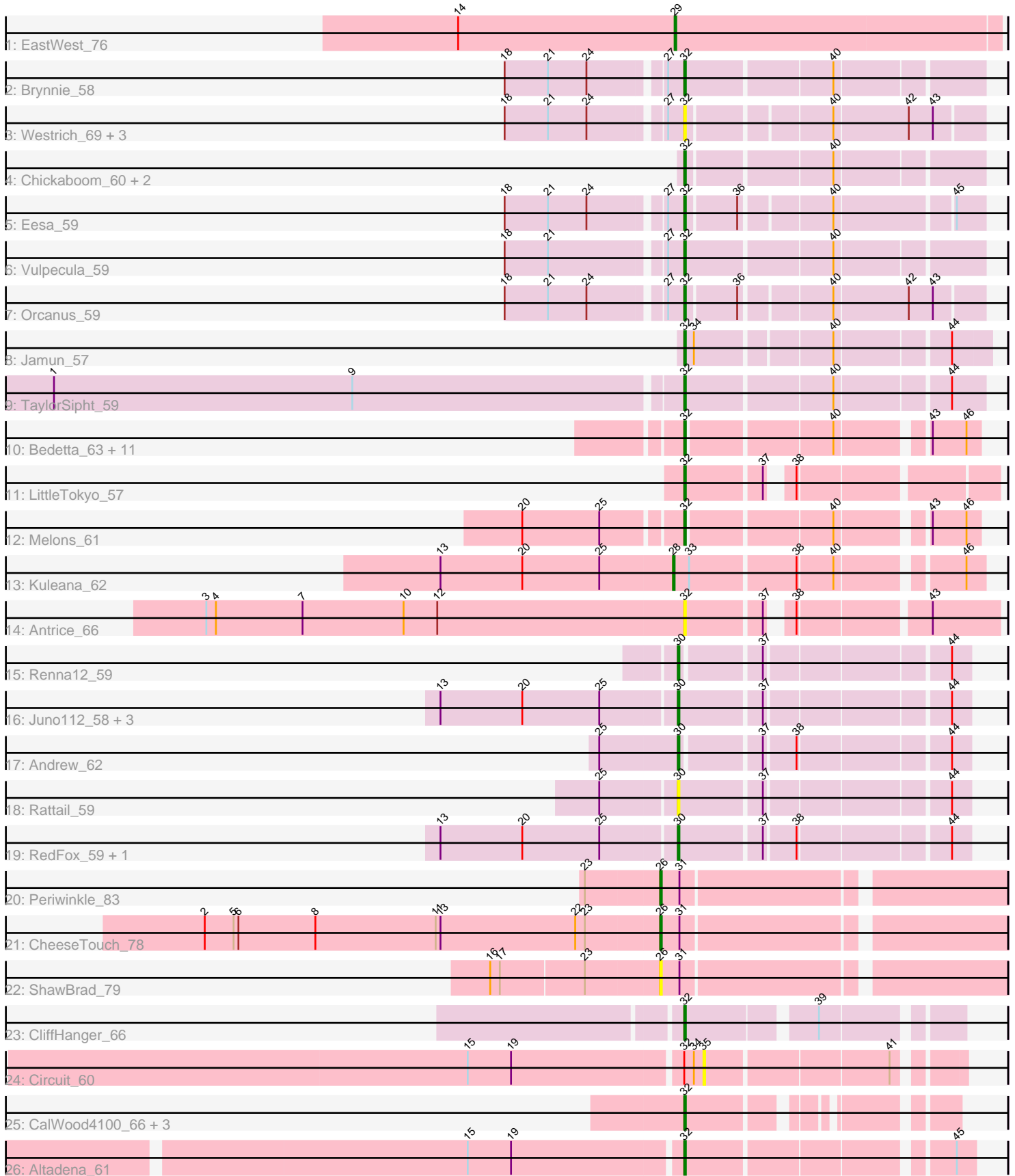


Pham 203028



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 203028 Report

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

Pham number 203028 has 49 members, 15 are drafts.

Phages represented in each track:

- Track 1 : EastWest_76
- Track 2 : Brynnie_58
- Track 3 : Westrich_69, Gravel_70, KendraB23_69, Pelletreau_70
- Track 4 : Chickaboom_60, Basilisk_59, Ruchi_58
- Track 5 : Eesa_59
- Track 6 : Vulpecula_59
- Track 7 : Orcanus_59
- Track 8 : Jamun_57
- Track 9 : TaylorSipht_59
- Track 10 : Bedetta_63, Amelia_58, Lunar_60, Coral_58, Polka_58, Colusalem_61, Daob_60, Kepler_60, Jerole_68, Bibble12_63, HannahPhantana_60, Cote_61
- Track 11 : LittleTokyo_57
- Track 12 : Melons_61
- Track 13 : Kuleana_62
- Track 14 : Antrice_66
- Track 15 : Renna12_59
- Track 16 : Juno112_58, PhluffyCoco_59, HamCheese_58, Atlantica_59
- Track 17 : Andrew_62
- Track 18 : Rattail_59
- Track 19 : RedFox_59, Leona_58
- Track 20 : Periwinkle_83
- Track 21 : CheeseTouch_78
- Track 22 : ShawBrad_79
- Track 23 : CliffHanger_66
- Track 24 : Circuit_60
- Track 25 : CalWood4100_66, Lilmac1015_66, Klevey_65, Bolt007_63
- Track 26 : Altadena_61

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

The start number called the most often in the published annotations is 32, it was called in 24 of the 34 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Altadena_61, Amelia_58, Antrice_66, Basilisk_59, Bedetta_63, Bibble12_63, Bolt007_63, Brynnie_58, CalWood4100_66, Chickaboom_60, CliffHanger_66, Colusalem_61, Coral_58, Cote_61, Daob_60, Eesa_59, Gravel_70, HannahPhantana_60, Jamun_57, Jerole_68, KendraB23_69, Kepler_60, Klevey_65, Lilmac1015_66, LittleTokyo_57, Lunar_60, Melons_61, Orcanus_59, Pelletreau_70, Polka_58, Ruchi_58, TaylorSipht_59, Vulpecula_59, Westrich_69,

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

• Circuit_60,

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

• Andrew_62, Atlantica_59, CheeseTouch_78, EastWest_76, HamCheese_58, Juno112_58, Kuleana_62, Leona_58, Periwinkle_83, PhluffyCoco_59, Rattail_59, RedFox_59, Renna12_59, ShawBrad_79,

Summary by start number:

Start 26:

- Found in 3 of 49 (6.1%) of genes in pham
- Manual Annotations of this start: 2 of 34
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CheeseTouch_78 (DN1), Periwinkle_83 (DN1), ShawBrad_79 (DN1),

Start 28:

- Found in 1 of 49 (2.0%) of genes in pham
- Manual Annotations of this start: 1 of 34
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kuleana_62 (AS2),

Start 29:

- Found in 1 of 49 (2.0%) of genes in pham
- Manual Annotations of this start: 1 of 34
- Called 100.0% of time when present
- Phage (with cluster) where this start called: EastWest_76 (AO),

Start 30:

- Found in 9 of 49 (18.4%) of genes in pham
- Manual Annotations of this start: 6 of 34
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Andrew_62 (AS3), Atlantica_59 (AS3), HamCheese_58 (AS3), Juno112_58 (AS3), Leona_58 (AS3), PhluffyCoco_59 (AS3), Rattail_59 (AS3), RedFox_59 (AS3), Renna12_59 (AS3),

Start 32:

- Found in 35 of 49 (71.4%) of genes in pham
- Manual Annotations of this start: 24 of 34
- Called 97.1% of time when present
- Phage (with cluster) where this start called: Altadena_61 (FH), Amelia_58 (AS2), Antrice_66 (AS2), Basilisk_59 (AS1), Bedetta_63 (AS2), Bibble12_63 (AS2), Bolt007_63 (FH), Brynnie_58 (AS1), CalWood4100_66 (FH), Chickaboom_60 (AS1), CliffHanger_66 (EB), Colusalem_61 (AS2), Coral_58 (AS2), Cote_61 (AS2), Daob_60 (AS2), Eesa_59 (AS1), Gravel_70 (AS1), HannahPhantana_60 (AS2), Jamun_57

(AS1), Jerole_68 (AS2), KendraB23_69 (AS1), Kepler_60 (AS2), Klevey_65 (FH), Lilmac1015_66 (FH), LittleTokyo_57 (AS2), Lunar_60 (AS2), Melons_61 (AS2), Orcanus_59 (AS1), Pelletreau_70 (AS1), Polka_58 (AS2), Ruchi_58 (AS1), TaylorSipht_59 (AS1), Vulpecula_59 (AS1), Westrich_69 (AS1),

Start 35:

- Found in 1 of 49 (2.0%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Circuit_60 (FH),

Summary by clusters:

There are 7 clusters represented in this pham: AS3, AS2, AS1, AO, EB, DN1, FH,

Info for manual annotations of cluster AO:

- Start number 29 was manually annotated 1 time for cluster AO.

Info for manual annotations of cluster AS1:

- Start number 32 was manually annotated 9 times for cluster AS1.

Info for manual annotations of cluster AS2:

- Start number 28 was manually annotated 1 time for cluster AS2.
- Start number 32 was manually annotated 10 times for cluster AS2.

Info for manual annotations of cluster AS3:

- Start number 30 was manually annotated 6 times for cluster AS3.

Info for manual annotations of cluster DN1:

- Start number 26 was manually annotated 2 times for cluster DN1.

Info for manual annotations of cluster EB:

- Start number 32 was manually annotated 1 time for cluster EB.

Info for manual annotations of cluster FH:

- Start number 32 was manually annotated 4 times for cluster FH.

Gene Information:

Gene: Altadena_61 Start: 39462, Stop: 39623, Start Num: 32

Candidate Starts for Altadena_61:

(15, 39333), (19, 39360), (Start: 32 @39462 has 24 MA's), (45, 39612),

Gene: Amelia_58 Start: 34705, Stop: 34866, Start Num: 32

Candidate Starts for Amelia_58:

(Start: 32 @34705 has 24 MA's), (40, 34789), (43, 34837), (46, 34858),

Gene: Andrew_62 Start: 36132, Stop: 36293, Start Num: 30

Candidate Starts for Andrew_62:

(25, 36084), (Start: 30 @36132 has 6 MA's), (37, 36177), (38, 36195), (44, 36282),

Gene: Antrice_66 Start: 35734, Stop: 35904, Start Num: 32
Candidate Starts for Antrice_66:
(3, 35437), (4, 35443), (7, 35497), (10, 35560), (12, 35581), (Start: 32 @35734 has 24 MA's), (37, 35779), (38, 35788), (43, 35863),

Gene: Atlantica_59 Start: 35604, Stop: 35768, Start Num: 30
Candidate Starts for Atlantica_59:
(13, 35460), (20, 35511), (25, 35559), (Start: 30 @35604 has 6 MA's), (37, 35652), (44, 35757),

Gene: Basilisk_59 Start: 36355, Stop: 36525, Start Num: 32
Candidate Starts for Basilisk_59:
(Start: 32 @36355 has 24 MA's), (40, 36439),

Gene: Bedetta_63 Start: 34865, Stop: 35026, Start Num: 32
Candidate Starts for Bedetta_63:
(Start: 32 @34865 has 24 MA's), (40, 34949), (43, 34997), (46, 35018),

Gene: Bibble12_63 Start: 34700, Stop: 34861, Start Num: 32
Candidate Starts for Bibble12_63:
(Start: 32 @34700 has 24 MA's), (40, 34784), (43, 34832), (46, 34853),

Gene: Bolt007_63 Start: 41703, Stop: 41837, Start Num: 32
Candidate Starts for Bolt007_63:
(Start: 32 @41703 has 24 MA's),

Gene: Brynnie_58 Start: 36288, Stop: 36461, Start Num: 32
Candidate Starts for Brynnie_58:
(18, 36186), (21, 36213), (24, 36237), (27, 36279), (Start: 32 @36288 has 24 MA's), (40, 36375),

Gene: CalWood4100_66 Start: 41664, Stop: 41798, Start Num: 32
Candidate Starts for CalWood4100_66:
(Start: 32 @41664 has 24 MA's),

Gene: CheeseTouch_78 Start: 40545, Stop: 40745, Start Num: 26
Candidate Starts for CheeseTouch_78:
(2, 40263), (5, 40281), (6, 40284), (8, 40332), (11, 40407), (13, 40410), (22, 40494), (23, 40500),
(Start: 26 @40545 has 2 MA's), (31, 40557),

Gene: Chickaboom_60 Start: 36691, Stop: 36861, Start Num: 32
Candidate Starts for Chickaboom_60:
(Start: 32 @36691 has 24 MA's), (40, 36775),

Gene: Circuit_60 Start: 40818, Stop: 40961, Start Num: 35
Candidate Starts for Circuit_60:
(15, 40677), (19, 40704), (Start: 32 @40806 has 24 MA's), (34, 40812), (35, 40818), (41, 40926),

Gene: CliffHanger_66 Start: 37257, Stop: 37406, Start Num: 32
Candidate Starts for CliffHanger_66:
(Start: 32 @37257 has 24 MA's), (39, 37329),

Gene: Colusalem_61 Start: 34682, Stop: 34843, Start Num: 32
Candidate Starts for Colusalem_61:
(Start: 32 @34682 has 24 MA's), (40, 34766), (43, 34814), (46, 34835),

Gene: Coral_58 Start: 34610, Stop: 34771, Start Num: 32
Candidate Starts for Coral_58:
(Start: 32 @34610 has 24 MA's), (40, 34694), (43, 34742), (46, 34763),

Gene: Cote_61 Start: 35043, Stop: 35204, Start Num: 32
Candidate Starts for Cote_61:
(Start: 32 @35043 has 24 MA's), (40, 35127), (43, 35175), (46, 35196),

Gene: Daob_60 Start: 35054, Stop: 35215, Start Num: 32
Candidate Starts for Daob_60:
(Start: 32 @35054 has 24 MA's), (40, 35138), (43, 35186), (46, 35207),

Gene: EastWest_76 Start: 45392, Stop: 45592, Start Num: 29
Candidate Starts for EastWest_76:
(14, 45257), (Start: 29 @45392 has 1 MA's),

Gene: Eesa_59 Start: 37502, Stop: 37666, Start Num: 32
Candidate Starts for Eesa_59:
(18, 37400), (21, 37427), (24, 37451), (27, 37493), (Start: 32 @37502 has 24 MA's), (36, 37532), (40, 37583), (45, 37649),

Gene: Gravel_70 Start: 37719, Stop: 37889, Start Num: 32
Candidate Starts for Gravel_70:
(18, 37617), (21, 37644), (24, 37668), (27, 37710), (Start: 32 @37719 has 24 MA's), (40, 37800), (42, 37845), (43, 37860),

Gene: HamCheese_58 Start: 35590, Stop: 35754, Start Num: 30
Candidate Starts for HamCheese_58:
(13, 35446), (20, 35497), (25, 35545), (Start: 30 @35590 has 6 MA's), (37, 35638), (44, 35743),

Gene: HannahPhantana_60 Start: 34700, Stop: 34861, Start Num: 32
Candidate Starts for HannahPhantana_60:
(Start: 32 @34700 has 24 MA's), (40, 34784), (43, 34832), (46, 34853),

Gene: Jamun_57 Start: 36628, Stop: 36801, Start Num: 32
Candidate Starts for Jamun_57:
(Start: 32 @36628 has 24 MA's), (34, 36634), (40, 36712), (44, 36778),

Gene: Jerole_68 Start: 34824, Stop: 34985, Start Num: 32
Candidate Starts for Jerole_68:
(Start: 32 @34824 has 24 MA's), (40, 34908), (43, 34956), (46, 34977),

Gene: Juno112_58 Start: 35606, Stop: 35770, Start Num: 30
Candidate Starts for Juno112_58:
(13, 35462), (20, 35513), (25, 35561), (Start: 30 @35606 has 6 MA's), (37, 35654), (44, 35759),

Gene: KendraB23_69 Start: 37407, Stop: 37577, Start Num: 32
Candidate Starts for KendraB23_69:
(18, 37305), (21, 37332), (24, 37356), (27, 37398), (Start: 32 @37407 has 24 MA's), (40, 37488), (42, 37533), (43, 37548),

Gene: Kepler_60 Start: 34821, Stop: 34982, Start Num: 32

Candidate Starts for Kepler_60:
(Start: 32 @34821 has 24 MA's), (40, 34905), (43, 34953), (46, 34974),

Gene: Klevey_65 Start: 41409, Stop: 41543, Start Num: 32
Candidate Starts for Klevey_65:
(Start: 32 @41409 has 24 MA's),

Gene: Kuleana_62 Start: 35611, Stop: 35784, Start Num: 28
Candidate Starts for Kuleana_62:
(13, 35467), (20, 35518), (25, 35566), (Start: 28 @35611 has 1 MA's), (33, 35620), (38, 35683), (40, 35704), (46, 35773),

Gene: Leona_58 Start: 35698, Stop: 35859, Start Num: 30
Candidate Starts for Leona_58:
(13, 35554), (20, 35605), (25, 35653), (Start: 30 @35698 has 6 MA's), (37, 35743), (38, 35761), (44, 35848),

Gene: Lilmac1015_66 Start: 41664, Stop: 41798, Start Num: 32
Candidate Starts for Lilmac1015_66:
(Start: 32 @41664 has 24 MA's),

Gene: LittleTokyo_57 Start: 34219, Stop: 34386, Start Num: 32
Candidate Starts for LittleTokyo_57:
(Start: 32 @34219 has 24 MA's), (37, 34264), (38, 34273),

Gene: Lunar_60 Start: 34733, Stop: 34894, Start Num: 32
Candidate Starts for Lunar_60:
(Start: 32 @34733 has 24 MA's), (40, 34817), (43, 34865), (46, 34886),

Gene: Melons_61 Start: 34888, Stop: 35049, Start Num: 32
Candidate Starts for Melons_61:
(20, 34795), (25, 34843), (Start: 32 @34888 has 24 MA's), (40, 34972), (43, 35020), (46, 35041),

Gene: Orcanus_59 Start: 36837, Stop: 37007, Start Num: 32
Candidate Starts for Orcanus_59:
(18, 36735), (21, 36762), (24, 36786), (27, 36828), (Start: 32 @36837 has 24 MA's), (36, 36867), (40, 36918), (42, 36963), (43, 36978),

Gene: Pelletreau_70 Start: 37719, Stop: 37889, Start Num: 32
Candidate Starts for Pelletreau_70:
(18, 37617), (21, 37644), (24, 37668), (27, 37710), (Start: 32 @37719 has 24 MA's), (40, 37800), (42, 37845), (43, 37860),

Gene: Periwinkle_83 Start: 46446, Stop: 46646, Start Num: 26
Candidate Starts for Periwinkle_83:
(23, 46401), (Start: 26 @46446 has 2 MA's), (31, 46458),

Gene: PhluffyCoco_59 Start: 35705, Stop: 35869, Start Num: 30
Candidate Starts for PhluffyCoco_59:
(13, 35561), (20, 35612), (25, 35660), (Start: 30 @35705 has 6 MA's), (37, 35753), (44, 35858),

Gene: Polka_58 Start: 34555, Stop: 34716, Start Num: 32
Candidate Starts for Polka_58:

(Start: 32 @34555 has 24 MA's), (40, 34639), (43, 34687), (46, 34708),

Gene: Rattail_59 Start: 35790, Stop: 35954, Start Num: 30

Candidate Starts for Rattail_59:

(25, 35745), (Start: 30 @35790 has 6 MA's), (37, 35838), (44, 35943),

Gene: RedFox_59 Start: 35703, Stop: 35867, Start Num: 30

Candidate Starts for RedFox_59:

(13, 35559), (20, 35610), (25, 35658), (Start: 30 @35703 has 6 MA's), (37, 35751), (38, 35769), (44, 35856),

Gene: Renna12_59 Start: 35816, Stop: 35977, Start Num: 30

Candidate Starts for Renna12_59:

(Start: 30 @35816 has 6 MA's), (37, 35861), (44, 35966),

Gene: Ruchi_58 Start: 36277, Stop: 36447, Start Num: 32

Candidate Starts for Ruchi_58:

(Start: 32 @36277 has 24 MA's), (40, 36361),

Gene: ShawBrad_79 Start: 43937, Stop: 44137, Start Num: 26

Candidate Starts for ShawBrad_79:

(16, 43835), (17, 43841), (23, 43892), (Start: 26 @43937 has 2 MA's), (31, 43949),

Gene: TaylorSipht_59 Start: 36450, Stop: 36623, Start Num: 32

Candidate Starts for TaylorSipht_59:

(1, 36066), (9, 36252), (Start: 32 @36450 has 24 MA's), (40, 36537), (44, 36603),

Gene: Vulpecula_59 Start: 36124, Stop: 36297, Start Num: 32

Candidate Starts for Vulpecula_59:

(18, 36022), (21, 36049), (27, 36115), (Start: 32 @36124 has 24 MA's), (40, 36211),

Gene: Westrich_69 Start: 37643, Stop: 37813, Start Num: 32

Candidate Starts for Westrich_69:

(18, 37541), (21, 37568), (24, 37592), (27, 37634), (Start: 32 @37643 has 24 MA's), (40, 37724), (42, 37769), (43, 37784),