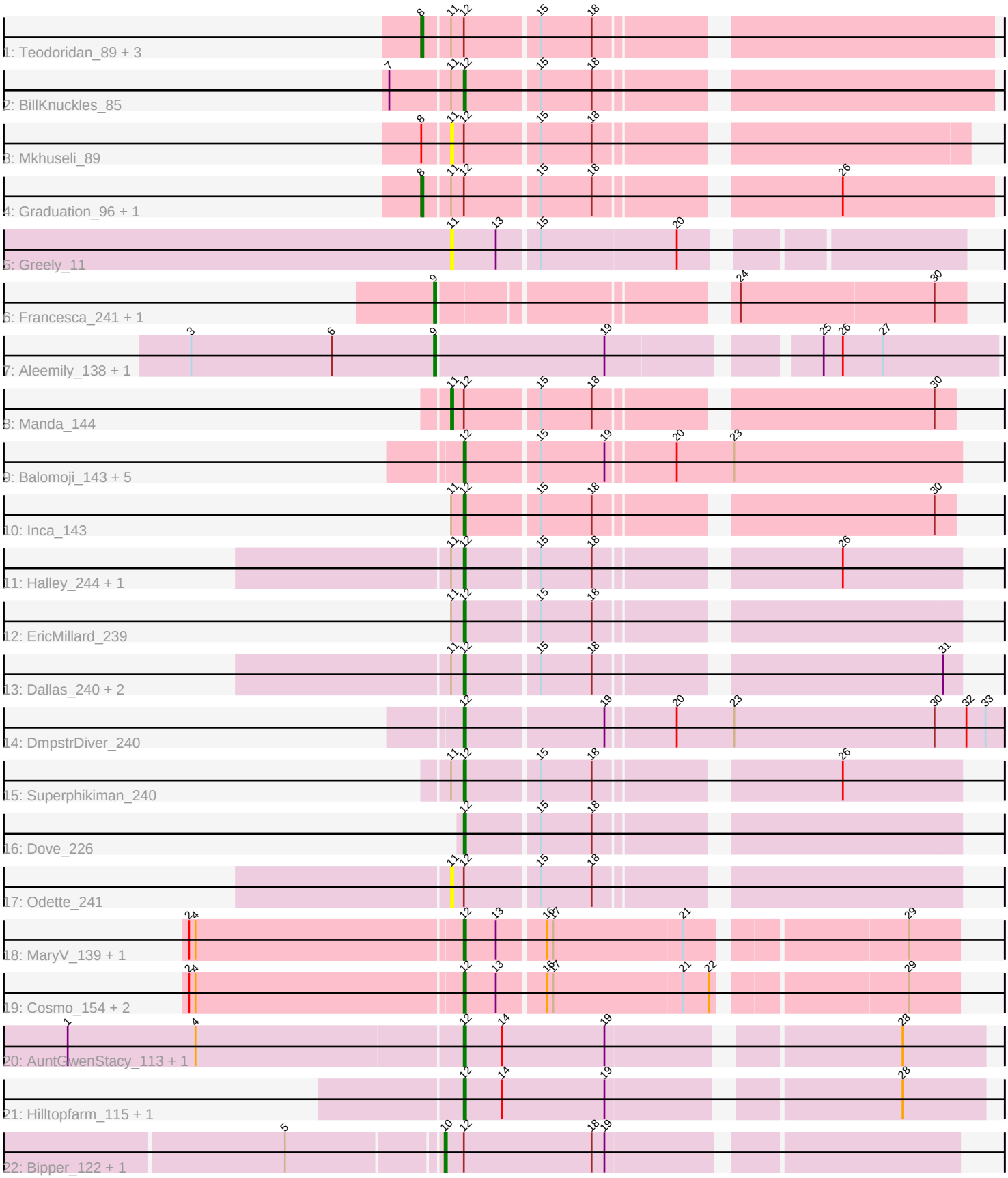
Pham 345893


1: Teodoridan_89 + 3
2: BillKnuckles_85
3: Mkhuseli_89
4: Graduation_96 + 1
5: Greely_11
6: Francesca_241 + 1
7: Aleemily_138 + 1
8: Manda_144
9: Balomoji_143 + 5
10: Inca_143
11: Halley_244 + 1
12: EricMillard_239
13: Dallas_240 + 2
14: DmpstrDiver_240
15: Superphikiman_240
16: Dove_226
17: Odette_241
18: MaryV_139 + 1
19: Cosmo_154 + 2
20: AuntGwenStacy_113 + 1
21: Hilltopfarm_115 + 1
22: Bipper_122 + 1

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 345893 Report

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

Pham number 345893 has 42 members, 6 are drafts.

Phages represented in each track:
• Track 1 : Teodoridan_89, Payneful_82, Marchy_86, PattyP_91
• Track 2 : BillKnuckles_85
• Track 3 : Mkhuseli_89
• Track 4 : Graduation_96, Cueylyss_76
• Track 5 : Greely_11
• Track 6 : Francesca_241, Dorin_240
• Track 7 : Aleemily_138, ModicumRichard_140
• Track 8 : Manda_144
• Track 9 : Balomoji_143, Asriel_140, Flypotenuse_138, Daikon_145, Barbarian_142, Traaww1_140
• Track 10 : Inca_143
• Track 11 : Halley_244, Zelink_235
• Track 12 : EricMillard_239
• Track 13 : Dallas_240, Rearden_242, Ejimix_233
• Track 14 : DmpstrDiver_240
• Track 15 : Superphikiman_240
• Track 16 : Dove_226
• Track 17 : Odette_241
• Track 18 : MaryV_139, Wildcat_153
• Track 19 : Cosmo_154, Azrael100_146, EniyanLRS_146
• Track 20 : AuntGwenStacy_113, Typha_112
• Track 21 : Hilltopfarm_115, Faiyaz_113
• Track 22 : Bipper_122, Cracklewink_122

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

The start number called the most often in the published annotations is 12, it was called in 24 of the 36 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Asriel_140, AuntGwenStacy_113, Azrael100_146, Balomoji_143, Barbarian_142, BillKnuckles_85, Cosmo_154, Daikon_145, Dallas_240, DmpstrDiver_240, Dove_226, Ejimix_233, EniyanLRS_146, EricMillard_239, Faiyaz_113, Flypotenuse_138, Halley_244, Hilltopfarm_115, Inca_143, MaryV_139, Rearden_242,

Superphikiman_240, Traaww1_140, Typha_112, Wildcat_153, Zelink_235,

Genes that have the "Most Annotated" start but do not call it:
• Bipper_122, Cracklewink_122, Cueylyss_76, Graduation_96, Manda_144, Marchy_86, Mkhuseli_89, Odette_241, PattyP_91, Payneful_82, Teodoridan_89,

Genes that do not have the "Most Annotated" start:
• Aleemily_138, Dorin_240, Francesca_241, Greely_11, ModicumRichard_140,

Summary by start number:

Start 8:
• Found in 7 of 42 (16.7%) of genes in pham
• Manual Annotations of this start: 5 of 36
• Called 85.7% of time when present
• Phage (with cluster) where this start called: Cueylyss_76 (A1), Graduation_96 (A1), Marchy_86 (A1), PattyP_91 (A1), Payneful_82 (A1), Teodoridan_89 (A1),

Start 9:
• Found in 4 of 42 (9.5%) of genes in pham
• Manual Annotations of this start: 4 of 36
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Aleemily_138 (DZ), Dorin_240 (CG), Francesca_241 (CG), ModicumRichard_140 (DZ),

Start 10:
• Found in 2 of 42 (4.8%) of genes in pham
• Manual Annotations of this start: 2 of 36
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bipper_122 (Y), Cracklewink_122 (Y),

Start 11:
• Found in 19 of 42 (45.2%) of genes in pham
• Manual Annotations of this start: 1 of 36
• Called 21.1% of time when present
• Phage (with cluster) where this start called: Greely_11 (C2), Manda_144 (E), Mkhuseli_89 (A1), Odette_241 (J),

Start 12:
• Found in 37 of 42 (88.1%) of genes in pham
• Manual Annotations of this start: 24 of 36
• Called 70.3% of time when present
• Phage (with cluster) where this start called: Asriel_140 (E), AuntGwenStacy_113 (Y), Azrael100_146 (V), Balomoji_143 (E), Barbarian_142 (E), BillKnuckles_85 (A1), Cosmo_154 (V), Daikon_145 (E), Dallas_240 (J), DmpstrDiver_240 (J), Dove_226 (J), Ejimix_233 (J), EniyanLRS_146 (V), EricMillard_239 (J), Faiyaz_113 (Y), Flypotenuse_138 (E), Halley_244 (J), Hilltopfarm_115 (Y), Inca_143 (E), MaryV_139 (V), Rearden_242 (J), Superphikiman_240 (J), Traaww1_140 (E), Typha_112 (Y), Wildcat_153 (V), Zelink_235 (J),

Summary by clusters:

There are 8 clusters represented in this pham: E, J, CG, A1, DZ, V, Y, C2,

Info for manual annotations of cluster A1:
•Start number 8 was manually annotated 5 times for cluster A1.
•Start number 12 was manually annotated 1 time for cluster A1.

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

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

Info for manual annotations of cluster E:
•Start number 11 was manually annotated 1 time for cluster E.
•Start number 12 was manually annotated 6 times for cluster E.

Info for manual annotations of cluster J:
•Start number 12 was manually annotated 8 times for cluster J.

Info for manual annotations of cluster V:
•Start number 12 was manually annotated 5 times for cluster V.

Info for manual annotations of cluster Y:
•Start number 10 was manually annotated 2 times for cluster Y.
•Start number 12 was manually annotated 4 times for cluster Y.

Gene Information:

Gene: Aleemily_138 Start: 74358, Stop: 74113, Start Num: 9
Candidate Starts for Aleemily_138:
(3, 74472), (6, 74406), (Start: 9 @74358 has 4 MA's), (19, 74280), (25, 74193), (26, 74184), (27, 74166),

Gene: Asriel_140 Start: 73109, Stop: 72885, Start Num: 12
Candidate Starts for Asriel_140:
(Start: 12 @73109 has 24 MA's), (15, 73076), (19, 73046), (20, 73016), (23, 72989),

Gene: AuntGwenStacy_113 Start: 67958, Stop: 68185, Start Num: 12
Candidate Starts for AuntGwenStacy_113:
(1, 67775), (4, 67835), (Start: 12 @67958 has 24 MA's), (14, 67976), (19, 68024), (28, 68147),

Gene: Azrael100_146 Start: 70067, Stop: 69852, Start Num: 12
Candidate Starts for Azrael100_146:
(2, 70193), (4, 70190), (Start: 12 @70067 has 24 MA's), (13, 70052), (16, 70031), (17, 70028), (21, 69968), (22, 69956), (29, 69875),

Gene: Balomoji_143 Start: 74934, Stop: 74710, Start Num: 12
Candidate Starts for Balomoji_143:
(Start: 12 @74934 has 24 MA's), (15, 74901), (19, 74871), (20, 74841), (23, 74814),

Gene: Barbarian_142 Start: 73109, Stop: 72885, Start Num: 12

Candidate Starts for Barbarian_142:
(Start: 12 @73109 has 24 MA's), (15, 73076), (19, 73046), (20, 73016), (23, 72989),

Gene: BillKnuckles_85 Start: 51113, Stop: 50886, Start Num: 12
Candidate Starts for BillKnuckles_85:
(7, 51146), (Start: 11 @51119 has 1 MA's), (Start: 12 @51113 has 24 MA's), (15, 51080), (18, 51056),

Gene: Bipper_122 Start: 72041, Stop: 72268, Start Num: 10
Candidate Starts for Bipper_122:
(5, 71972), (Start: 10 @72041 has 2 MA's), (Start: 12 @72050 has 24 MA's), (18, 72110), (19, 72116),

Gene: Cosmo_154 Start: 70231, Stop: 70016, Start Num: 12
Candidate Starts for Cosmo_154:
(2, 70357), (4, 70354), (Start: 12 @70231 has 24 MA's), (13, 70216), (16, 70195), (17, 70192), (21, 70132), (22, 70120), (29, 70039),

Gene: Cracklewink_122 Start: 71193, Stop: 71420, Start Num: 10
Candidate Starts for Cracklewink_122:
(5, 71124), (Start: 10 @71193 has 2 MA's), (Start: 12 @71202 has 24 MA's), (18, 71262), (19, 71268),

Gene: Cueylyss_76 Start: 47966, Stop: 47721, Start Num: 8
Candidate Starts for Cueylyss_76:
(Start: 8 @47966 has 5 MA's), (Start: 11 @47954 has 1 MA's), (Start: 12 @47948 has 24 MA's), (15, 47915), (18, 47891), (26, 47789),

Gene: Daikon_145 Start: 74182, Stop: 73958, Start Num: 12
Candidate Starts for Daikon_145:
(Start: 12 @74182 has 24 MA's), (15, 74149), (19, 74119), (20, 74089), (23, 74062),

Gene: Dallas_240 Start: 110966, Stop: 110754, Start Num: 12
Candidate Starts for Dallas_240:
(Start: 11 @110972 has 1 MA's), (Start: 12 @110966 has 24 MA's), (15, 110933), (18, 110909), (31, 110762),

Gene: DmpstrDiver_240 Start: 111353, Stop: 111108, Start Num: 12
Candidate Starts for DmpstrDiver_240:
(Start: 12 @111353 has 24 MA's), (19, 111290), (20, 111260), (23, 111233), (30, 111140), (32, 111125), (33, 111116),

Gene: Dorin_240 Start: 123030, Stop: 123254, Start Num: 9
Candidate Starts for Dorin_240:
(Start: 9 @123030 has 4 MA's), (24, 123150), (30, 123240),

Gene: Dove_226 Start: 108097, Stop: 107885, Start Num: 12
Candidate Starts for Dove_226:
(Start: 12 @108097 has 24 MA's), (15, 108064), (18, 108040),

Gene: Ejimix_233 Start: 111044, Stop: 110832, Start Num: 12
Candidate Starts for Ejimix_233:
(Start: 11 @111050 has 1 MA's), (Start: 12 @111044 has 24 MA's), (15, 111011), (18, 110987), (31, 110840),

Gene: EniyanLRS_146 Start: 70560, Stop: 70345, Start Num: 12

Candidate Starts for EniyanLRS_146:
(2, 70686), (4, 70683), (Start: 12 @70560 has 24 MA's), (13, 70545), (16, 70524), (17, 70521), (21, 70461), (22, 70449), (29, 70368),

Gene: EricMillard_239 Start: 112923, Stop: 112711, Start Num: 12
Candidate Starts for EricMillard_239:
(Start: 11 @112929 has 1 MA's), (Start: 12 @112923 has 24 MA's), (15, 112890), (18, 112866),

Gene: Faiyaz_113 Start: 67824, Stop: 68051, Start Num: 12
Candidate Starts for Faiyaz_113:
(Start: 12 @67824 has 24 MA's), (14, 67842), (19, 67890), (28, 68013),

Gene: Flypotenuse_138 Start: 73763, Stop: 73539, Start Num: 12
Candidate Starts for Flypotenuse_138:
(Start: 12 @73763 has 24 MA's), (15, 73730), (19, 73700), (20, 73670), (23, 73643),

Gene: Francesca_241 Start: 123673, Stop: 123897, Start Num: 9
Candidate Starts for Francesca_241:
(Start: 9 @123673 has 4 MA's), (24, 123793), (30, 123883),

Gene: Graduation_96 Start: 52305, Stop: 52060, Start Num: 8
Candidate Starts for Graduation_96:
(Start: 8 @52305 has 5 MA's), (Start: 11 @52293 has 1 MA's), (Start: 12 @52287 has 24 MA's), (15, 52254), (18, 52230), (26, 52128),

Gene: Greely_11 Start: 4707, Stop: 4925, Start Num: 11
Candidate Starts for Greely_11:
(Start: 11 @4707 has 1 MA's), (13, 4728), (15, 4746), (20, 4809),

Gene: Halley_244 Start: 111452, Stop: 111240, Start Num: 12
Candidate Starts for Halley_244:
(Start: 11 @111458 has 1 MA's), (Start: 12 @111452 has 24 MA's), (15, 111419), (18, 111395), (26, 111293),

Gene: Hilltopfarm_115 Start: 68647, Stop: 68874, Start Num: 12
Candidate Starts for Hilltopfarm_115:
(Start: 12 @68647 has 24 MA's), (14, 68665), (19, 68713), (28, 68836),

Gene: Inca_143 Start: 72597, Stop: 72388, Start Num: 12
Candidate Starts for Inca_143:
(Start: 11 @72603 has 1 MA's), (Start: 12 @72597 has 24 MA's), (15, 72564), (18, 72540), (30, 72396),

Gene: Manda_144 Start: 74266, Stop: 74051, Start Num: 11
Candidate Starts for Manda_144:
(Start: 11 @74266 has 1 MA's), (Start: 12 @74260 has 24 MA's), (15, 74227), (18, 74203), (30, 74059),

Gene: Marchy_86 Start: 48590, Stop: 48835, Start Num: 8
Candidate Starts for Marchy_86:
(Start: 8 @48590 has 5 MA's), (Start: 11 @48602 has 1 MA's), (Start: 12 @48608 has 24 MA's), (15, 48641), (18, 48665),

Gene: MaryV_139 Start: 68409, Stop: 68194, Start Num: 12
Candidate Starts for MaryV_139:

(2, 68535), (4, 68532), (Start: 12 @68409 has 24 MA's), (13, 68394), (16, 68373), (17, 68370), (21, 68310), (29, 68217),

Gene: Mkhuseli_89 Start: 49243, Stop: 49022, Start Num: 11
Candidate Starts for Mkhuseli_89:
(Start: 8 @49255 has 5 MA's), (Start: 11 @49243 has 1 MA's), (Start: 12 @49237 has 24 MA's), (15, 49204), (18, 49180),

Gene: ModicumRichard_140 Start: 75253, Stop: 75008, Start Num: 9
Candidate Starts for ModicumRichard_140:
(3, 75367), (6, 75301), (Start: 9 @75253 has 4 MA's), (19, 75175), (25, 75088), (26, 75079), (27, 75061),

Gene: Odette_241 Start: 111900, Stop: 111682, Start Num: 11
Candidate Starts for Odette_241:
(Start: 11 @111900 has 1 MA's), (Start: 12 @111894 has 24 MA's), (15, 111861), (18, 111837),

Gene: PattyP_91 Start: 51310, Stop: 51065, Start Num: 8
Candidate Starts for PattyP_91:
(Start: 8 @51310 has 5 MA's), (Start: 11 @51298 has 1 MA's), (Start: 12 @51292 has 24 MA's), (15, 51259), (18, 51235),

Gene: Payneful_82 Start: 47682, Stop: 47927, Start Num: 8
Candidate Starts for Payneful_82:
(Start: 8 @47682 has 5 MA's), (Start: 11 @47694 has 1 MA's), (Start: 12 @47700 has 24 MA's), (15, 47733), (18, 47757),

Gene: Rearden_242 Start: 110103, Stop: 109891, Start Num: 12
Candidate Starts for Rearden_242:
(Start: 11 @110109 has 1 MA's), (Start: 12 @110103 has 24 MA's), (15, 110070), (18, 110046), (31, 109899),

Gene: Superphikiman_240 Start: 109188, Stop: 108976, Start Num: 12
Candidate Starts for Superphikiman_240:
(Start: 11 @109194 has 1 MA's), (Start: 12 @109188 has 24 MA's), (15, 109155), (18, 109131), (26, 109029),

Gene: Teodoridan_89 Start: 49160, Stop: 48915, Start Num: 8
Candidate Starts for Teodoridan_89:
(Start: 8 @49160 has 5 MA's), (Start: 11 @49148 has 1 MA's), (Start: 12 @49142 has 24 MA's), (15, 49109), (18, 49085),

Gene: Traaww1_140 Start: 73938, Stop: 73714, Start Num: 12
Candidate Starts for Traaww1_140:
(Start: 12 @73938 has 24 MA's), (15, 73905), (19, 73875), (20, 73845), (23, 73818),

Gene: Typha_112 Start: 67959, Stop: 68186, Start Num: 12
Candidate Starts for Typha_112:
(1, 67776), (4, 67836), (Start: 12 @67959 has 24 MA's), (14, 67977), (19, 68025), (28, 68148),

Gene: Wildcat_153 Start: 70302, Stop: 70087, Start Num: 12
Candidate Starts for Wildcat_153:

(2, 70428), (4, 70425), (Start: 12 @70302 has 24 MA's), (13, 70287), (16, 70266), (17, 70263), (21, 70203), (29, 70110),

Gene: Zelink_235 Start: 110841, Stop: 110635, Start Num: 12
Candidate Starts for Zelink_235:
(Start: 11 @110847 has 1 MA's), (Start: 12 @110841 has 24 MA's), (15, 110808), (18, 110784), (26, 110682),