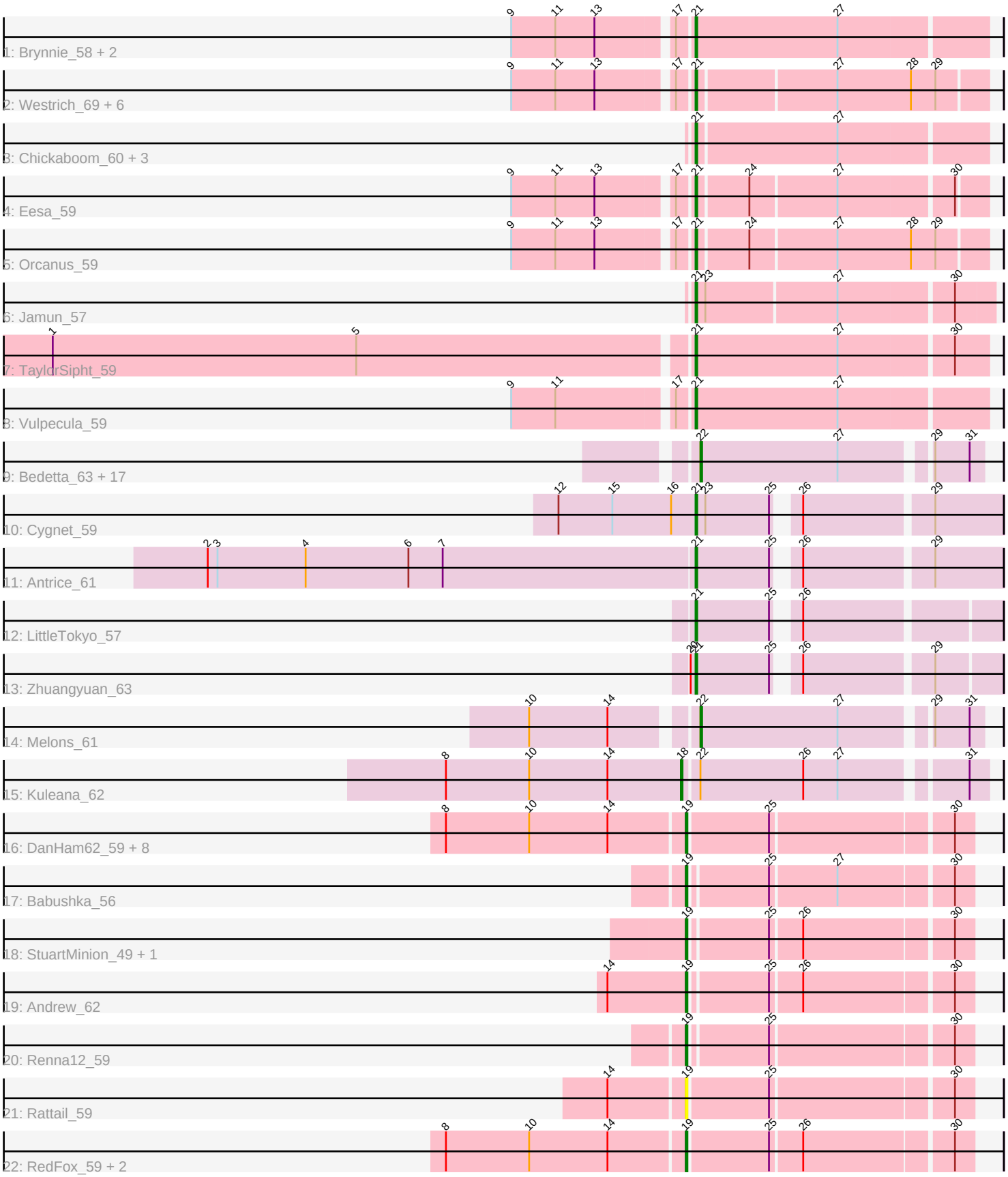
Pham 342178


1: Brynnie_58 + 2
2: Westrich_69 + 6
3: Chickaboom_60 + 3
4: Eesa_59
5: Orcanus_59
6: Jamun_57
7: TaylorSipht_59
8: Vulpecula_59
9: Bedetta_63 + 17
10: Cygnet_59
11: Antrice_61
12: LittleTokyo_57
13: Zhuangyuan_63
14: Melons_61
15: Kuleana_62
16: DanHam62_59 + 8
17: Babushka_56
18: StuartMinion_49 + 1
19: Andrew_62
20: Renna12_59
21: Rattail_59
22: RedFox_59 + 2

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 342178 Report

This analysis was run 11/14/26 on database version 672.

Pham number 342178 has 61 members, 10 are drafts.

Phages represented in each track:
• Track 1 : Brynnie_58, Chicken_59, Niblet_59
• Track 2 : Westrich_69, Amanises_61, Zixiang_58, Toad24_61, Gravel_70, KendraB23_69, Pelletreau_70
• Track 3 : Chickaboom_60, Basilisk_59, WileyE_60, Ruchi_58
• Track 4 : Eesa_59
• Track 5 : Orcanus_59
• Track 6 : Jamun_57
• Track 7 : TaylorSipht_59
• Track 8 : Vulpecula_59
• Track 9 : Bedetta_63, GramZayde_60, OtsoOtso_59, Jerole_59, Amelia_58, Lunar_60, Pineda_60, Coral_58, Damocles_63, Polka_58, Kepler_60, PhirstandPhine_59, BadWillHunting_64, Daob_60, Bibble12_63, HannahPhantana_60, Cote_61, Colusalem_59
• Track 10 : Cygnet_59
• Track 11 : Antrice_61
• Track 12 : LittleTokyo_57
• Track 13 : Zhuangyuan_63
• Track 14 : Melons_61
• Track 15 : Kuleana_62
• Track 16 : DanHam62_59, Juno112_58, Fingolfin_59, AmiCi24_58, HamCheese_59, PhluffyCoco_59, Atlantica_59, Laphuphu24k_57, Glotell_60
• Track 17 : Babushka_56
• Track 18 : StuartMinion_49, AlexMinion_57
• Track 19 : Andrew_62
• Track 20 : Renna12_59
• Track 21 : Rattail_59
• Track 22 : RedFox_59, Azaz_59, Leona_58

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

The start number called the most often in the published annotations is 21, it was called in 19 of the 51 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Amanises_61, Antrice_61, Basilisk_59, Brynnie_58, Chickaboom_60, Chicken_59, Cygnet_59, Eesa_59, Gravel_70, Jamun_57, KendraB23_69, LittleTokyo_57, Niblet_59, Orcanus_59, Pelletreau_70, Ruchi_58, TaylorSipht_59, Toad24_61, Vulpecula_59, Westrich_69, WileyE_60, Zhuangyuan_63, Zixiang_58,

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

Genes that do not have the "Most Annotated" start:
• AlexMinion_57, Amelia_58, AmiCi24_58, Andrew_62, Atlantica_59, Azaz_59, Babushka_56, BadWillHunting_64, Bedetta_63, Bibble12_63, Colusalem_59, Coral_58, Cote_61, Damocles_63, DanHam62_59, Daob_60, Fingolfin_59, Glotell_60, GramZayde_60, HamCheese_59, HannahPhantana_60, Jerole_59, Juno112_58, Kepler_60, Kuleana_62, Laphuphu24k_57, Leona_58, Lunar_60, Melons_61, OtsoOtso_59, PhirstandPhine_59, PhluffyCoco_59, Pineda_60, Polka_58, Rattail_59, RedFox_59, Renna12_59, StuartMinion_49,

Summary by start number:

Start 18:
• Found in 1 of 61 (1.6%) of genes in pham
• Manual Annotations of this start: 1 of 51
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Kuleana_62 (AS2),

Start 19:
• Found in 18 of 61 (29.5%) of genes in pham
• Manual Annotations of this start: 17 of 51
• Called 100.0% of time when present
• Phage (with cluster) where this start called: AlexMinion_57 (AS3), AmiCi24_58 (AS3), Andrew_62 (AS3), Atlantica_59 (AS3), Azaz_59 (AS3), Babushka_56 (AS3), DanHam62_59 (AS3), Fingolfin_59 (AS3), Glotell_60 (AS3), HamCheese_59 (AS3), Juno112_58 (AS3), Laphuphu24k_57 (AS3), Leona_58 (AS3), PhluffyCoco_59 (AS3), Rattail_59 (AS3), RedFox_59 (AS3), Renna12_59 (AS3), StuartMinion_49 (AS3),

Start 21:
• Found in 23 of 61 (37.7%) of genes in pham
• Manual Annotations of this start: 19 of 51
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Amanises_61 (AS1), Antrice_61 (AS2), Basilisk_59 (AS1), Brynnie_58 (AS1), Chickaboom_60 (AS1), Chicken_59 (AS1), Cygnet_59 (AS2), Eesa_59 (AS1), Gravel_70 (AS1), Jamun_57 (AS1), KendraB23_69 (AS1), LittleTokyo_57 (AS2), Niblet_59 (AS1), Orcanus_59 (AS1), Pelletreau_70 (AS1), Ruchi_58 (AS1), TaylorSipht_59 (AS1), Toad24_61 (AS1), Vulpecula_59 (AS1), Westrich_69 (AS1), WileyE_60 (AS1), Zhuangyuan_63 (AS2), Zixiang_58 (AS1),

Start 22:
• Found in 20 of 61 (32.8%) of genes in pham
• Manual Annotations of this start: 14 of 51
• Called 95.0% of time when present
• Phage (with cluster) where this start called: Amelia_58 (AS2), BadWillHunting_64 (AS2), Bedetta_63 (AS2), Bibble12_63 (AS2), Colusalem_59 (AS2), Coral_58 (AS2),

Cote_61 (AS2), Damocles_63 (AS2), Daob_60 (AS2), GramZayde_60 (AS2), HannahPhantana_60 (AS2), Jerole_59 (AS2), Kepler_60 (AS2), Lunar_60 (AS2), Melons_61 (AS2), OtsoOtso_59 (AS2), PhirstandPhine_59 (AS2), Pineda_60 (AS2), Polka_58 (AS2),

Summary by clusters:

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

Info for manual annotations of cluster AS1:
•Start number 21 was manually annotated 15 times for cluster AS1.

Info for manual annotations of cluster AS2:
•Start number 18 was manually annotated 1 time for cluster AS2.
•Start number 21 was manually annotated 4 times for cluster AS2.
•Start number 22 was manually annotated 14 times for cluster AS2.

Info for manual annotations of cluster AS3:
•Start number 19 was manually annotated 17 times for cluster AS3.

Gene Information:

Gene: AlexMinion_57 Start: 35165, Stop: 35326, Start Num: 19
Candidate Starts for AlexMinion_57:
(Start: 19 @35165 has 17 MA's), (25, 35210), (26, 35228), (30, 35315),

Gene: Amanises_61 Start: 37405, Stop: 37575, Start Num: 21
Candidate Starts for Amanises_61:
(9, 37303), (11, 37330), (13, 37354), (17, 37396), (Start: 21 @37405 has 19 MA's), (27, 37486), (28, 37531), (29, 37546),

Gene: Amelia_58 Start: 34705, Stop: 34866, Start Num: 22
Candidate Starts for Amelia_58:
(Start: 22 @34705 has 14 MA's), (27, 34789), (29, 34837), (31, 34858),

Gene: AmiCi24_58 Start: 35602, Stop: 35766, Start Num: 19
Candidate Starts for AmiCi24_58:
(8, 35458), (10, 35509), (14, 35557), (Start: 19 @35602 has 17 MA's), (25, 35650), (30, 35755),

Gene: Andrew_62 Start: 36132, Stop: 36293, Start Num: 19
Candidate Starts for Andrew_62:
(14, 36084), (Start: 19 @36132 has 17 MA's), (25, 36177), (26, 36195), (30, 36282),

Gene: Antrice_61 Start: 35734, Stop: 35904, Start Num: 21
Candidate Starts for Antrice_61:
(2, 35437), (3, 35443), (4, 35497), (6, 35560), (7, 35581), (Start: 21 @35734 has 19 MA's), (25, 35779), (26, 35788), (29, 35863),

Gene: Atlantica_59 Start: 35604, Stop: 35768, Start Num: 19
Candidate Starts for Atlantica_59:
(8, 35460), (10, 35511), (14, 35559), (Start: 19 @35604 has 17 MA's), (25, 35652), (30, 35757),

Gene: Azaz_59 Start: 35697, Stop: 35858, Start Num: 19
Candidate Starts for Azaz_59:
(8, 35553), (10, 35604), (14, 35652), (Start: 19 @35697 has 17 MA's), (25, 35742), (26, 35760), (30, 35847),

Gene: Babushka_56 Start: 35400, Stop: 35561, Start Num: 19
Candidate Starts for Babushka_56:
(Start: 19 @35400 has 17 MA's), (25, 35445), (27, 35484), (30, 35550),

Gene: BadWillHunting_64 Start: 34572, Stop: 34733, Start Num: 22
Candidate Starts for BadWillHunting_64:
(Start: 22 @34572 has 14 MA's), (27, 34656), (29, 34704), (31, 34725),

Gene: Basilisk_59 Start: 36355, Stop: 36525, Start Num: 21
Candidate Starts for Basilisk_59:
(Start: 21 @36355 has 19 MA's), (27, 36439),

Gene: Bedetta_63 Start: 34865, Stop: 35026, Start Num: 22
Candidate Starts for Bedetta_63:
(Start: 22 @34865 has 14 MA's), (27, 34949), (29, 34997), (31, 35018),

Gene: Bibble12_63 Start: 34700, Stop: 34861, Start Num: 22
Candidate Starts for Bibble12_63:
(Start: 22 @34700 has 14 MA's), (27, 34784), (29, 34832), (31, 34853),

Gene: Brynnie_58 Start: 36288, Stop: 36461, Start Num: 21
Candidate Starts for Brynnie_58:
(9, 36186), (11, 36213), (13, 36237), (17, 36279), (Start: 21 @36288 has 19 MA's), (27, 36375),

Gene: Chickaboom_60 Start: 36691, Stop: 36861, Start Num: 21
Candidate Starts for Chickaboom_60:
(Start: 21 @36691 has 19 MA's), (27, 36775),

Gene: Chicken_59 Start: 37075, Stop: 37242, Start Num: 21
Candidate Starts for Chicken_59:
(9, 36973), (11, 37000), (13, 37024), (17, 37066), (Start: 21 @37075 has 19 MA's), (27, 37156),

Gene: Colusalem_59 Start: 34682, Stop: 34843, Start Num: 22
Candidate Starts for Colusalem_59:
(Start: 22 @34682 has 14 MA's), (27, 34766), (29, 34814), (31, 34835),

Gene: Coral_58 Start: 34610, Stop: 34771, Start Num: 22
Candidate Starts for Coral_58:
(Start: 22 @34610 has 14 MA's), (27, 34694), (29, 34742), (31, 34763),

Gene: Cote_61 Start: 35043, Stop: 35204, Start Num: 22
Candidate Starts for Cote_61:
(Start: 22 @35043 has 14 MA's), (27, 35127), (29, 35175), (31, 35196),

Gene: Cygnet_59 Start: 36218, Stop: 36388, Start Num: 21
Candidate Starts for Cygnet_59:

(12, 36134), (15, 36167), (16, 36203), (Start: 21 @36218 has 19 MA's), (23, 36224), (25, 36263), (26, 36272), (29, 36347),

Gene: Damocles_63 Start: 34841, Stop: 35002, Start Num: 22
Candidate Starts for Damocles_63:
(Start: 22 @34841 has 14 MA's), (27, 34925), (29, 34973), (31, 34994),

Gene: DanHam62_59 Start: 35603, Stop: 35767, Start Num: 19
Candidate Starts for DanHam62_59:
(8, 35459), (10, 35510), (14, 35558), (Start: 19 @35603 has 17 MA's), (25, 35651), (30, 35756),

Gene: Daob_60 Start: 35054, Stop: 35215, Start Num: 22
Candidate Starts for Daob_60:
(Start: 22 @35054 has 14 MA's), (27, 35138), (29, 35186), (31, 35207),

Gene: Eesa_59 Start: 37502, Stop: 37666, Start Num: 21
Candidate Starts for Eesa_59:
(9, 37400), (11, 37427), (13, 37451), (17, 37493), (Start: 21 @37502 has 19 MA's), (24, 37532), (27, 37583), (30, 37649),

Gene: Fingolfin_59 Start: 35606, Stop: 35770, Start Num: 19
Candidate Starts for Fingolfin_59:
(8, 35462), (10, 35513), (14, 35561), (Start: 19 @35606 has 17 MA's), (25, 35654), (30, 35759),

Gene: Glotell_60 Start: 35650, Stop: 35814, Start Num: 19
Candidate Starts for Glotell_60:
(8, 35506), (10, 35557), (14, 35605), (Start: 19 @35650 has 17 MA's), (25, 35698), (30, 35803),

Gene: GramZayde_60 Start: 34882, Stop: 35043, Start Num: 22
Candidate Starts for GramZayde_60:
(Start: 22 @34882 has 14 MA's), (27, 34966), (29, 35014), (31, 35035),

Gene: Gravel_70 Start: 37719, Stop: 37889, Start Num: 21
Candidate Starts for Gravel_70:
(9, 37617), (11, 37644), (13, 37668), (17, 37710), (Start: 21 @37719 has 19 MA's), (27, 37800), (28, 37845), (29, 37860),

Gene: HamCheese_59 Start: 35590, Stop: 35754, Start Num: 19
Candidate Starts for HamCheese_59:
(8, 35446), (10, 35497), (14, 35545), (Start: 19 @35590 has 17 MA's), (25, 35638), (30, 35743),

Gene: HannahPhantana_60 Start: 34700, Stop: 34861, Start Num: 22
Candidate Starts for HannahPhantana_60:
(Start: 22 @34700 has 14 MA's), (27, 34784), (29, 34832), (31, 34853),

Gene: Jamun_57 Start: 36628, Stop: 36801, Start Num: 21
Candidate Starts for Jamun_57:
(Start: 21 @36628 has 19 MA's), (23, 36634), (27, 36712), (30, 36778),

Gene: Jerole_59 Start: 34824, Stop: 34985, Start Num: 22
Candidate Starts for Jerole_59:
(Start: 22 @34824 has 14 MA's), (27, 34908), (29, 34956), (31, 34977),

Gene: Juno112_58 Start: 35606, Stop: 35770, Start Num: 19
Candidate Starts for Juno112_58:
(8, 35462), (10, 35513), (14, 35561), (Start: 19 @35606 has 17 MA's), (25, 35654), (30, 35759),

Gene: KendraB23_69 Start: 37407, Stop: 37577, Start Num: 21
Candidate Starts for KendraB23_69:
(9, 37305), (11, 37332), (13, 37356), (17, 37398), (Start: 21 @37407 has 19 MA's), (27, 37488), (28, 37533), (29, 37548),

Gene: Kepler_60 Start: 34821, Stop: 34982, Start Num: 22
Candidate Starts for Kepler_60:
(Start: 22 @34821 has 14 MA's), (27, 34905), (29, 34953), (31, 34974),

Gene: Kuleana_62 Start: 35611, Stop: 35784, Start Num: 18
Candidate Starts for Kuleana_62:
(8, 35467), (10, 35518), (14, 35566), (Start: 18 @35611 has 1 MA's), (Start: 22 @35620 has 14 MA's), (26, 35683), (27, 35704), (31, 35773),

Gene: Laphuphu24k_57 Start: 35590, Stop: 35754, Start Num: 19
Candidate Starts for Laphuphu24k_57:
(8, 35446), (10, 35497), (14, 35545), (Start: 19 @35590 has 17 MA's), (25, 35638), (30, 35743),

Gene: Leona_58 Start: 35698, Stop: 35859, Start Num: 19
Candidate Starts for Leona_58:
(8, 35554), (10, 35605), (14, 35653), (Start: 19 @35698 has 17 MA's), (25, 35743), (26, 35761), (30, 35848),

Gene: LittleTokyo_57 Start: 34219, Stop: 34386, Start Num: 21
Candidate Starts for LittleTokyo_57:
(Start: 21 @34219 has 19 MA's), (25, 34264), (26, 34273),

Gene: Lunar_60 Start: 34733, Stop: 34894, Start Num: 22
Candidate Starts for Lunar_60:
(Start: 22 @34733 has 14 MA's), (27, 34817), (29, 34865), (31, 34886),

Gene: Melons_61 Start: 34888, Stop: 35049, Start Num: 22
Candidate Starts for Melons_61:
(10, 34795), (14, 34843), (Start: 22 @34888 has 14 MA's), (27, 34972), (29, 35020), (31, 35041),

Gene: Niblet_59 Start: 37013, Stop: 37180, Start Num: 21
Candidate Starts for Niblet_59:
(9, 36911), (11, 36938), (13, 36962), (17, 37004), (Start: 21 @37013 has 19 MA's), (27, 37094),

Gene: Orcanus_59 Start: 36837, Stop: 37007, Start Num: 21
Candidate Starts for Orcanus_59:
(9, 36735), (11, 36762), (13, 36786), (17, 36828), (Start: 21 @36837 has 19 MA's), (24, 36867), (27, 36918), (28, 36963), (29, 36978),

Gene: OtsoOtso_59 Start: 34555, Stop: 34716, Start Num: 22
Candidate Starts for OtsoOtso_59:
(Start: 22 @34555 has 14 MA's), (27, 34639), (29, 34687), (31, 34708),

Gene: Pelletreau_70 Start: 37719, Stop: 37889, Start Num: 21

Candidate Starts for Pelletreau_70:
(9, 37617), (11, 37644), (13, 37668), (17, 37710), (Start: 21 @37719 has 19 MA's), (27, 37800), (28, 37845), (29, 37860),

Gene: PhirstandPhine_59 Start: 34693, Stop: 34854, Start Num: 22
Candidate Starts for PhirstandPhine_59:
(Start: 22 @34693 has 14 MA's), (27, 34777), (29, 34825), (31, 34846),

Gene: PhluffyCoco_59 Start: 35705, Stop: 35869, Start Num: 19
Candidate Starts for PhluffyCoco_59:
(8, 35561), (10, 35612), (14, 35660), (Start: 19 @35705 has 17 MA's), (25, 35753), (30, 35858),

Gene: Pineda_60 Start: 34862, Stop: 35023, Start Num: 22
Candidate Starts for Pineda_60:
(Start: 22 @34862 has 14 MA's), (27, 34946), (29, 34994), (31, 35015),

Gene: Polka_58 Start: 34555, Stop: 34716, Start Num: 22
Candidate Starts for Polka_58:
(Start: 22 @34555 has 14 MA's), (27, 34639), (29, 34687), (31, 34708),

Gene: Rattail_59 Start: 35790, Stop: 35954, Start Num: 19
Candidate Starts for Rattail_59:
(14, 35745), (Start: 19 @35790 has 17 MA's), (25, 35838), (30, 35943),

Gene: RedFox_59 Start: 35703, Stop: 35867, Start Num: 19
Candidate Starts for RedFox_59:
(8, 35559), (10, 35610), (14, 35658), (Start: 19 @35703 has 17 MA's), (25, 35751), (26, 35769), (30, 35856),

Gene: Renna12_59 Start: 35816, Stop: 35977, Start Num: 19
Candidate Starts for Renna12_59:
(Start: 19 @35816 has 17 MA's), (25, 35861), (30, 35966),

Gene: Ruchi_58 Start: 36277, Stop: 36447, Start Num: 21
Candidate Starts for Ruchi_58:
(Start: 21 @36277 has 19 MA's), (27, 36361),

Gene: StuartMinion_49 Start: 32064, Stop: 32225, Start Num: 19
Candidate Starts for StuartMinion_49:
(Start: 19 @32064 has 17 MA's), (25, 32109), (26, 32127), (30, 32214),

Gene: TaylorSipht_59 Start: 36450, Stop: 36623, Start Num: 21
Candidate Starts for TaylorSipht_59:
(1, 36066), (5, 36252), (Start: 21 @36450 has 19 MA's), (27, 36537), (30, 36603),

Gene: Toad24_61 Start: 37459, Stop: 37629, Start Num: 21
Candidate Starts for Toad24_61:
(9, 37357), (11, 37384), (13, 37408), (17, 37450), (Start: 21 @37459 has 19 MA's), (27, 37540), (28, 37585), (29, 37600),

Gene: Vulpecula_59 Start: 36124, Stop: 36297, Start Num: 21
Candidate Starts for Vulpecula_59:
(9, 36022), (11, 36049), (17, 36115), (Start: 21 @36124 has 19 MA's), (27, 36211),

Gene: Westrich_69 Start: 37643, Stop: 37813, Start Num: 21
Candidate Starts for Westrich_69:
(9, 37541), (11, 37568), (13, 37592), (17, 37634), (Start: 21 @37643 has 19 MA's), (27, 37724), (28, 37769), (29, 37784),

Gene: WileyE_60 Start: 36691, Stop: 36861, Start Num: 21
Candidate Starts for WileyE_60:
(Start: 21 @36691 has 19 MA's), (27, 36775),

Gene: Zhuangyuan_63 Start: 36406, Stop: 36573, Start Num: 21
Candidate Starts for Zhuangyuan_63:
(20, 36403), (Start: 21 @36406 has 19 MA's), (25, 36451), (26, 36460), (29, 36535),

Gene: Zixiang_58 Start: 36823, Stop: 36993, Start Num: 21
Candidate Starts for Zixiang_58:
(9, 36721), (11, 36748), (13, 36772), (17, 36814), (Start: 21 @36823 has 19 MA's), (27, 36904), (28, 36949), (29, 36964),