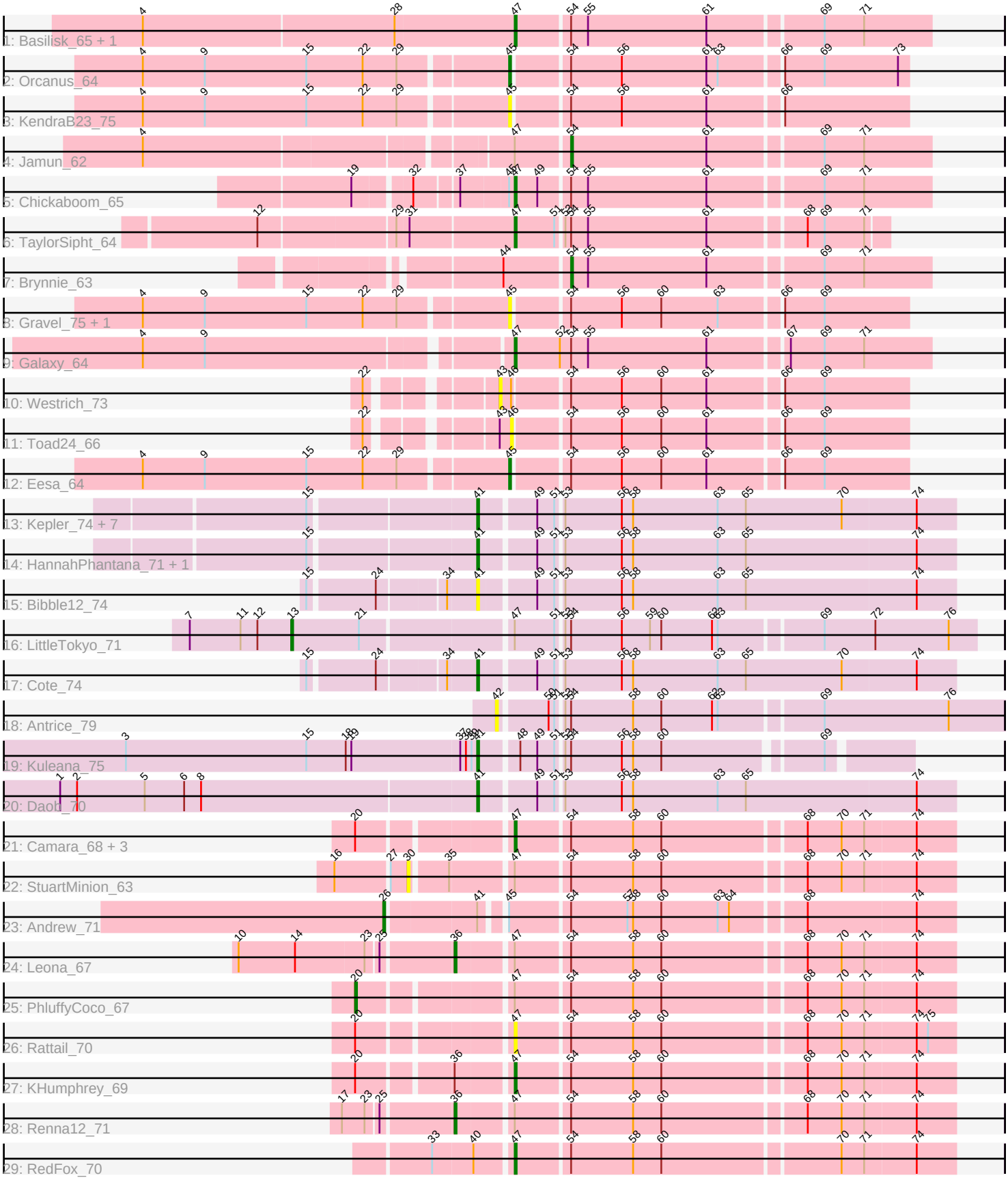
Pham 203087


1: Basilisk_65 + 1
2: Orcanus_64
3: KendraB23_75
4: Jamun_62
5: Chickaboom_65
6: TaylorSipht_64
7: Brynnie_63
8: Gravel_75 + 1
9: Galaxy_64
10: Westrich_73
11: Toad24_66
12: Eesa_64
13: Kepler_74 + 7
14: HannahPhantana_71 + 1
15: Bibble12_74
16: LittleTokyo_71
17: Cote_74
18: Antrice_79
19: Kuleana_75
20: Daoh_70
21: Camara_68 + 3
22: StuartMinion_63
23: Andrew_71
24: Leona_67
25: PhluffyCoco_67
26: Rattail_70
27: KHumphrey_69
28: Renna12_71
29: RedFox_70

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 203087 Report

This analysis was run 01/18/25 on database version 583.

Pham number 203087 has 42 members, 15 are drafts.

Phages represented in each track:
- Track 1 : Basilisk_65, Ruchi_63
- Track 2 : Orcanus_64
- Track 3 : KendraB23_75
- Track 4 : Jamun_62
- Track 5 : Chickaboom_65
- Track 6 : TaylorSipht_64
- Track 7 : Brynnie_63
- Track 8 : Gravel_75, Pelletreau_75
- Track 9 : Galaxy_64
- Track 10 : Westrich_73
- Track 11 : Toad24_66
- Track 12 : Eesa_64
- Track 13 : Kepler_74, Jerole_78, Amelia_70, Coral_71, Bedetta_74, Melons_72, Lunar_72, Colusalem_71
- Track 14 : HannahPhantana_71, Polka_70
- Track 15 : Bibble12_74
- Track 16 : LittleTokyo_71
- Track 17 : Cote_74
- Track 18 : Antrice_79
- Track 19 : Kuleana_75
- Track 20 : Daob_70
- Track 21 : Camara_68, AmiCi24_67, Atlantica_70, Juno112_68
- Track 22 : StuartMinion_63
- Track 23 : Andrew_71
- Track 24 : Leona_67
- Track 25 : PhluffyCoco_67
- Track 26 : Rattail_70
- Track 27 : KHumphrey_69
- Track 28 : Renna12_71
- Track 29 : RedFox_70

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

The start number called the most often in the published annotations is 41, it was called in 10 of the 27 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Amelia_70, Bedetta_74, Bibble12_74, Colusalem_71, Coral_71, Cote_74, Daob_70, HannahPhantana_71, Jerole_78, Kepler_74, Kuleana_75, Lunar_72, Melons_72, Polka_70,

Genes that have the "Most Annotated" start but do not call it:
• Andrew_71,

Genes that do not have the "Most Annotated" start:
• AmiCi24_67, Antrice_79, Atlantica_70, Basilisk_65, Brynnie_63, Camara_68, Chickaboom_65, Eesa_64, Galaxy_64, Gravel_75, Jamun_62, Juno112_68, KHumphrey_69, KendraB23_75, Leona_67, LittleTokyo_71, Orcanus_64, Pelletreau_75, PhluffyCoco_67, Rattail_70, RedFox_70, Renna12_71, Ruchi_63, StuartMinion_63, TaylorSipht_64, Toad24_66, Westrich_73,

Summary by start number:

Start 13:
• Found in 1 of 42 (2.4%) of genes in pham
• Manual Annotations of this start: 1 of 27
• Called 100.0% of time when present
• Phage (with cluster) where this start called: LittleTokyo_71 (AS2),

Start 20:
• Found in 7 of 42 (16.7%) of genes in pham
• Manual Annotations of this start: 1 of 27
• Called 14.3% of time when present
• Phage (with cluster) where this start called: PhluffyCoco_67 (AS3),

Start 26:
• Found in 1 of 42 (2.4%) of genes in pham
• Manual Annotations of this start: 1 of 27
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Andrew_71 (AS3),

Start 30:
• Found in 1 of 42 (2.4%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: StuartMinion_63 (AS3),

Start 36:
• Found in 3 of 42 (7.1%) of genes in pham
• Manual Annotations of this start: 2 of 27
• Called 66.7% of time when present
• Phage (with cluster) where this start called: Leona_67 (AS3), Renna12_71 (AS3),

Start 41:
• Found in 15 of 42 (35.7%) of genes in pham
• Manual Annotations of this start: 10 of 27

• Called 93.3% of time when present
• Phage (with cluster) where this start called: Amelia_70 (AS2), Bedetta_74 (AS2), Bibble12_74 (AS2), Colusalem_71 (AS2), Coral_71 (AS2), Cote_74 (AS2), Daob_70 (AS2), HannahPhantana_71 (AS2), Jerole_78 (AS2), Kepler_74 (AS2), Kuleana_75 (AS2), Lunar_72 (AS2), Melons_72 (AS2), Polka_70 (AS2),

Start 42:
• Found in 1 of 42 (2.4%) 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_79 (AS2),

Start 43:
• Found in 2 of 42 (4.8%) of genes in pham
• No Manual Annotations of this start.
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Westrich_73 (AS1),

Start 45:
• Found in 7 of 42 (16.7%) of genes in pham
• Manual Annotations of this start: 2 of 27
• Called 71.4% of time when present
• Phage (with cluster) where this start called: Eesa_64 (AS1), Gravel_75 (AS1), KendraB23_75 (AS1), Orcanus_64 (AS1), Pelletreau_75 (AS1),

Start 46:
• Found in 2 of 42 (4.8%) of genes in pham
• No Manual Annotations of this start.
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Toad24_66 (AS1),

Start 47:
• Found in 18 of 42 (42.9%) of genes in pham
• Manual Annotations of this start: 8 of 27
• Called 66.7% of time when present
• Phage (with cluster) where this start called: AmiCi24_67 (AS3), Atlantica_70 (AS3), Basilisk_65 (AS1), Camara_68 (AS3), Chickaboom_65 (AS1), Galaxy_64 (AS1), Juno112_68 (AS3), KHumphrey_69 (AS3), Rattail_70 (AS3), RedFox_70 (AS3), Ruchi_63 (AS1), TaylorSipht_64 (AS1),

Start 54:
• Found in 29 of 42 (69.0%) of genes in pham
• Manual Annotations of this start: 2 of 27
• Called 6.9% of time when present
• Phage (with cluster) where this start called: Brynnie_63 (AS1), Jamun_62 (AS1),

Summary by clusters:

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

Info for manual annotations of cluster AS1:
•Start number 45 was manually annotated 2 times for cluster AS1.
•Start number 47 was manually annotated 5 times for cluster AS1.

•Start number 54 was manually annotated 2 times for cluster AS1.

Info for manual annotations of cluster AS2:
•Start number 13 was manually annotated 1 time for cluster AS2.
•Start number 41 was manually annotated 10 times for cluster AS2.

Info for manual annotations of cluster AS3:
•Start number 20 was manually annotated 1 time for cluster AS3.
•Start number 26 was manually annotated 1 time for cluster AS3.
•Start number 36 was manually annotated 2 times for cluster AS3.
•Start number 47 was manually annotated 3 times for cluster AS3.

Gene Information:

Gene: Amelia_70 Start: 37346, Stop: 37591, Start Num: 41
Candidate Starts for Amelia_70:
(15, 37262), (Start: 41 @37346 has 10 MA's), (49, 37373), (51, 37382), (53, 37385), (56, 37415), (58, 37421), (63, 37466), (65, 37481), (70, 37532), (74, 37571),

Gene: AmiCi24_67 Start: 37633, Stop: 37857, Start Num: 47
Candidate Starts for AmiCi24_67:
(Start: 20 @37561 has 1 MA's), (Start: 47 @37633 has 8 MA's), (Start: 54 @37660 has 2 MA's), (58, 37693), (60, 37708), (68, 37780), (70, 37798), (71, 37810), (74, 37837),

Gene: Andrew_71 Start: 37949, Stop: 38230, Start Num: 26
Candidate Starts for Andrew_71:
(Start: 26 @37949 has 1 MA's), (Start: 41 @37994 has 10 MA's), (Start: 45 @38003 has 2 MA's), (Start: 54 @38033 has 2 MA's), (57, 38063), (58, 38066), (60, 38081), (63, 38111), (64, 38117), (68, 38153), (74, 38210),

Gene: Antrice_79 Start: 38347, Stop: 38604, Start Num: 42
Candidate Starts for Antrice_79:
(42, 38347), (50, 38371), (51, 38374), (53, 38377), (Start: 54 @38380 has 2 MA's), (58, 38413), (60, 38428), (62, 38455), (63, 38458), (69, 38509), (76, 38575),

Gene: Atlantica_70 Start: 37635, Stop: 37859, Start Num: 47
Candidate Starts for Atlantica_70:
(Start: 20 @37563 has 1 MA's), (Start: 47 @37635 has 8 MA's), (Start: 54 @37662 has 2 MA's), (58, 37695), (60, 37710), (68, 37782), (70, 37800), (71, 37812), (74, 37839),

Gene: Basilisk_65 Start: 37815, Stop: 38027, Start Num: 47
Candidate Starts for Basilisk_65:
(4, 37620), (28, 37752), (Start: 47 @37815 has 8 MA's), (Start: 54 @37842 has 2 MA's), (55, 37851), (61, 37914), (69, 37971), (71, 37992),

Gene: Bedetta_74 Start: 37509, Stop: 37754, Start Num: 41
Candidate Starts for Bedetta_74:
(15, 37425), (Start: 41 @37509 has 10 MA's), (49, 37536), (51, 37545), (53, 37548), (56, 37578), (58, 37584), (63, 37629), (65, 37644), (70, 37695), (74, 37734),

Gene: Bibble12_74 Start: 37919, Stop: 38164, Start Num: 41

Candidate Starts for Bibble12_74:
(15, 37838), (24, 37871), (34, 37904), (Start: 41 @37919 has 10 MA's), (49, 37946), (51, 37955), (53, 37958), (56, 37988), (58, 37994), (63, 38039), (65, 38054), (74, 38144),

Gene: Brynnie_63 Start: 37788, Stop: 37973, Start Num: 54
Candidate Starts for Brynnie_63:
(44, 37755), (Start: 54 @37788 has 2 MA's), (55, 37797), (61, 37860), (69, 37917), (71, 37938),

Gene: Camara_68 Start: 37526, Stop: 37750, Start Num: 47
Candidate Starts for Camara_68:
(Start: 20 @37454 has 1 MA's), (Start: 47 @37526 has 8 MA's), (Start: 54 @37553 has 2 MA's), (58, 37586), (60, 37601), (68, 37673), (70, 37691), (71, 37703), (74, 37730),

Gene: Chickaboom_65 Start: 37923, Stop: 38135, Start Num: 47
Candidate Starts for Chickaboom_65:
(19, 37848), (32, 37875), (37, 37896), (Start: 45 @37920 has 2 MA's), (Start: 47 @37923 has 8 MA's), (49, 37935), (Start: 54 @37950 has 2 MA's), (55, 37959), (61, 38022), (69, 38079), (71, 38100),

Gene: Colusalem_71 Start: 37323, Stop: 37568, Start Num: 41
Candidate Starts for Colusalem_71:
(15, 37239), (Start: 41 @37323 has 10 MA's), (49, 37350), (51, 37359), (53, 37362), (56, 37392), (58, 37398), (63, 37443), (65, 37458), (70, 37509), (74, 37548),

Gene: Coral_71 Start: 37538, Stop: 37783, Start Num: 41
Candidate Starts for Coral_71:
(15, 37454), (Start: 41 @37538 has 10 MA's), (49, 37565), (51, 37574), (53, 37577), (56, 37607), (58, 37613), (63, 37658), (65, 37673), (70, 37724), (74, 37763),

Gene: Cote_74 Start: 38262, Stop: 38507, Start Num: 41
Candidate Starts for Cote_74:
(15, 38181), (24, 38214), (34, 38247), (Start: 41 @38262 has 10 MA's), (49, 38289), (51, 38298), (53, 38301), (56, 38331), (58, 38337), (63, 38382), (65, 38397), (70, 38448), (74, 38487),

Gene: Daob_70 Start: 37188, Stop: 37433, Start Num: 41
Candidate Starts for Daob_70:
(1, 36969), (2, 36978), (5, 37014), (6, 37035), (8, 37044), (Start: 41 @37188 has 10 MA's), (49, 37215), (51, 37224), (53, 37227), (56, 37257), (58, 37263), (63, 37308), (65, 37323), (74, 37413),

Gene: Eesa_64 Start: 39050, Stop: 39250, Start Num: 45
Candidate Starts for Eesa_64:
(4, 38861), (9, 38894), (15, 38948), (22, 38978), (29, 38996), (Start: 45 @39050 has 2 MA's), (Start: 54 @39077 has 2 MA's), (56, 39104), (60, 39125), (61, 39149), (66, 39185), (69, 39206),

Gene: Galaxy_64 Start: 36960, Stop: 37175, Start Num: 47
Candidate Starts for Galaxy_64:
(4, 36777), (9, 36810), (Start: 47 @36960 has 8 MA's), (52, 36984), (Start: 54 @36990 has 2 MA's), (55, 36999), (61, 37062), (67, 37101), (69, 37119), (71, 37140),

Gene: Gravel_75 Start: 39306, Stop: 39506, Start Num: 45
Candidate Starts for Gravel_75:
(4, 39117), (9, 39150), (15, 39204), (22, 39234), (29, 39252), (Start: 45 @39306 has 2 MA's), (Start: 54 @39333 has 2 MA's), (56, 39360), (60, 39381), (63, 39411), (66, 39441), (69, 39462),

Gene: HannahPhantana_71 Start: 37341, Stop: 37586, Start Num: 41
Candidate Starts for HannahPhantana_71:
(15, 37257), (Start: 41 @37341 has 10 MA's), (49, 37368), (51, 37377), (53, 37380), (56, 37410), (58, 37416), (63, 37461), (65, 37476), (74, 37566),

Gene: Jamun_62 Start: 38028, Stop: 38213, Start Num: 54
Candidate Starts for Jamun_62:
(4, 37818), (Start: 47 @38001 has 8 MA's), (Start: 54 @38028 has 2 MA's), (61, 38100), (69, 38157), (71, 38178),

Gene: Jerole_78 Start: 37465, Stop: 37710, Start Num: 41
Candidate Starts for Jerole_78:
(15, 37381), (Start: 41 @37465 has 10 MA's), (49, 37492), (51, 37501), (53, 37504), (56, 37534), (58, 37540), (63, 37585), (65, 37600), (70, 37651), (74, 37690),

Gene: Juno112_68 Start: 37637, Stop: 37861, Start Num: 47
Candidate Starts for Juno112_68:
(Start: 20 @37565 has 1 MA's), (Start: 47 @37637 has 8 MA's), (Start: 54 @37664 has 2 MA's), (58, 37697), (60, 37712), (68, 37784), (70, 37802), (71, 37814), (74, 37841),

Gene: KHumphrey_69 Start: 37510, Stop: 37734, Start Num: 47
Candidate Starts for KHumphrey_69:
(Start: 20 @37438 has 1 MA's), (Start: 36 @37483 has 2 MA's), (Start: 47 @37510 has 8 MA's), (Start: 54 @37537 has 2 MA's), (58, 37570), (60, 37585), (68, 37657), (70, 37675), (71, 37687), (74, 37714),

Gene: KendraB23_75 Start: 39011, Stop: 39211, Start Num: 45
Candidate Starts for KendraB23_75:
(4, 38822), (9, 38855), (15, 38909), (22, 38939), (29, 38957), (Start: 45 @39011 has 2 MA's), (Start: 54 @39038 has 2 MA's), (56, 39065), (61, 39110), (66, 39146),

Gene: Kepler_74 Start: 37670, Stop: 37915, Start Num: 41
Candidate Starts for Kepler_74:
(15, 37586), (Start: 41 @37670 has 10 MA's), (49, 37697), (51, 37706), (53, 37709), (56, 37739), (58, 37745), (63, 37790), (65, 37805), (70, 37856), (74, 37895),

Gene: Kuleana_75 Start: 38064, Stop: 38273, Start Num: 41
Candidate Starts for Kuleana_75:
(3, 37878), (15, 37974), (18, 37995), (19, 37998), (37, 38055), (38, 38058), (39, 38061), (Start: 41 @38064 has 10 MA's), (48, 38082), (49, 38091), (51, 38100), (53, 38103), (Start: 54 @38106 has 2 MA's), (56, 38133), (58, 38139), (60, 38154), (69, 38232),

Gene: Leona_67 Start: 37757, Stop: 38008, Start Num: 36
Candidate Starts for Leona_67:
(10, 37649), (14, 37679), (23, 37715), (25, 37721), (Start: 36 @37757 has 2 MA's), (Start: 47 @37784 has 8 MA's), (Start: 54 @37811 has 2 MA's), (58, 37844), (60, 37859), (68, 37931), (70, 37949), (71, 37961), (74, 37988),

Gene: LittleTokyo_71 Start: 37065, Stop: 37412, Start Num: 13
Candidate Starts for LittleTokyo_71:
(7, 37011), (11, 37038), (12, 37047), (Start: 13 @37065 has 1 MA's), (21, 37101), (Start: 47 @37176 has 8 MA's), (51, 37197), (53, 37200), (Start: 54 @37203 has 2 MA's), (56, 37230), (59, 37245), (60, 37251), (62, 37278), (63, 37281), (69, 37332), (72, 37359), (76, 37398),

Gene: Lunar_72 Start: 37670, Stop: 37915, Start Num: 41
Candidate Starts for Lunar_72:
(15, 37586), (Start: 41 @37670 has 10 MA's), (49, 37697), (51, 37706), (53, 37709), (56, 37739), (58, 37745), (63, 37790), (65, 37805), (70, 37856), (74, 37895),

Gene: Melons_72 Start: 37679, Stop: 37924, Start Num: 41
Candidate Starts for Melons_72:
(15, 37595), (Start: 41 @37679 has 10 MA's), (49, 37706), (51, 37715), (53, 37718), (56, 37748), (58, 37754), (63, 37799), (65, 37814), (70, 37865), (74, 37904),

Gene: Orcanus_64 Start: 38537, Stop: 38737, Start Num: 45
Candidate Starts for Orcanus_64:
(4, 38348), (9, 38381), (15, 38435), (22, 38465), (29, 38483), (Start: 45 @38537 has 2 MA's), (Start: 54 @38564 has 2 MA's), (56, 38591), (61, 38636), (63, 38642), (66, 38672), (69, 38693), (73, 38732),

Gene: Pelletreau_75 Start: 39306, Stop: 39506, Start Num: 45
Candidate Starts for Pelletreau_75:
(4, 39117), (9, 39150), (15, 39204), (22, 39234), (29, 39252), (Start: 45 @39306 has 2 MA's), (Start: 54 @39333 has 2 MA's), (56, 39360), (60, 39381), (63, 39411), (66, 39441), (69, 39462),

Gene: PhluffyCoco_67 Start: 37664, Stop: 37960, Start Num: 20
Candidate Starts for PhluffyCoco_67:
(Start: 20 @37664 has 1 MA's), (Start: 47 @37736 has 8 MA's), (Start: 54 @37763 has 2 MA's), (58, 37796), (60, 37811), (68, 37883), (70, 37901), (71, 37913), (74, 37940),

Gene: Polka_70 Start: 37295, Stop: 37540, Start Num: 41
Candidate Starts for Polka_70:
(15, 37211), (Start: 41 @37295 has 10 MA's), (49, 37322), (51, 37331), (53, 37334), (56, 37364), (58, 37370), (63, 37415), (65, 37430), (74, 37520),

Gene: Rattail_70 Start: 38032, Stop: 38256, Start Num: 47
Candidate Starts for Rattail_70:
(Start: 20 @37960 has 1 MA's), (Start: 47 @38032 has 8 MA's), (Start: 54 @38059 has 2 MA's), (58, 38092), (60, 38107), (68, 38179), (70, 38197), (71, 38209), (74, 38236), (75, 38242),

Gene: RedFox_70 Start: 37895, Stop: 38119, Start Num: 47
Candidate Starts for RedFox_70:
(33, 37856), (40, 37877), (Start: 47 @37895 has 8 MA's), (Start: 54 @37922 has 2 MA's), (58, 37955), (60, 37970), (70, 38060), (71, 38072), (74, 38099),

Gene: Renna12_71 Start: 38335, Stop: 38586, Start Num: 36
Candidate Starts for Renna12_71:
(17, 38281), (23, 38293), (25, 38299), (Start: 36 @38335 has 2 MA's), (Start: 47 @38362 has 8 MA's), (Start: 54 @38389 has 2 MA's), (58, 38422), (60, 38437), (68, 38509), (70, 38527), (71, 38539), (74, 38566),

Gene: Ruchi_63 Start: 37737, Stop: 37949, Start Num: 47
Candidate Starts for Ruchi_63:
(4, 37542), (28, 37674), (Start: 47 @37737 has 8 MA's), (Start: 54 @37764 has 2 MA's), (55, 37773), (61, 37836), (69, 37893), (71, 37914),

Gene: StuartMinion_63 Start: 34325, Stop: 34597, Start Num: 30
Candidate Starts for StuartMinion_63:

(16, 34289), (27, 34316), (30, 34325), (35, 34343), (Start: 47 @34373 has 8 MA's), (Start: 54 @34400 has 2 MA's), (58, 34433), (60, 34448), (68, 34520), (70, 34538), (71, 34550), (74, 34577),

Gene: TaylorSipht_64 Start: 38271, Stop: 38459, Start Num: 47
Candidate Starts for TaylorSipht_64:
(12, 38142), (29, 38211), (31, 38217), (Start: 47 @38271 has 8 MA's), (51, 38292), (53, 38295), (Start: 54 @38298 has 2 MA's), (55, 38307), (61, 38370), (68, 38418), (69, 38427), (71, 38448),

Gene: Toad24_66 Start: 39066, Stop: 39266, Start Num: 46
Candidate Starts for Toad24_66:
(22, 39006), (43, 39060), (46, 39066), (Start: 54 @39093 has 2 MA's), (56, 39120), (60, 39141), (61, 39165), (66, 39201), (69, 39222),

Gene: Westrich_73 Start: 39227, Stop: 39433, Start Num: 43
Candidate Starts for Westrich_73:
(22, 39173), (43, 39227), (46, 39233), (Start: 54 @39260 has 2 MA's), (56, 39287), (60, 39308), (61, 39332), (66, 39368), (69, 39389),