10 was manually annotated 8 times for cluster AS1.

Info for manual annotations of cluster AS2:
•Start number 5 was manually annotated 1 time for cluster AS2.
•Start number 7 was manually annotated 1 time for cluster AS2.
•Start number 8 was manually annotated 8 times for cluster AS2.

Info for manual annotations of cluster AS3:
•Start number 6 was manually annotated 1 time for cluster AS3.
•Start number 10 was manually annotated 3 times for cluster AS3.

Gene Information:

Gene: Abidatro_48 Start: 32041, Stop: 32679, Start Num: 9
Candidate Starts for Abidatro_48:
(Start: 9 @32041 has 2 MA's), (Start: 10 @32044 has 11 MA's), (12, 32077), (14, 32098), (20, 32152), (29, 32266), (33, 32308), (34, 32317), (39, 32362), (44, 32404), (48, 32425), (50, 32458), (52, 32482), (53, 32512), (58, 32572), (59, 32575), (60, 32587), (61, 32590),

Gene: Amelia_48 Start: 31044, Stop: 31661, Start Num: 8
Candidate Starts for Amelia_48:
(Start: 8 @31044 has 8 MA's), (19, 31143), (21, 31161), (28, 31263), (38, 31329), (39, 31344), (44, 31386), (48, 31407), (53, 31494), (57, 31548), (58, 31554), (59, 31557), (60, 31569), (61, 31572), (63, 31614), (67, 31635),

Gene: Andrew_50 Start: 31328, Stop: 31915, Start Num: 10
Candidate Starts for Andrew_50:
(Start: 6 @31322 has 1 MA's), (Start: 10 @31328 has 11 MA's), (19, 31427), (21, 31445), (26, 31517), (27, 31523), (30, 31538), (32, 31562), (42, 31634), (44, 31652), (48, 31673), (59, 31823), (60, 31835), (61, 31838),

Gene: Basilisk_46 Start: 31242, Stop: 31877, Start Num: 10
Candidate Starts for Basilisk_46:
(1, 30861), (2, 30909), (3, 31128), (Start: 10 @31242 has 11 MA's), (12, 31275), (14, 31296), (19, 31341), (28, 31461), (29, 31464), (31, 31482), (32, 31494), (39, 31560), (42, 31584), (44, 31602), (46, 31614), (48, 31623), (50, 31656), (52, 31680), (53, 31710), (56, 31755), (58, 31770), (60, 31785), (61, 31788), (63, 31830),

Gene: Brynnie_45 Start: 31099, Stop: 31734, Start Num: 10
Candidate Starts for Brynnie_45:
(1, 30718), (2, 30766), (3, 30985), (Start: 10 @31099 has 11 MA's), (12, 31132), (14, 31153), (19, 31198), (28, 31318), (29, 31321), (32, 31351), (39, 31417), (42, 31441), (44, 31459), (46, 31471), (48, 31480), (50, 31513), (52, 31537), (53, 31567), (56, 31612), (58, 31627), (60, 31642), (61, 31645), (63, 31687),

Gene: Chickaboom_52 Start: 31826, Stop: 32461, Start Num: 10

Candidate Starts for Chickaboom_52:
(1, 31445), (2, 31493), (3, 31712), (Start: 10 @31826 has 11 MA's), (12, 31859), (19, 31925), (29, 32048), (32, 32078), (39, 32144), (42, 32168), (44, 32186), (48, 32207), (50, 32240), (52, 32264), (53, 32294), (58, 32354), (59, 32357), (60, 32369), (61, 32372), (63, 32414),

Gene: Coral_48 Start: 30912, Stop: 31529, Start Num: 8
Candidate Starts for Coral_48:
(Start: 8 @30912 has 8 MA's), (19, 31011), (21, 31029), (28, 31131), (38, 31197), (39, 31212), (44, 31254), (53, 31362), (57, 31416), (58, 31422), (59, 31425), (60, 31437), (61, 31440), (63, 31482), (66, 31497), (67, 31503),

Gene: Cote_50 Start: 31386, Stop: 32015, Start Num: 8
Candidate Starts for Cote_50:
(Start: 8 @31386 has 8 MA's), (19, 31485), (21, 31503), (28, 31605), (32, 31638), (38, 31671), (39, 31686), (44, 31728), (53, 31836), (57, 31890), (58, 31896), (59, 31899), (60, 31911), (61, 31914), (63, 31956), (66, 31971), (67, 31977), (68, 31995),

Gene: Daob_50 Start: 31397, Stop: 32026, Start Num: 8
Candidate Starts for Daob_50:
(Start: 8 @31397 has 8 MA's), (19, 31496), (21, 31514), (28, 31616), (38, 31682), (39, 31697), (44, 31739), (53, 31847), (57, 31901), (58, 31907), (59, 31910), (60, 31922), (61, 31925), (63, 31967), (66, 31982), (67, 31988), (68, 32006),

Gene: Eesa_46 Start: 32689, Stop: 33282, Start Num: 10
Candidate Starts for Eesa_46:
(Start: 10 @32689 has 11 MA's), (12, 32722), (14, 32743), (19, 32788), (21, 32806), (29, 32893), (30, 32899), (32, 32923), (39, 32971), (41, 32992), (42, 32995), (43, 33007), (44, 33013), (46, 33025), (48, 33034), (49, 33043), (50, 33067), (51, 33079), (52, 33091), (55, 33148), (57, 33175), (58, 33181), (59, 33184), (60, 33196), (61, 33199),

Gene: Galaxy_45 Start: 30461, Stop: 31111, Start Num: 9
Candidate Starts for Galaxy_45:
(Start: 9 @30461 has 2 MA's), (Start: 10 @30464 has 11 MA's), (12, 30497), (14, 30518), (29, 30686), (33, 30728), (34, 30737), (44, 30824), (46, 30836), (48, 30845), (50, 30878), (52, 30902), (53, 30932), (58, 30992), (59, 30995), (60, 31007), (61, 31010), (64, 31061),

Gene: HannahPhantana_56 Start: 31039, Stop: 31656, Start Num: 8
Candidate Starts for HannahPhantana_56:
(Start: 8 @31039 has 8 MA's), (19, 31138), (21, 31156), (28, 31258), (38, 31324), (39, 31339), (44, 31381), (48, 31402), (53, 31489), (57, 31543), (58, 31549), (59, 31552), (60, 31564), (61, 31567), (63, 31609), (67, 31630),

Gene: Jamun_46 Start: 31983, Stop: 32600, Start Num: 10
Candidate Starts for Jamun_46:
(1, 31602), (2, 31650), (3, 31869), (Start: 10 @31983 has 11 MA's), (12, 32016), (19, 32082), (21, 32100), (28, 32202), (29, 32205), (37, 32268), (39, 32283), (42, 32307), (44, 32325), (48, 32346), (50, 32379), (51, 32391), (52, 32403), (53, 32433), (55, 32460), (58, 32493), (59, 32496), (60, 32508), (61, 32511), (63, 32553), (66, 32568),

Gene: Juno112_49 Start: 31453, Stop: 32037, Start Num: 10
Candidate Starts for Juno112_49:
(Start: 6 @31447 has 1 MA's), (Start: 10 @31453 has 11 MA's), (21, 31570), (26, 31642), (27, 31648), (28, 31654), (29, 31657), (30, 31663), (32, 31687), (42, 31759), (44, 31777), (48, 31798), (58, 31945),

(59, 31948), (60, 31960), (61, 31963), (63, 32005), (65, 32014), (66, 32017),

Gene: KHumphrey_48 Start: 31341, Stop: 31925, Start Num: 10
Candidate Starts for KHumphrey_48:
(Start: 6 @31335 has 1 MA's), (Start: 10 @31341 has 11 MA's), (21, 31458), (26, 31530), (28, 31542), (29, 31545), (30, 31551), (32, 31575), (42, 31647), (44, 31665), (48, 31686), (58, 31833), (59, 31836), (60, 31848), (61, 31851), (63, 31893), (65, 31902), (66, 31905),

Gene: Kepler_49 Start: 31160, Stop: 31777, Start Num: 8
Candidate Starts for Kepler_49:
(Start: 8 @31160 has 8 MA's), (19, 31259), (21, 31277), (28, 31379), (38, 31445), (39, 31460), (44, 31502), (48, 31523), (53, 31610), (57, 31664), (58, 31670), (59, 31673), (60, 31685), (61, 31688), (63, 31730), (67, 31751),

Gene: Kuleana_49 Start: 30719, Stop: 31336, Start Num: 5
Candidate Starts for Kuleana_49:
(Start: 5 @30719 has 1 MA's), (Start: 7 @30725 has 1 MA's), (Start: 10 @30728 has 11 MA's), (12, 30761), (18, 30803), (21, 30845), (30, 30956), (38, 31013), (39, 31028), (42, 31052), (44, 31070), (48, 31091), (54, 31196), (57, 31232), (58, 31238), (59, 31241), (60, 31253), (61, 31256), (63, 31298), (66, 31307), (67, 31313),

Gene: Leona_48 Start: 31530, Stop: 32114, Start Num: 10
Candidate Starts for Leona_48:
(Start: 10 @31530 has 11 MA's), (21, 31647), (26, 31719), (27, 31725), (28, 31731), (29, 31734), (30, 31740), (32, 31764), (34, 31785), (42, 31836), (44, 31854), (58, 32022), (59, 32025), (60, 32037), (61, 32040), (63, 32082), (65, 32091),

Gene: LittleTokyo_47 Start: 30147, Stop: 30734, Start Num: 7
Candidate Starts for LittleTokyo_47:
(Start: 7 @30147 has 1 MA's), (13, 30192), (15, 30213), (16, 30219), (17, 30222), (19, 30249), (22, 30270), (24, 30306), (25, 30333), (29, 30354), (35, 30411), (38, 30417), (44, 30474), (45, 30483), (59, 30645), (60, 30657), (61, 30660), (62, 30663), (66, 30714),

Gene: Lunar_49 Start: 31076, Stop: 31705, Start Num: 8
Candidate Starts for Lunar_49:
(Start: 8 @31076 has 8 MA's), (12, 31109), (19, 31175), (21, 31193), (28, 31295), (30, 31304), (38, 31361), (39, 31376), (44, 31418), (53, 31526), (57, 31580), (58, 31586), (59, 31589), (60, 31601), (61, 31604), (63, 31646), (66, 31661), (67, 31667), (68, 31685),

Gene: Melons_49 Start: 30890, Stop: 31519, Start Num: 8
Candidate Starts for Melons_49:
(Start: 8 @30890 has 8 MA's), (19, 30989), (21, 31007), (28, 31109), (38, 31175), (39, 31190), (44, 31232), (53, 31340), (57, 31394), (58, 31400), (59, 31403), (60, 31415), (61, 31418), (63, 31460), (66, 31475), (67, 31481), (68, 31499),

Gene: Orcanus_47 Start: 32348, Stop: 32941, Start Num: 10
Candidate Starts for Orcanus_47:
(3, 32237), (Start: 10 @32348 has 11 MA's), (12, 32381), (14, 32402), (19, 32447), (21, 32465), (29, 32552), (30, 32558), (32, 32582), (34, 32603), (39, 32630), (41, 32651), (43, 32666), (44, 32672), (46, 32684), (48, 32693), (49, 32702), (50, 32726), (51, 32738), (52, 32750), (55, 32807), (56, 32825), (57, 32834), (58, 32840), (59, 32843), (60, 32855), (61, 32858),

Gene: PhluffyCoco_49 Start: 31545, Stop: 32135, Start Num: 6

Candidate Starts for PhluffyCoco_49:
(Start: 6 @31545 has 1 MA's), (Start: 10 @31551 has 11 MA's), (21, 31668), (26, 31740), (27, 31746), (28, 31752), (29, 31755), (30, 31761), (32, 31785), (42, 31857), (44, 31875), (48, 31896), (58, 32043), (59, 32046), (60, 32058), (61, 32061), (63, 32103), (65, 32112), (66, 32115),

Gene: Polka_48 Start: 30893, Stop: 31510, Start Num: 8
Candidate Starts for Polka_48:
(Start: 8 @30893 has 8 MA's), (19, 30992), (21, 31010), (28, 31112), (38, 31178), (39, 31193), (44, 31235), (48, 31256), (53, 31343), (57, 31397), (58, 31403), (59, 31406), (60, 31418), (61, 31421), (63, 31463), (67, 31484),

Gene: RedFox_49 Start: 31544, Stop: 32134, Start Num: 6
Candidate Starts for RedFox_49:
(Start: 6 @31544 has 1 MA's), (Start: 10 @31550 has 11 MA's), (11, 31571), (21, 31667), (26, 31739), (27, 31745), (28, 31751), (29, 31754), (30, 31760), (32, 31784), (42, 31856), (44, 31874), (48, 31895), (58, 32042), (59, 32045), (60, 32057), (61, 32060), (63, 32102), (65, 32111), (66, 32114),

Gene: Renna12_48 Start: 31408, Stop: 31992, Start Num: 10
Candidate Starts for Renna12_48:
(Start: 10 @31408 has 11 MA's), (19, 31507), (21, 31525), (23, 31561), (26, 31597), (27, 31603), (29, 31612), (30, 31618), (32, 31642), (42, 31714), (44, 31732), (48, 31753), (58, 31900), (59, 31903), (60, 31915), (61, 31918), (63, 31960), (65, 31969), (66, 31972),

Gene: Ruchi_45 Start: 31164, Stop: 31799, Start Num: 10
Candidate Starts for Ruchi_45:
(1, 30783), (2, 30831), (3, 31050), (Start: 10 @31164 has 11 MA's), (12, 31197), (14, 31218), (19, 31263), (28, 31383), (29, 31386), (31, 31404), (32, 31416), (39, 31482), (42, 31506), (44, 31524), (46, 31536), (48, 31545), (50, 31578), (52, 31602), (53, 31632), (56, 31677), (58, 31692), (60, 31707), (61, 31710), (63, 31752),

Gene: TaylorSipht_47 Start: 31815, Stop: 32444, Start Num: 10
Candidate Starts for TaylorSipht_47:
(4, 31791), (Start: 10 @31815 has 11 MA's), (29, 32037), (32, 32067), (33, 32079), (36, 32100), (39, 32130), (40, 32133), (41, 32151), (44, 32172), (50, 32226), (52, 32250), (53, 32280), (57, 32334), (59, 32343), (60, 32355), (61, 32358),

Gene: Vulpecula_45 Start: 30841, Stop: 31458, Start Num: 10
Candidate Starts for Vulpecula_45:
(1, 30460), (2, 30508), (3, 30727), (Start: 10 @30841 has 11 MA's), (12, 30874), (29, 31063), (32, 31093), (39, 31141), (41, 31162), (42, 31165), (44, 31183), (47, 31201), (48, 31204), (50, 31237), (52, 31261), (53, 31291), (56, 31336), (58, 31351), (59, 31354), (60, 31366), (61, 31369), (63, 31411),