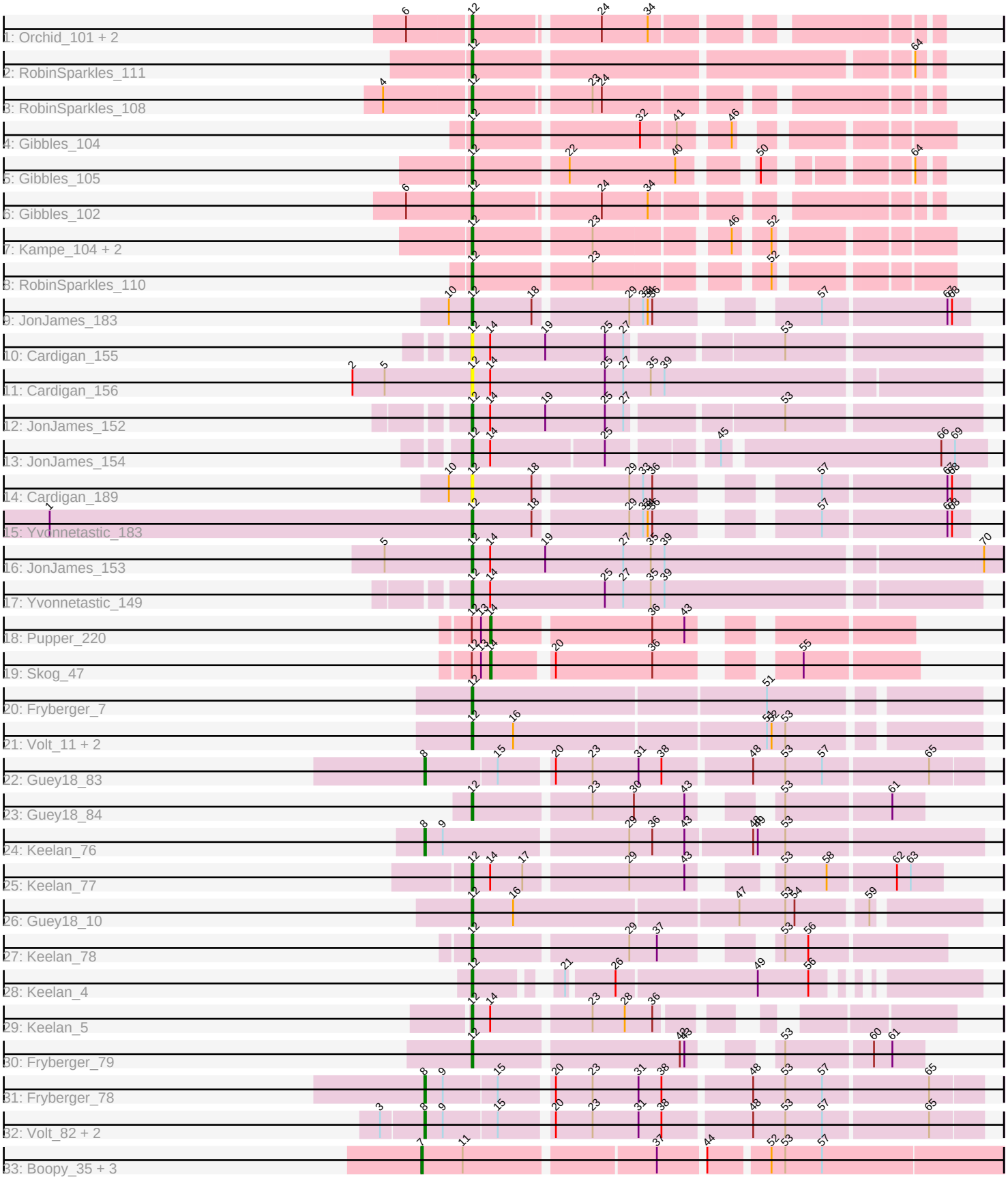
Pham 170089


1: Orchid_101 + 2
2: RobinSparkles_111
3: RobinSparkles_108
4: Gibbles_104
5: Gibbles_105
6: Gibbles_102
7: Kampe_104 + 2
8: RobinSparkles_110
9: JonJames_183
10: Cardigan_155
11: Cardigan_156
12: JonJames_152
13: JonJames_154
14: Cardigan_189
15: Yvonnetastic_183
16: JonJames_153
17: Yvonnetastic_149
18: Pupper_220
19: Skog_47
20: Fryberger_7
21: Volt_11 + 2
22: Guey18_83
23: Guey18_84
24: Keelan_76
25: Keelan_77
26: Guey18_10
27: Keelan_78
28: Keelan_4
29: Keelan_5
30: Fryberger_79
31: Fryberger_78
32: Volt_82 + 2
33: Boopy_35 + 3

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 170089 Report

This analysis was run 07/09/24 on database version 566.

Pham number 170089 has 44 members, 3 are drafts.

Phages represented in each track:
- Track 1 : Orchid_101, Kampe_102, PatrickStar_102
- Track 2 : RobinSparkles_111
- Track 3 : RobinSparkles_108
- Track 4 : Gibbles_104
- Track 5 : Gibbles_105
- Track 6 : Gibbles_102
- Track 7 : Kampe_104, PatrickStar_104, Orchid_103
- Track 8 : RobinSparkles_110
- Track 9 : JonJames_183
- Track 10 : Cardigan_155
- Track 11 : Cardigan_156
- Track 12 : JonJames_152
- Track 13 : JonJames_154
- Track 14 : Cardigan_189
- Track 15 : Yvonnetastic_183
- Track 16 : JonJames_153
- Track 17 : Yvonnetastic_149
- Track 18 : Pupper_220
- Track 19 : Skog_47
- Track 20 : Fryberger_7
- Track 21 : Volt_11, Ziko_12, Ronaldo_11
- Track 22 : Guey18_83
- Track 23 : Guey18_84
- Track 24 : Keelan_76
- Track 25 : Keelan_77
- Track 26 : Guey18_10
- Track 27 : Keelan_78
- Track 28 : Keelan_4
- Track 29 : Keelan_5
- Track 30 : Fryberger_79
- Track 31 : Fryberger_78
- Track 32 : Volt_82, Ronaldo_82, Ziko_82
- Track 33 : Boopy_35, BlueNGold_33, Forza_34, Mareelih_33

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 29 of the 41 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Cardigan_155, Cardigan_156, Cardigan_189, Fryberger_7, Fryberger_79, Gibbles_102, Gibbles_104, Gibbles_105, Guey18_10, Guey18_84, JonJames_152, JonJames_153, JonJames_154, JonJames_183, Kampe_102, Kampe_104, Keelan_4, Keelan_5, Keelan_77, Keelan_78, Orchid_101, Orchid_103, PatrickStar_102, PatrickStar_104, RobinSparkles_108, RobinSparkles_110, RobinSparkles_111, Ronaldo_11, Volt_11, Yvonnetastic_149, Yvonnetastic_183, Ziko_12,

Genes that have the "Most Annotated" start but do not call it:
• Pupper_220, Skog_47,

Genes that do not have the "Most Annotated" start:
• BlueNGold_33, Boopy_35, Forza_34, Fryberger_78, Guey18_83, Keelan_76, Mareelih_33, Ronaldo_82, Volt_82, Ziko_82,

Summary by start number:

Start 7:
• Found in 4 of 44 (9.1%) of genes in pham
• Manual Annotations of this start: 4 of 41
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BlueNGold_33 (DS), Boopy_35 (DS), Forza_34 (DS), Mareelih_33 (DS),

Start 8:
• Found in 6 of 44 (13.6%) of genes in pham
• Manual Annotations of this start: 6 of 41
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Fryberger_78 (DP), Guey18_83 (DP), Keelan_76 (DP), Ronaldo_82 (DP), Volt_82 (DP), Ziko_82 (DP),

Start 12:
• Found in 34 of 44 (77.3%) of genes in pham
• Manual Annotations of this start: 29 of 41
• Called 94.1% of time when present
• Phage (with cluster) where this start called: Cardigan_155 (DD), Cardigan_156 (DD), Cardigan_189 (DD), Fryberger_7 (DP), Fryberger_79 (DP), Gibbles_102 (CX), Gibbles_104 (CX), Gibbles_105 (CX), Guey18_10 (DP), Guey18_84 (DP), JonJames_152 (DD), JonJames_153 (DD), JonJames_154 (DD), JonJames_183 (DD), Kampe_102 (CX), Kampe_104 (CX), Keelan_4 (DP), Keelan_5 (DP), Keelan_77 (DP), Keelan_78 (DP), Orchid_101 (CX), Orchid_103 (CX), PatrickStar_102 (CX), PatrickStar_104 (CX), RobinSparkles_108 (CX), RobinSparkles_110 (CX), RobinSparkles_111 (CX), Ronaldo_11 (DP), Volt_11 (DP), Yvonnetastic_149 (DD), Yvonnetastic_183 (DD), Ziko_12 (DP),

Start 14:
• Found in 10 of 44 (22.7%) of genes in pham
• Manual Annotations of this start: 2 of 41

• Called 20.0% of time when present
• Phage (with cluster) where this start called: Pupper_220 (DO), Skog_47 (DO),

Summary by clusters:

There are 5 clusters represented in this pham: DO, DD, CX, DS, DP,

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

Info for manual annotations of cluster DD:
•Start number 12 was manually annotated 6 times for cluster DD.

Info for manual annotations of cluster DO:
•Start number 14 was manually annotated 2 times for cluster DO.

Info for manual annotations of cluster DP:
•Start number 8 was manually annotated 6 times for cluster DP.
•Start number 12 was manually annotated 11 times for cluster DP.

Info for manual annotations of cluster DS:
•Start number 7 was manually annotated 4 times for cluster DS.

Gene Information:

Gene: BlueNGold_33 Start: 11811, Stop: 11455, Start Num: 7
Candidate Starts for BlueNGold_33:
(Start: 7 @11811 has 4 MA's), (11, 11784), (37, 11667), (44, 11640), (52, 11604), (53, 11595), (57, 11571),

Gene: Boopy_35 Start: 11823, Stop: 11467, Start Num: 7
Candidate Starts for Boopy_35:
(Start: 7 @11823 has 4 MA's), (11, 11796), (37, 11679), (44, 11652), (52, 11616), (53, 11607), (57, 11583),

Gene: Cardigan_155 Start: 83851, Stop: 84165, Start Num: 12
Candidate Starts for Cardigan_155:
(Start: 12 @83851 has 29 MA's), (Start: 14 @83863 has 2 MA's), (19, 83899), (25, 83938), (27, 83950), (53, 84043),

Gene: Cardigan_156 Start: 84162, Stop: 84485, Start Num: 12
Candidate Starts for Cardigan_156:
(2, 84084), (5, 84105), (Start: 12 @84162 has 29 MA's), (Start: 14 @84174 has 2 MA's), (25, 84249), (27, 84261), (35, 84279), (39, 84288),

Gene: Cardigan_189 Start: 93769, Stop: 93488, Start Num: 12
Candidate Starts for Cardigan_189:
(10, 93784), (Start: 12 @93769 has 29 MA's), (18, 93730), (29, 93673), (33, 93664), (36, 93658), (57, 93580), (67, 93502), (68, 93499),

Gene: Forza_34 Start: 11739, Stop: 11383, Start Num: 7

Candidate Starts for Forza_34:
(Start: 7 @11739 has 4 MA's), (11, 11712), (37, 11595), (44, 11568), (52, 11532), (53, 11523), (57, 11499),

Gene: Fryberger_7 Start: 1604, Stop: 1293, Start Num: 12
Candidate Starts for Fryberger_7:
(Start: 12 @1604 has 29 MA's), (51, 1418),

Gene: Fryberger_79 Start: 41758, Stop: 41507, Start Num: 12
Candidate Starts for Fryberger_79:
(Start: 12 @41758 has 29 MA's), (42, 41629), (43, 41626), (53, 41593), (60, 41539), (61, 41527),

Gene: Fryberger_78 Start: 41510, Stop: 41169, Start Num: 8
Candidate Starts for Fryberger_78:
(Start: 8 @41510 has 6 MA's), (9, 41498), (15, 41465), (20, 41435), (23, 41411), (31, 41381), (38, 41366), (48, 41312), (53, 41291), (57, 41267), (65, 41201),

Gene: Gibbles_104 Start: 73545, Stop: 73285, Start Num: 12
Candidate Starts for Gibbles_104:
(Start: 12 @73545 has 29 MA's), (32, 73443), (41, 73422), (46, 73395),

Gene: Gibbles_105 Start: 73790, Stop: 73542, Start Num: 12
Candidate Starts for Gibbles_105:
(Start: 12 @73790 has 29 MA's), (22, 73733), (40, 73664), (50, 73628), (64, 73556),

Gene: Gibbles_102 Start: 72919, Stop: 72659, Start Num: 12
Candidate Starts for Gibbles_102:
(6, 72961), (Start: 12 @72919 has 29 MA's), (24, 72844), (34, 72814),

Gene: Guey18_83 Start: 42881, Stop: 42540, Start Num: 8
Candidate Starts for Guey18_83:
(Start: 8 @42881 has 6 MA's), (15, 42836), (20, 42806), (23, 42782), (31, 42752), (38, 42737), (48, 42683), (53, 42662), (57, 42638), (65, 42572),

Gene: Guey18_84 Start: 43129, Stop: 42878, Start Num: 12
Candidate Starts for Guey18_84:
(Start: 12 @43129 has 29 MA's), (23, 43057), (30, 43030), (43, 42997), (53, 42964), (61, 42898),

Gene: Guey18_10 Start: 2298, Stop: 1987, Start Num: 12
Candidate Starts for Guey18_10:
(Start: 12 @2298 has 29 MA's), (16, 2271), (47, 2130), (53, 2100), (54, 2094), (59, 2052),

Gene: JonJames_183 Start: 94689, Stop: 94408, Start Num: 12
Candidate Starts for JonJames_183:
(10, 94704), (Start: 12 @94689 has 29 MA's), (18, 94650), (29, 94593), (33, 94584), (34, 94581), (36, 94578), (57, 94500), (67, 94422), (68, 94419),

Gene: JonJames_152 Start: 84680, Stop: 84994, Start Num: 12
Candidate Starts for JonJames_152:
(Start: 12 @84680 has 29 MA's), (Start: 14 @84692 has 2 MA's), (19, 84728), (25, 84767), (27, 84779), (53, 84872),

Gene: JonJames_154 Start: 85323, Stop: 85631, Start Num: 12

Candidate Starts for JonJames_154:
(Start: 12 @85323 has 29 MA's), (Start: 14 @85335 has 2 MA's), (25, 85407), (45, 85467), (66, 85602), (69, 85611),

Gene: JonJames_153 Start: 84991, Stop: 85326, Start Num: 12
Candidate Starts for JonJames_153:
(5, 84934), (Start: 12 @84991 has 29 MA's), (Start: 14 @85003 has 2 MA's), (19, 85039), (27, 85090), (35, 85108), (39, 85117), (70, 85315),

Gene: Kampe_102 Start: 72589, Stop: 72329, Start Num: 12
Candidate Starts for Kampe_102:
(6, 72628), (Start: 12 @72589 has 29 MA's), (24, 72514), (34, 72484),

Gene: Kampe_104 Start: 73218, Stop: 72952, Start Num: 12
Candidate Starts for Kampe_104:
(Start: 12 @73218 has 29 MA's), (23, 73146), (46, 73068), (52, 73050),

Gene: Keelan_76 Start: 41390, Stop: 41040, Start Num: 8
Candidate Starts for Keelan_76:
(Start: 8 @41390 has 6 MA's), (9, 41378), (29, 41264), (36, 41249), (43, 41228), (48, 41186), (49, 41183), (53, 41165),

Gene: Keelan_77 Start: 41653, Stop: 41387, Start Num: 12
Candidate Starts for Keelan_77:
(Start: 12 @41653 has 29 MA's), (Start: 14 @41641 has 2 MA's), (17, 41620), (29, 41557), (43, 41521), (53, 41485), (58, 41458), (62, 41416), (63, 41407),

Gene: Keelan_78 Start: 41921, Stop: 41655, Start Num: 12
Candidate Starts for Keelan_78:
(Start: 12 @41921 has 29 MA's), (29, 41825), (37, 41807), (53, 41756), (56, 41741),

Gene: Keelan_4 Start: 977, Stop: 702, Start Num: 12
Candidate Starts for Keelan_4:
(Start: 12 @977 has 29 MA's), (21, 935), (26, 908), (49, 818), (56, 785),

Gene: Keelan_5 Start: 1224, Stop: 967, Start Num: 12
Candidate Starts for Keelan_5:
(Start: 12 @1224 has 29 MA's), (Start: 14 @1212 has 2 MA's), (23, 1152), (28, 1131), (36, 1113),

Gene: Mareelih_33 Start: 11268, Stop: 10912, Start Num: 7
Candidate Starts for Mareelih_33:
(Start: 7 @11268 has 4 MA's), (11, 11241), (37, 11124), (44, 11097), (52, 11061), (53, 11052), (57, 11028),

Gene: Orchid_101 Start: 72590, Stop: 72330, Start Num: 12
Candidate Starts for Orchid_101:
(6, 72629), (Start: 12 @72590 has 29 MA's), (24, 72515), (34, 72485),

Gene: Orchid_103 Start: 73219, Stop: 72953, Start Num: 12
Candidate Starts for Orchid_103:
(Start: 12 @73219 has 29 MA's), (23, 73147), (46, 73069), (52, 73051),

Gene: PatrickStar_102 Start: 72589, Stop: 72329, Start Num: 12

Candidate Starts for PatrickStar_102:
(6, 72628), (Start: 12 @72589 has 29 MA's), (24, 72514), (34, 72484),

Gene: PatrickStar_104 Start: 73218, Stop: 72952, Start Num: 12
Candidate Starts for PatrickStar_104:
(Start: 12 @73218 has 29 MA's), (23, 73146), (46, 73068), (52, 73050),

Gene: Pupper_220 Start: 145511, Stop: 145744, Start Num: 14
Candidate Starts for Pupper_220:
(Start: 12 @145499 has 29 MA's), (13, 145505), (Start: 14 @145511 has 2 MA's), (36, 145610), (43, 145631),

Gene: RobinSparkles_111 Start: 74296, Stop: 74018, Start Num: 12
Candidate Starts for RobinSparkles_111:
(Start: 12 @74296 has 29 MA's), (64, 74032),

Gene: RobinSparkles_108 Start: 73384, Stop: 73124, Start Num: 12
Candidate Starts for RobinSparkles_108:
(4, 73438), (Start: 12 @73384 has 29 MA's), (23, 73315), (24, 73309),

Gene: RobinSparkles_110 Start: 74021, Stop: 73755, Start Num: 12
Candidate Starts for RobinSparkles_110:
(Start: 12 @74021 has 29 MA's), (23, 73949), (52, 73853),

Gene: Ronaldo_11 Start: 2730, Stop: 2419, Start Num: 12
Candidate Starts for Ronaldo_11:
(Start: 12 @2730 has 29 MA's), (16, 2703), (51, 2544), (52, 2541), (53, 2532),

Gene: Ronaldo_82 Start: 42654, Stop: 42313, Start Num: 8
Candidate Starts for Ronaldo_82:
(3, 42681), (Start: 8 @42654 has 6 MA's), (9, 42642), (15, 42609), (20, 42579), (23, 42555), (31, 42525), (38, 42510), (48, 42456), (53, 42435), (57, 42411), (65, 42345),

Gene: Skog_47 Start: 20557, Stop: 20790, Start Num: 14
Candidate Starts for Skog_47:
(Start: 12 @20545 has 29 MA's), (13, 20551), (Start: 14 @20557 has 2 MA's), (20, 20590), (36, 20653), (55, 20719),

Gene: Volt_11 Start: 2730, Stop: 2419, Start Num: 12
Candidate Starts for Volt_11:
(Start: 12 @2730 has 29 MA's), (16, 2703), (51, 2544), (52, 2541), (53, 2532),

Gene: Volt_82 Start: 42818, Stop: 42477, Start Num: 8
Candidate Starts for Volt_82:
(3, 42845), (Start: 8 @42818 has 6 MA's), (9, 42806), (15, 42773), (20, 42743), (23, 42719), (31, 42689), (38, 42674), (48, 42620), (53, 42599), (57, 42575), (65, 42509),

Gene: Yvonnetastic_183 Start: 91588, Stop: 91307, Start Num: 12
Candidate Starts for Yvonnetastic_183:
(1, 91864), (Start: 12 @91588 has 29 MA's), (18, 91549), (29, 91492), (33, 91483), (34, 91480), (36, 91477), (57, 91399), (67, 91321), (68, 91318),

Gene: Yvonnetastic_149 Start: 81383, Stop: 81706, Start Num: 12

Candidate Starts for Yvonnetastic_149:
(Start: 12 @81383 has 29 MA's), (Start: 14 @81395 has 2 MA's), (25, 81470), (27, 81482), (35, 81500), (39, 81509),

Gene: Ziko_12 Start: 2744, Stop: 2433, Start Num: 12
Candidate Starts for Ziko_12:
(Start: 12 @2744 has 29 MA's), (16, 2717), (51, 2558), (52, 2555), (53, 2546),

Gene: Ziko_82 Start: 42640, Stop: 42299, Start Num: 8
Candidate Starts for Ziko_82:
(3, 42667), (Start: 8 @42640 has 6 MA's), (9, 42628), (15, 42595), (20, 42565), (23, 42541), (31, 42511), (38, 42496), (48, 42442), (53, 42421), (57, 42397), (65, 42331),