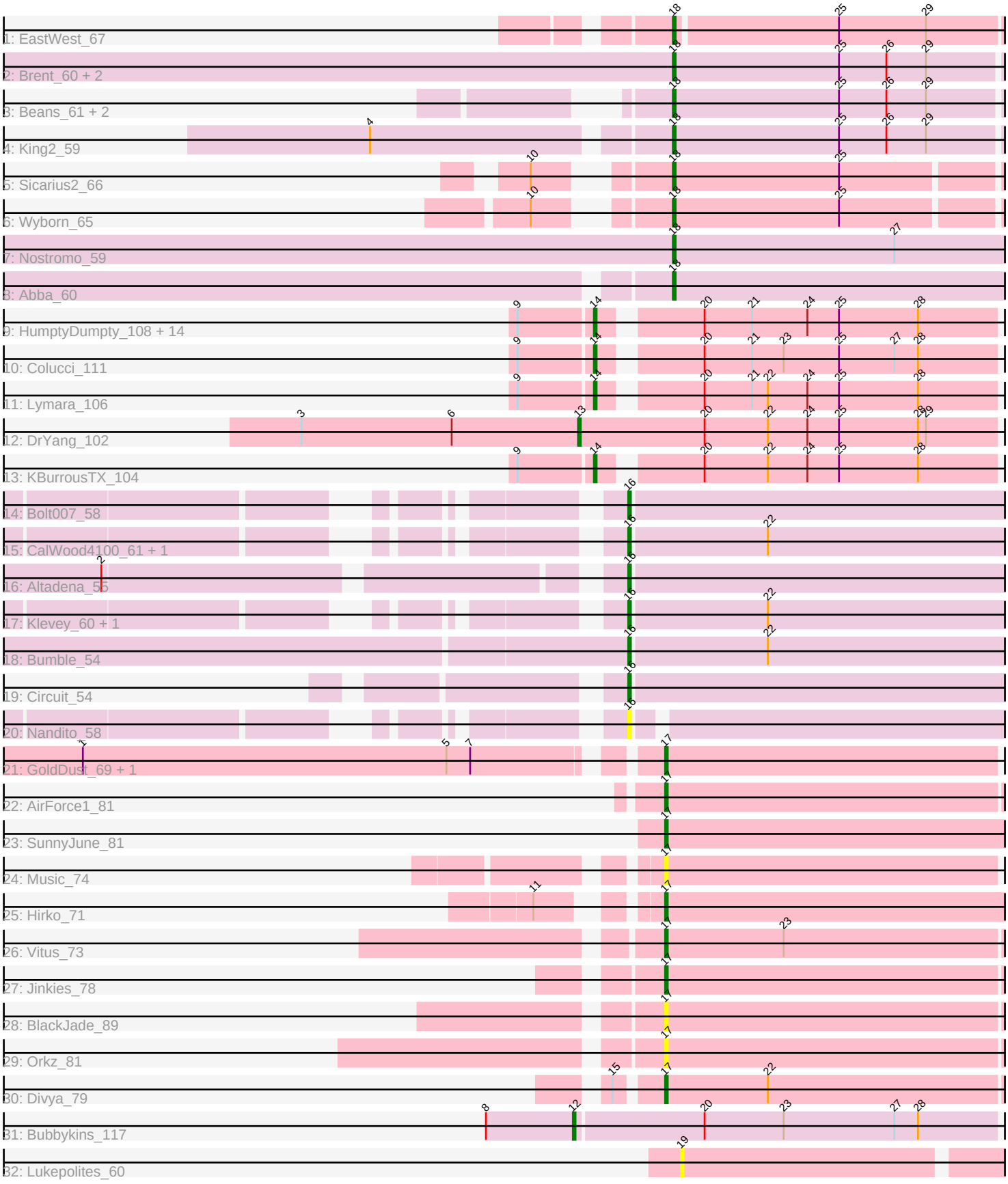
Pham 344064


1: EastWest_67
2: Brent_60 + 2
3: Beans_61 + 2
4: King2_59
5: Sicarius2_66
6: Wyborn_65
7: Nostromo_59
8: Abba_60
9: HumptyDumpty_108 + 14
10: Colucci_111
11: Lymara_106
12: DrYang_102
13: KBurrousTX_104
14: Bolt007_58
15: CalWood4100_61 + 1
16: Altadena_55
17: Klevey_60 + 1
18: Bumble_54
19: Circuit_54
20: Nandito_58
21: GoldDust_69 + 1
22: AirForce1_81
23: SunnyJune_81
24: Music_74
25: Hirko_71
26: Vitus_73
27: Jinkies_78
28: BlackJade_89
29: Orkz_81
30: Divya_79
31: Bubbykins_117
32: Lukepolites_60

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 344064 Report

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

Pham number 344064 has 53 members, 7 are drafts.

Phages represented in each track:
- Track 1 : EastWest_67
- Track 2 : Brent_60, Jawnski_59, Franzy_59
- Track 3 : Beans_61, NathanVaag_60, Piccoletto_61
- Track 4 : King2_59
- Track 5 : Sicarius2_66
- Track 6 : Wyborn_65
- Track 7 : Nostromo_59
- Track 8 : Abba_60
- Track 9 : HumptyDumpty_108, JayCookie_109, EdgarPoe_108, Kabreeze_108, Linus_109, Chocolat_108, Scavito_109, PrincessTrina_109, Chipper1996_1090, Chubster_109, JaNo_107, RosiePosie_109, MoyaNatalis_109, Mordred_108, Conboy_108
- Track 10 : Colucci_111
- Track 11 : Lymara_106
- Track 12 : DrYang_102
- Track 13 : KBurrousTX_104
- Track 14 : Bolt007_58
- Track 15 : CalWood4100_61, Lilmac1015_61
- Track 16 : Altadena_55
- Track 17 : Klevey_60, Prairie_58
- Track 18 : Bumble_54
- Track 19 : Circuit_54
- Track 20 : Nandito_58
- Track 21 : GoldDust_69, Gooberta_70
- Track 22 : AirForce1_81
- Track 23 : SunnyJune_81
- Track 24 : Music_74
- Track 25 : Hirko_71
- Track 26 : Vitus_73
- Track 27 : Jinkies_78
- Track 28 : BlackJade_89
- Track 29 : Orkz_81
- Track 30 : Divya_79
- Track 31 : Bubbykins_117
- Track 32 : Lukepolites_60

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

The start number called the most often in the published annotations is 14, it was called in 17 of the 46 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Chipper1996_1090, Chocolat_108, Chubster_109, Colucci_111, Conboy_108, EdgarPoe_108, HumptyDumpty_108, JaNo_107, JayCookie_109, KBurrousTX_104, Kabreeze_108, Linus_109, Lymara_106, Mordred_108, MoyaNatalis_109, PrincessTrina_109, RosiePosie_109, Scavito_109,

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

Genes that do not have the "Most Annotated" start:
• Abba_60, AirForce1_81, Altadena_55, Beans_61, BlackJade_89, Bolt007_58, Brent_60, Bubbykins_117, Bumble_54, CalWood4100_61, Circuit_54, Divya_79, DrYang_102, EastWest_67, Franzy_59, GoldDust_69, Gooberta_70, Hirko_71, Jawnski_59, Jinkies_78, King2_59, Klevey_60, Lilmac1015_61, Lukepolites_60, Music_74, Nandito_58, NathanVaag_60, Nostromo_59, Orkz_81, Piccoletto_61, Prairie_58, Sicarius2_66, SunnyJune_81, Vitus_73, Wyborn_65,

Summary by start number:

Start 12:
• Found in 1 of 53 (1.9%) of genes in pham
• Manual Annotations of this start: 1 of 46
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bubbykins_117 (UNK),

Start 13:
• Found in 1 of 53 (1.9%) of genes in pham
• Manual Annotations of this start: 1 of 46
• Called 100.0% of time when present
• Phage (with cluster) where this start called: DrYang_102 (AR),

Start 14:
• Found in 18 of 53 (34.0%) of genes in pham
• Manual Annotations of this start: 17 of 46
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Chipper1996_1090 (AR), Chocolat_108 (AR), Chubster_109 (AR), Colucci_111 (AR), Conboy_108 (AR), EdgarPoe_108 (AR), HumptyDumpty_108 (AR), JaNo_107 (AR), JayCookie_109 (AR), KBurrousTX_104 (AR), Kabreeze_108 (AR), Linus_109 (AR), Lymara_106 (AR), Mordred_108 (AR), MoyaNatalis_109 (AR), PrincessTrina_109 (AR), RosiePosie_109 (AR), Scavito_109 (AR),

Start 16:
• Found in 9 of 53 (17.0%) of genes in pham
• Manual Annotations of this start: 7 of 46
• Called 100.0% of time when present

• Phage (with cluster) where this start called: Altadena_55 (FH), Bolt007_58 (FH), Bumble_54 (FH), CalWood4100_61 (FH), Circuit_54 (FH), Klevey_60 (FH), Lilmac1015_61 (FH), Nandito_58 (FH), Prairie_58 (FH),

Start 17:
• Found in 11 of 53 (20.8%) of genes in pham
• Manual Annotations of this start: 8 of 46
• Called 100.0% of time when present
• Phage (with cluster) where this start called: AirForce1_81 (FL), BlackJade_89 (FL), Divya_79 (FL), GoldDust_69 (FL), Gooberta_70 (FL), Hirko_71 (FL), Jinkies_78 (FL), Music_74 (FL), Orkz_81 (FL), SunnyJune_81 (FL), Vitus_73 (FL),

Start 18:
• Found in 12 of 53 (22.6%) of genes in pham
• Manual Annotations of this start: 12 of 46
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Abba_60 (AO3), Beans_61 (AO1), Brent_60 (AO1), EastWest_67 (AO), Franzy_59 (AO1), Jawnski_59 (AO1), King2_59 (AO1), NathanVaag_60 (AO1), Nostromo_59 (AO3), Piccoletto_61 (AO1), Sicarius2_66 (AO2), Wyborn_65 (AO2),

Start 19:
• Found in 1 of 53 (1.9%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Lukepolites_60 (singleton),

Summary by clusters:

There are 9 clusters represented in this pham: singleton, AO, AR, AO3, AO2, AO1, FH, UNK, FL,

Info for manual annotations of cluster AO:
•Start number 18 was manually annotated 1 time for cluster AO.

Info for manual annotations of cluster AO1:
•Start number 18 was manually annotated 7 times for cluster AO1.

Info for manual annotations of cluster AO2:
•Start number 18 was manually annotated 2 times for cluster AO2.

Info for manual annotations of cluster AO3:
•Start number 18 was manually annotated 2 times for cluster AO3.

Info for manual annotations of cluster AR:
•Start number 13 was manually annotated 1 time for cluster AR.
•Start number 14 was manually annotated 17 times for cluster AR.

Info for manual annotations of cluster FH:
•Start number 16 was manually annotated 7 times for cluster FH.

Info for manual annotations of cluster FL:
•Start number 17 was manually annotated 8 times for cluster FL.

Info for manual annotations of cluster UNK:
•Start number 12 was manually annotated 1 time for cluster UNK.

Gene Information:

Gene: Abba_60 Start: 38967, Stop: 39098, Start Num: 18
Candidate Starts for Abba_60:
(Start: 18 @38967 has 12 MA's),

Gene: AirForce1_81 Start: 45175, Stop: 45303, Start Num: 17
Candidate Starts for AirForce1_81:
(Start: 17 @45175 has 8 MA's),

Gene: Altadena_55 Start: 36572, Stop: 36724, Start Num: 16
Candidate Starts for Altadena_55:
(2, 36395), (Start: 16 @36572 has 7 MA's),

Gene: Beans_61 Start: 41664, Stop: 41792, Start Num: 18
Candidate Starts for Beans_61:
(Start: 18 @41664 has 12 MA's), (25, 41727), (26, 41745), (29, 41760),

Gene: BlackJade_89 Start: 46182, Stop: 46313, Start Num: 17
Candidate Starts for BlackJade_89:
(Start: 17 @46182 has 8 MA's),

Gene: Bolt007_58 Start: 39345, Stop: 39497, Start Num: 16
Candidate Starts for Bolt007_58:
(Start: 16 @39345 has 7 MA's),

Gene: Brent_60 Start: 41735, Stop: 41863, Start Num: 18
Candidate Starts for Brent_60:
(Start: 18 @41735 has 12 MA's), (25, 41798), (26, 41816), (29, 41831),

Gene: Bubbykins_117 Start: 67289, Stop: 67447, Start Num: 12
Candidate Starts for Bubbykins_117:
(8, 67256), (Start: 12 @67289 has 1 MA's), (20, 67337), (23, 67367), (27, 67409), (28, 67418),

Gene: Bumble_54 Start: 37362, Stop: 37514, Start Num: 16
Candidate Starts for Bumble_54:
(Start: 16 @37362 has 7 MA's), (22, 37413),

Gene: CalWood4100_61 Start: 39241, Stop: 39393, Start Num: 16
Candidate Starts for CalWood4100_61:
(Start: 16 @39241 has 7 MA's), (22, 39292),

Gene: Chipper1996_1090 Start: 68691, Stop: 68834, Start Num: 14
Candidate Starts for Chipper1996_1090:
(9, 68664), (Start: 14 @68691 has 17 MA's), (20, 68724), (21, 68742), (24, 68763), (25, 68775), (28, 68805),

Gene: Chocolat_108 Start: 68402, Stop: 68545, Start Num: 14
Candidate Starts for Chocolat_108:
(9, 68375), (Start: 14 @68402 has 17 MA's), (20, 68435), (21, 68453), (24, 68474), (25, 68486), (28, 68516),

Gene: Chubster_109 Start: 68859, Stop: 69002, Start Num: 14
Candidate Starts for Chubster_109:
(9, 68832), (Start: 14 @68859 has 17 MA's), (20, 68892), (21, 68910), (24, 68931), (25, 68943), (28, 68973),

Gene: Circuit_54 Start: 38013, Stop: 38165, Start Num: 16
Candidate Starts for Circuit_54:
(Start: 16 @38013 has 7 MA's),

Gene: Colucci_111 Start: 69295, Stop: 69438, Start Num: 14
Candidate Starts for Colucci_111:
(9, 69268), (Start: 14 @69295 has 17 MA's), (20, 69328), (21, 69346), (23, 69358), (25, 69379), (27, 69400), (28, 69409),

Gene: Conboy_108 Start: 68696, Stop: 68839, Start Num: 14
Candidate Starts for Conboy_108:
(9, 68669), (Start: 14 @68696 has 17 MA's), (20, 68729), (21, 68747), (24, 68768), (25, 68780), (28, 68810),

Gene: Divya_79 Start: 44825, Stop: 44956, Start Num: 17
Candidate Starts for Divya_79:
(15, 44810), (Start: 17 @44825 has 8 MA's), (22, 44864),

Gene: DrYang_102 Start: 67623, Stop: 67781, Start Num: 13
Candidate Starts for DrYang_102:
(3, 67518), (6, 67575), (Start: 13 @67623 has 1 MA's), (20, 67671), (22, 67695), (24, 67710), (25, 67722), (28, 67752), (29, 67755),

Gene: EastWest_67 Start: 40934, Stop: 41056, Start Num: 18
Candidate Starts for EastWest_67:
(Start: 18 @40934 has 12 MA's), (25, 40994), (29, 41027),

Gene: EdgarPoe_108 Start: 68776, Stop: 68919, Start Num: 14
Candidate Starts for EdgarPoe_108:
(9, 68749), (Start: 14 @68776 has 17 MA's), (20, 68809), (21, 68827), (24, 68848), (25, 68860), (28, 68890),

Gene: Franzy_59 Start: 41751, Stop: 41879, Start Num: 18
Candidate Starts for Franzy_59:
(Start: 18 @41751 has 12 MA's), (25, 41814), (26, 41832), (29, 41847),

Gene: GoldDust_69 Start: 45468, Stop: 45593, Start Num: 17
Candidate Starts for GoldDust_69:
(1, 45261), (5, 45399), (7, 45408), (Start: 17 @45468 has 8 MA's),

Gene: Gooberta_70 Start: 46088, Stop: 46213, Start Num: 17
Candidate Starts for Gooberta_70:
(1, 45881), (5, 46019), (7, 46028), (Start: 17 @46088 has 8 MA's),

Gene: Hirko_71 Start: 45175, Stop: 45303, Start Num: 17
Candidate Starts for Hirko_71:
(11, 45142), (Start: 17 @45175 has 8 MA's),

Gene: HumptyDumpty_108 Start: 68579, Stop: 68722, Start Num: 14
Candidate Starts for HumptyDumpty_108:
(9, 68552), (Start: 14 @68579 has 17 MA's), (20, 68612), (21, 68630), (24, 68651), (25, 68663), (28, 68693),

Gene: JaNo_107 Start: 68550, Stop: 68693, Start Num: 14
Candidate Starts for JaNo_107:
(9, 68523), (Start: 14 @68550 has 17 MA's), (20, 68583), (21, 68601), (24, 68622), (25, 68634), (28, 68664),

Gene: Jawnski_59 Start: 41260, Stop: 41388, Start Num: 18
Candidate Starts for Jawnski_59:
(Start: 18 @41260 has 12 MA's), (25, 41323), (26, 41341), (29, 41356),

Gene: JayCookie_109 Start: 68963, Stop: 69106, Start Num: 14
Candidate Starts for JayCookie_109:
(9, 68936), (Start: 14 @68963 has 17 MA's), (20, 68996), (21, 69014), (24, 69035), (25, 69047), (28, 69077),

Gene: Jinkies_78 Start: 45527, Stop: 45655, Start Num: 17
Candidate Starts for Jinkies_78:
(Start: 17 @45527 has 8 MA's),

Gene: KBurrousTX_104 Start: 69569, Stop: 69712, Start Num: 14
Candidate Starts for KBurrousTX_104:
(9, 69542), (Start: 14 @69569 has 17 MA's), (20, 69602), (22, 69626), (24, 69641), (25, 69653), (28, 69683),

Gene: Kabreeze_108 Start: 68636, Stop: 68779, Start Num: 14
Candidate Starts for Kabreeze_108:
(9, 68609), (Start: 14 @68636 has 17 MA's), (20, 68669), (21, 68687), (24, 68708), (25, 68720), (28, 68750),

Gene: King2_59 Start: 41630, Stop: 41758, Start Num: 18
Candidate Starts for King2_59:
(4, 41525), (Start: 18 @41630 has 12 MA's), (25, 41693), (26, 41711), (29, 41726),

Gene: Klevey_60 Start: 39022, Stop: 39174, Start Num: 16
Candidate Starts for Klevey_60:
(Start: 16 @39022 has 7 MA's), (22, 39073),

Gene: Lilmac1015_61 Start: 39241, Stop: 39393, Start Num: 16
Candidate Starts for Lilmac1015_61:
(Start: 16 @39241 has 7 MA's), (22, 39292),

Gene: Linus_109 Start: 69084, Stop: 69227, Start Num: 14
Candidate Starts for Linus_109:

(9, 69057), (Start: 14 @69084 has 17 MA's), (20, 69117), (21, 69135), (24, 69156), (25, 69168), (28, 69198),

Gene: Lukepolites_60 Start: 40706, Stop: 40834, Start Num: 19
Candidate Starts for Lukepolites_60:
(19, 40706),

Gene: Lymara_106 Start: 67353, Stop: 67496, Start Num: 14
Candidate Starts for Lymara_106:
(9, 67326), (Start: 14 @67353 has 17 MA's), (20, 67386), (21, 67404), (22, 67410), (24, 67425), (25, 67437), (28, 67467),

Gene: Mordred_108 Start: 68675, Stop: 68818, Start Num: 14
Candidate Starts for Mordred_108:
(9, 68648), (Start: 14 @68675 has 17 MA's), (20, 68708), (21, 68726), (24, 68747), (25, 68759), (28, 68789),

Gene: MoyaNatalis_109 Start: 68409, Stop: 68552, Start Num: 14
Candidate Starts for MoyaNatalis_109:
(9, 68382), (Start: 14 @68409 has 17 MA's), (20, 68442), (21, 68460), (24, 68481), (25, 68493), (28, 68523),

Gene: Music_74 Start: 45746, Stop: 45871, Start Num: 17
Candidate Starts for Music_74:
(Start: 17 @45746 has 8 MA's),

Gene: Nandito_58 Start: 39020, Stop: 39169, Start Num: 16
Candidate Starts for Nandito_58:
(Start: 16 @39020 has 7 MA's),

Gene: NathanVaag_60 Start: 41450, Stop: 41578, Start Num: 18
Candidate Starts for NathanVaag_60:
(Start: 18 @41450 has 12 MA's), (25, 41513), (26, 41531), (29, 41546),

Gene: Nostromo_59 Start: 39981, Stop: 40106, Start Num: 18
Candidate Starts for Nostromo_59:
(Start: 18 @39981 has 12 MA's), (27, 40065),

Gene: Orkz_81 Start: 43492, Stop: 43620, Start Num: 17
Candidate Starts for Orkz_81:
(Start: 17 @43492 has 8 MA's),

Gene: Piccoletto_61 Start: 41667, Stop: 41795, Start Num: 18
Candidate Starts for Piccoletto_61:
(Start: 18 @41667 has 12 MA's), (25, 41730), (26, 41748), (29, 41763),

Gene: Prairie_58 Start: 38387, Stop: 38539, Start Num: 16
Candidate Starts for Prairie_58:
(Start: 16 @38387 has 7 MA's), (22, 38438),

Gene: PrincessTrina_109 Start: 68866, Stop: 69009, Start Num: 14
Candidate Starts for PrincessTrina_109:

(9, 68839), (Start: 14 @68866 has 17 MA's), (20, 68899), (21, 68917), (24, 68938), (25, 68950), (28, 68980),

Gene: RosiePosie_109 Start: 68997, Stop: 69140, Start Num: 14
Candidate Starts for RosiePosie_109:
(9, 68970), (Start: 14 @68997 has 17 MA's), (20, 69030), (21, 69048), (24, 69069), (25, 69081), (28, 69111),

Gene: Scavito_109 Start: 68724, Stop: 68867, Start Num: 14
Candidate Starts for Scavito_109:
(9, 68697), (Start: 14 @68724 has 17 MA's), (20, 68757), (21, 68775), (24, 68796), (25, 68808), (28, 68838),

Gene: Sicarius2_66 Start: 41017, Stop: 41142, Start Num: 18
Candidate Starts for Sicarius2_66:
(10, 40981), (Start: 18 @41017 has 12 MA's), (25, 41080),

Gene: SunnyJune_81 Start: 45235, Stop: 45369, Start Num: 17
Candidate Starts for SunnyJune_81:
(Start: 17 @45235 has 8 MA's),

Gene: Vitus_73 Start: 43697, Stop: 43825, Start Num: 17
Candidate Starts for Vitus_73:
(Start: 17 @43697 has 8 MA's), (23, 43742),

Gene: Wyborn_65 Start: 41716, Stop: 41841, Start Num: 18
Candidate Starts for Wyborn_65:
(10, 41680), (Start: 18 @41716 has 12 MA's), (25, 41779),