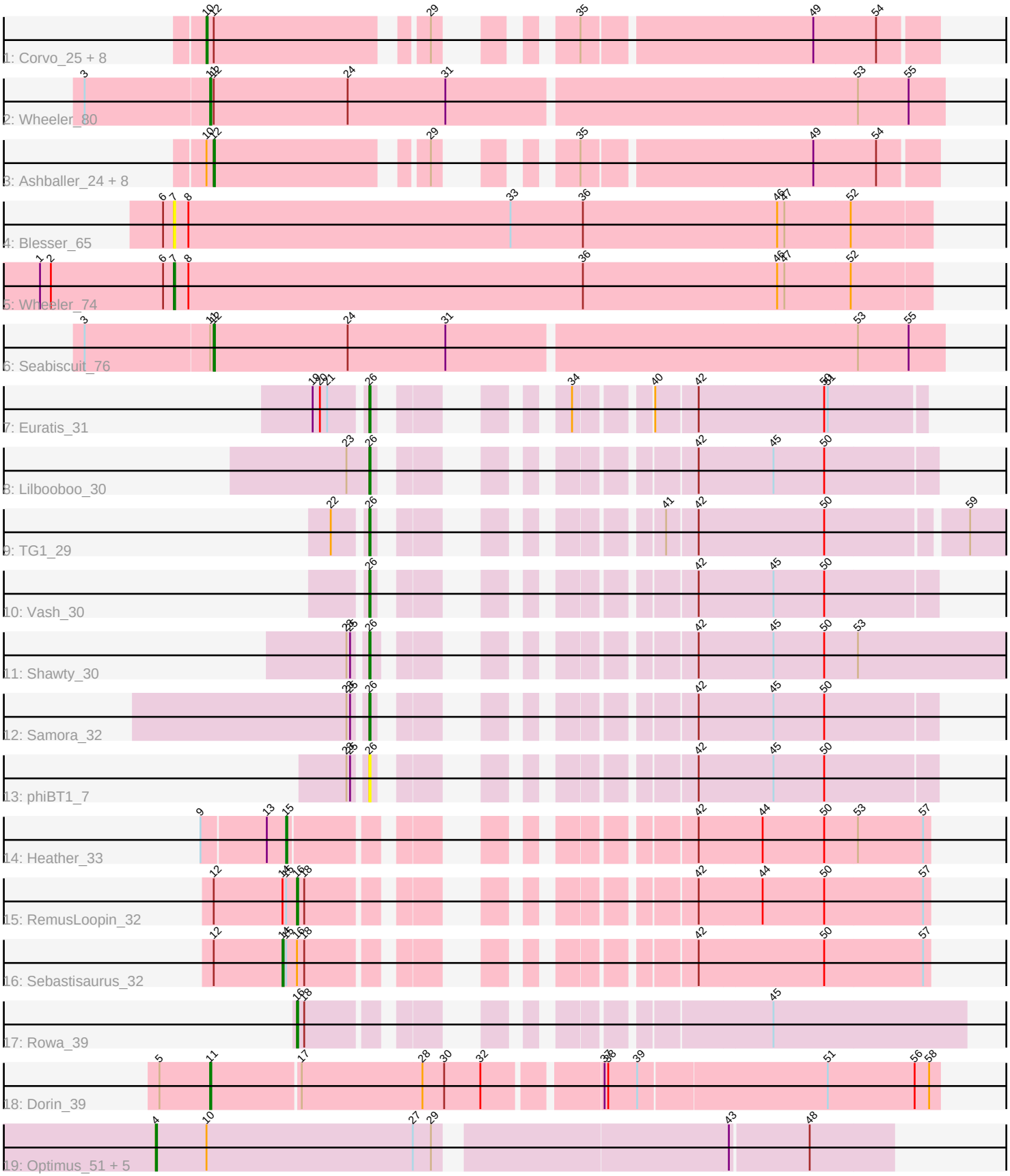
Pham 305136


1: Corvo_25 + 8
2: Wheeler_80
3: Ashballer_24 + 8
4: Blesser_65
5: Wheeler_74
6: Seabiscuit_76
7: Euratis_31
8: Lilbooboo_30
9: TG1_29
10: Vash_30
11: Shawty_30
12: Samora_32
13: phiBT1_7
14: Heather_33
15: RemusLoopin_32
16: Sebastisaurus_32
17: Rowa_39
18: Dorin_39
19: Optimus_51 + 5

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 305136 Report

This analysis was run 06/08/26 on database version 649.

WARNING: Pham size does not match number of genes in report. Either unphamerated genes have been added (by you) or starterator has removed genes due to invalid start codon.

Pham number 305136 has 40 members, 2 are drafts.

Phages represented in each track:
• Track 1 : Corvo_25, Target_27, Snazzy_23, Noxious_27, Hermia_27, Pinto_27, Zeeculate_24, GroundGoblin_26, Atkinbua_26
• Track 2 : Wheeler_80
• Track 3 : Ashballer_24, Trouble_25, GrecoEtereo_26, Beatrix_24, KikiBouba_27, Petruchio_25, ConceptII_26, SwissCheese_25, Ajay_25
• Track 4 : Blesser_65
• Track 5 : Wheeler_74
• Track 6 : Seabiscuit_76
• Track 7 : Euratis_31
• Track 8 : Lilbooboo_30
• Track 9 : TG1_29
• Track 10 : Vash_30
• Track 11 : Shawty_30
• Track 12 : Samora_32
• Track 13 : phiBT1_7
• Track 14 : Heather_33
• Track 15 : RemusLoopin_32
• Track 16 : Sebastisaurus_32
• Track 17 : Rowa_39
• Track 18 : Dorin_39
• Track 19 : Optimus_51, Wanda_52, DmpstrDiver_47, Minerva_52, Duke13_49, BAKA_50

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 10 of the 38 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Ajay_25, Ashballer_24, Beatrix_24, ConceptII_26, GrecoEtereo_26, KikiBouba_27, Petruchio_25, Seabiscuit_76, SwissCheese_25, Trouble_25,

Genes that have the "Most Annotated" start but do not call it:
• Atkinbua_26, Corvo_25, GroundGoblin_26, Hermia_27, Noxious_27, Pinto_27, RemusLoopin_32, Sebastisaurus_32, Snazzy_23, Target_27, Wheeler_80, Zeeculate_24,

Genes that do not have the "Most Annotated" start:
• BAKA_50, Blesser_65, DmpstrDiver_47, Dorin_39, Duke13_49, Euratis_31, Heather_33, Lilbooboo_30, Minerva_52, Optimus_51, Rowa_39, Samora_32, Shawty_30, TG1_29, Vash_30, Wanda_52, Wheeler_74, phiBT1_7,

Summary by start number:

Start 4:
• Found in 6 of 40 (15.0%) of genes in pham
• Manual Annotations of this start: 6 of 38
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BAKA_50 (J), DmpstrDiver_47 (J), Duke13_49 (J), Minerva_52 (J), Optimus_51 (J), Wanda_52 (J),

Start 7:
• Found in 2 of 40 (5.0%) of genes in pham
• Manual Annotations of this start: 1 of 38
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Blesser_65 (A1), Wheeler_74 (A1),

Start 10:
• Found in 24 of 40 (60.0%) of genes in pham
• Manual Annotations of this start: 9 of 38
• Called 37.5% of time when present
• Phage (with cluster) where this start called: Atkinbua_26 (A1), Corvo_25 (A1), GroundGoblin_26 (A1), Hermia_27 (A1), Noxious_27 (A1), Pinto_27 (A1), Snazzy_23 (A1), Target_27 (A1), Zeeculate_24 (A1),

Start 11:
• Found in 3 of 40 (7.5%) of genes in pham
• Manual Annotations of this start: 2 of 38
• Called 66.7% of time when present
• Phage (with cluster) where this start called: Dorin_39 (CG), Wheeler_80 (A1),

Start 12:
• Found in 22 of 40 (55.0%) of genes in pham
• Manual Annotations of this start: 10 of 38
• Called 45.5% of time when present
• Phage (with cluster) where this start called: Ajay_25 (A1), Ashballer_24 (A1), Beatrix_24 (A1), ConceptII_26 (A1), GrecoEtereo_26 (A1), KikiBouba_27 (A1), Petruchio_25 (A1), Seabiscuit_76 (A1), SwissCheese_25 (A1), Trouble_25 (A1),

Start 14:
• Found in 2 of 40 (5.0%) of genes in pham
• Manual Annotations of this start: 1 of 38

• Called 50.0% of time when present
• Phage (with cluster) where this start called: Sebastisaurus_32 (BB2),

Start 15:
• Found in 3 of 40 (7.5%) of genes in pham
• Manual Annotations of this start: 1 of 38
• Called 33.3% of time when present
• Phage (with cluster) where this start called: Heather_33 (BB2),

Start 16:
• Found in 3 of 40 (7.5%) of genes in pham
• Manual Annotations of this start: 2 of 38
• Called 66.7% of time when present
• Phage (with cluster) where this start called: RemusLoopin_32 (BB2), Rowa_39 (BL),

Start 26:
• Found in 7 of 40 (17.5%) of genes in pham
• Manual Annotations of this start: 6 of 38
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Euratis_31 (BB1), Lilbooboo_30 (BB1), Samora_32 (BB1), Shawty_30 (BB1), TG1_29 (BB1), Vash_30 (BB1), phiBT1_7 (BB1),

Summary by clusters:

There are 6 clusters represented in this pham: BL, J, CG, A1, BB2, BB1,

Info for manual annotations of cluster A1:
•Start number 7 was manually annotated 1 time for cluster A1.
•Start number 10 was manually annotated 9 times for cluster A1.
•Start number 11 was manually annotated 1 time for cluster A1.
•Start number 12 was manually annotated 10 times for cluster A1.

Info for manual annotations of cluster BB1:
•Start number 26 was manually annotated 6 times for cluster BB1.

Info for manual annotations of cluster BB2:
•Start number 14 was manually annotated 1 time for cluster BB2.
•Start number 15 was manually annotated 1 time for cluster BB2.
•Start number 16 was manually annotated 1 time for cluster BB2.

Info for manual annotations of cluster BL:
•Start number 16 was manually annotated 1 time for cluster BL.

Info for manual annotations of cluster CG:
•Start number 11 was manually annotated 1 time for cluster CG.

Info for manual annotations of cluster J:
•Start number 4 was manually annotated 6 times for cluster J.

Gene Information:

Gene: Ajay_25 Start: 18878, Stop: 19372, Start Num: 12
Candidate Starts for Ajay_25:
(Start: 10 @18872 has 9 MA's), (Start: 12 @18878 has 10 MA's), (29, 19034), (35, 19094), (49, 19274), (54, 19325),

Gene: Ashballer_24 Start: 18821, Stop: 19315, Start Num: 12
Candidate Starts for Ashballer_24:
(Start: 10 @18815 has 9 MA's), (Start: 12 @18821 has 10 MA's), (29, 18977), (35, 19037), (49, 19217), (54, 19268),

Gene: Atkinbua_26 Start: 18768, Stop: 19268, Start Num: 10
Candidate Starts for Atkinbua_26:
(Start: 10 @18768 has 9 MA's), (Start: 12 @18774 has 10 MA's), (29, 18930), (35, 18990), (49, 19170), (54, 19221),

Gene: BAKA_50 Start: 40286, Stop: 40870, Start Num: 4
Candidate Starts for BAKA_50:
(Start: 4 @40286 has 6 MA's), (Start: 10 @40328 has 9 MA's), (27, 40499), (29, 40514), (43, 40739), (48, 40802),

Gene: Beatrix_24 Start: 19780, Stop: 20274, Start Num: 12
Candidate Starts for Beatrix_24:
(Start: 10 @19774 has 9 MA's), (Start: 12 @19780 has 10 MA's), (29, 19936), (35, 19996), (49, 20176), (54, 20227),

Gene: Blesser_65 Start: 43215, Stop: 42592, Start Num: 7
Candidate Starts for Blesser_65:
(6, 43224), (Start: 7 @43215 has 1 MA's), (8, 43203), (33, 42936), (36, 42876), (46, 42717), (47, 42711), (52, 42657),

Gene: ConceptII_26 Start: 19302, Stop: 19796, Start Num: 12
Candidate Starts for ConceptII_26:
(Start: 10 @19296 has 9 MA's), (Start: 12 @19302 has 10 MA's), (29, 19458), (35, 19518), (49, 19698), (54, 19749),

Gene: Corvo_25 Start: 19271, Stop: 19771, Start Num: 10
Candidate Starts for Corvo_25:
(Start: 10 @19271 has 9 MA's), (Start: 12 @19277 has 10 MA's), (29, 19433), (35, 19493), (49, 19673), (54, 19724),

Gene: DmpstrDiver_47 Start: 39715, Stop: 40299, Start Num: 4
Candidate Starts for DmpstrDiver_47:
(Start: 4 @39715 has 6 MA's), (Start: 10 @39757 has 9 MA's), (27, 39928), (29, 39943), (43, 40168), (48, 40231),

Gene: Dorin_39 Start: 19049, Stop: 19627, Start Num: 11
Candidate Starts for Dorin_39:
(5, 19007), (Start: 11 @19049 has 2 MA's), (17, 19121), (28, 19220), (30, 19238), (32, 19268), (37, 19355), (38, 19358), (39, 19382), (51, 19535), (56, 19607), (58, 19619),

Gene: Duke13_49 Start: 40033, Stop: 40617, Start Num: 4
Candidate Starts for Duke13_49:

(Start: 4 @40033 has 6 MA's), (Start: 10 @40075 has 9 MA's), (27, 40246), (29, 40261), (43, 40486), (48, 40549),

Gene: Euratis_31 Start: 22823, Stop: 23176, Start Num: 26
Candidate Starts for Euratis_31:
(19, 22784), (20, 22790), (21, 22796), (Start: 26 @22823 has 6 MA's), (34, 22910), (40, 22961), (42, 22994), (50, 23096), (51, 23099),

Gene: GrecoEtereo_26 Start: 19123, Stop: 19617, Start Num: 12
Candidate Starts for GrecoEtereo_26:
(Start: 10 @19117 has 9 MA's), (Start: 12 @19123 has 10 MA's), (29, 19279), (35, 19339), (49, 19519), (54, 19570),

Gene: GroundGoblin_26 Start: 19663, Stop: 20163, Start Num: 10
Candidate Starts for GroundGoblin_26:
(Start: 10 @19663 has 9 MA's), (Start: 12 @19669 has 10 MA's), (29, 19825), (35, 19885), (49, 20065), (54, 20116),

Gene: Heather_33 Start: 23706, Stop: 24128, Start Num: 15
Candidate Starts for Heather_33:
(9, 23640), (13, 23691), (Start: 15 @23706 has 1 MA's), (42, 23940), (44, 23991), (50, 24042), (53, 24069), (57, 24123),

Gene: Hermia_27 Start: 19855, Stop: 20355, Start Num: 10
Candidate Starts for Hermia_27:
(Start: 10 @19855 has 9 MA's), (Start: 12 @19861 has 10 MA's), (29, 20017), (35, 20077), (49, 20257), (54, 20308),

Gene: KikiBouba_27 Start: 19670, Stop: 20164, Start Num: 12
Candidate Starts for KikiBouba_27:
(Start: 10 @19664 has 9 MA's), (Start: 12 @19670 has 10 MA's), (29, 19826), (35, 19886), (49, 20066), (54, 20117),

Gene: Lilbooboo_30 Start: 22871, Stop: 23233, Start Num: 26
Candidate Starts for Lilbooboo_30:
(23, 22853), (Start: 26 @22871 has 6 MA's), (42, 23042), (45, 23102), (50, 23144),

Gene: Minerva_52 Start: 41582, Stop: 42166, Start Num: 4
Candidate Starts for Minerva_52:
(Start: 4 @41582 has 6 MA's), (Start: 10 @41624 has 9 MA's), (27, 41795), (29, 41810), (43, 42035), (48, 42098),

Gene: Noxious_27 Start: 19855, Stop: 20355, Start Num: 10
Candidate Starts for Noxious_27:
(Start: 10 @19855 has 9 MA's), (Start: 12 @19861 has 10 MA's), (29, 20017), (35, 20077), (49, 20257), (54, 20308),

Gene: Optimus_51 Start: 41167, Stop: 41751, Start Num: 4
Candidate Starts for Optimus_51:
(Start: 4 @41167 has 6 MA's), (Start: 10 @41209 has 9 MA's), (27, 41380), (29, 41395), (43, 41620), (48, 41683),

Gene: Petruchio_25 Start: 18798, Stop: 19292, Start Num: 12

Candidate Starts for Petruchio_25:
(Start: 10 @18792 has 9 MA's), (Start: 12 @18798 has 10 MA's), (29, 18954), (35, 19014), (49, 19194), (54, 19245),

Gene: Pinto_27 Start: 18931, Stop: 19431, Start Num: 10
Candidate Starts for Pinto_27:
(Start: 10 @18931 has 9 MA's), (Start: 12 @18937 has 10 MA's), (29, 19093), (35, 19153), (49, 19333), (54, 19384),

Gene: RemusLoopin_32 Start: 23906, Stop: 24322, Start Num: 16
Candidate Starts for RemusLoopin_32:
(Start: 12 @23837 has 10 MA's), (Start: 14 @23894 has 1 MA's), (Start: 15 @23897 has 1 MA's), (Start: 16 @23906 has 2 MA's), (18, 23912), (42, 24134), (44, 24185), (50, 24236), (57, 24317),

Gene: Rowa_39 Start: 26669, Stop: 27115, Start Num: 16
Candidate Starts for Rowa_39:
(Start: 16 @26669 has 2 MA's), (18, 26675), (45, 26957),

Gene: Samora_32 Start: 23469, Stop: 23831, Start Num: 26
Candidate Starts for Samora_32:
(23, 23457), (25, 23460), (Start: 26 @23469 has 6 MA's), (42, 23640), (45, 23700), (50, 23742),

Gene: Seabiscuit_76 Start: 46023, Stop: 45430, Start Num: 12
Candidate Starts for Seabiscuit_76:
(3, 46128), (Start: 11 @46026 has 2 MA's), (Start: 12 @46023 has 10 MA's), (24, 45912), (31, 45831), (53, 45501), (55, 45459),

Gene: Sebastisaurus_32 Start: 23688, Stop: 24116, Start Num: 14
Candidate Starts for Sebastisaurus_32:
(Start: 12 @23631 has 10 MA's), (Start: 14 @23688 has 1 MA's), (Start: 15 @23691 has 1 MA's), (Start: 16 @23700 has 2 MA's), (18, 23706), (42, 23928), (50, 24030), (57, 24111),

Gene: Shawty_30 Start: 23340, Stop: 23774, Start Num: 26
Candidate Starts for Shawty_30:
(23, 23328), (25, 23331), (Start: 26 @23340 has 6 MA's), (42, 23514), (45, 23574), (50, 23616), (53, 23643),

Gene: Snazzy_23 Start: 18265, Stop: 18765, Start Num: 10
Candidate Starts for Snazzy_23:
(Start: 10 @18265 has 9 MA's), (Start: 12 @18271 has 10 MA's), (29, 18427), (35, 18487), (49, 18667), (54, 18718),

Gene: SwissCheese_25 Start: 18840, Stop: 19334, Start Num: 12
Candidate Starts for SwissCheese_25:
(Start: 10 @18834 has 9 MA's), (Start: 12 @18840 has 10 MA's), (29, 18996), (35, 19056), (49, 19236), (54, 19287),

Gene: TG1_29 Start: 22916, Stop: 23344, Start Num: 26
Candidate Starts for TG1_29:
(22, 22892), (Start: 26 @22916 has 6 MA's), (41, 23063), (42, 23087), (50, 23189), (59, 23297),

Gene: Target_27 Start: 19834, Stop: 20334, Start Num: 10
Candidate Starts for Target_27:

(Start: 10 @19834 has 9 MA's), (Start: 12 @19840 has 10 MA's), (29, 19996), (35, 20056), (49, 20236), (54, 20287),

Gene: Trouble_25 Start: 19144, Stop: 19638, Start Num: 12
Candidate Starts for Trouble_25:
(Start: 10 @19138 has 9 MA's), (Start: 12 @19144 has 10 MA's), (29, 19300), (35, 19360), (49, 19540), (54, 19591),

Gene: Vash_30 Start: 22721, Stop: 23083, Start Num: 26
Candidate Starts for Vash_30:
(Start: 26 @22721 has 6 MA's), (42, 22892), (45, 22952), (50, 22994),

Gene: Wanda_52 Start: 40059, Stop: 40643, Start Num: 4
Candidate Starts for Wanda_52:
(Start: 4 @40059 has 6 MA's), (Start: 10 @40101 has 9 MA's), (27, 40272), (29, 40287), (43, 40512), (48, 40575),

Gene: Wheeler_80 Start: 48775, Stop: 48179, Start Num: 11
Candidate Starts for Wheeler_80:
(3, 48877), (Start: 11 @48775 has 2 MA's), (Start: 12 @48772 has 10 MA's), (24, 48661), (31, 48580), (53, 48250), (55, 48208),

Gene: Wheeler_74 Start: 46185, Stop: 45562, Start Num: 7
Candidate Starts for Wheeler_74:
(1, 46296), (2, 46287), (6, 46194), (Start: 7 @46185 has 1 MA's), (8, 46173), (36, 45846), (46, 45687), (47, 45681), (52, 45627),

Gene: Zeeculate_24 Start: 19013, Stop: 19513, Start Num: 10
Candidate Starts for Zeeculate_24:
(Start: 10 @19013 has 9 MA's), (Start: 12 @19019 has 10 MA's), (29, 19175), (35, 19235), (49, 19415), (54, 19466),

Gene: phiBT1_7 Start: 24178, Stop: 24540, Start Num: 26
Candidate Starts for phiBT1_7:
(23, 24166), (25, 24169), (Start: 26 @24178 has 6 MA's), (42, 24349), (45, 24409), (50, 24451),