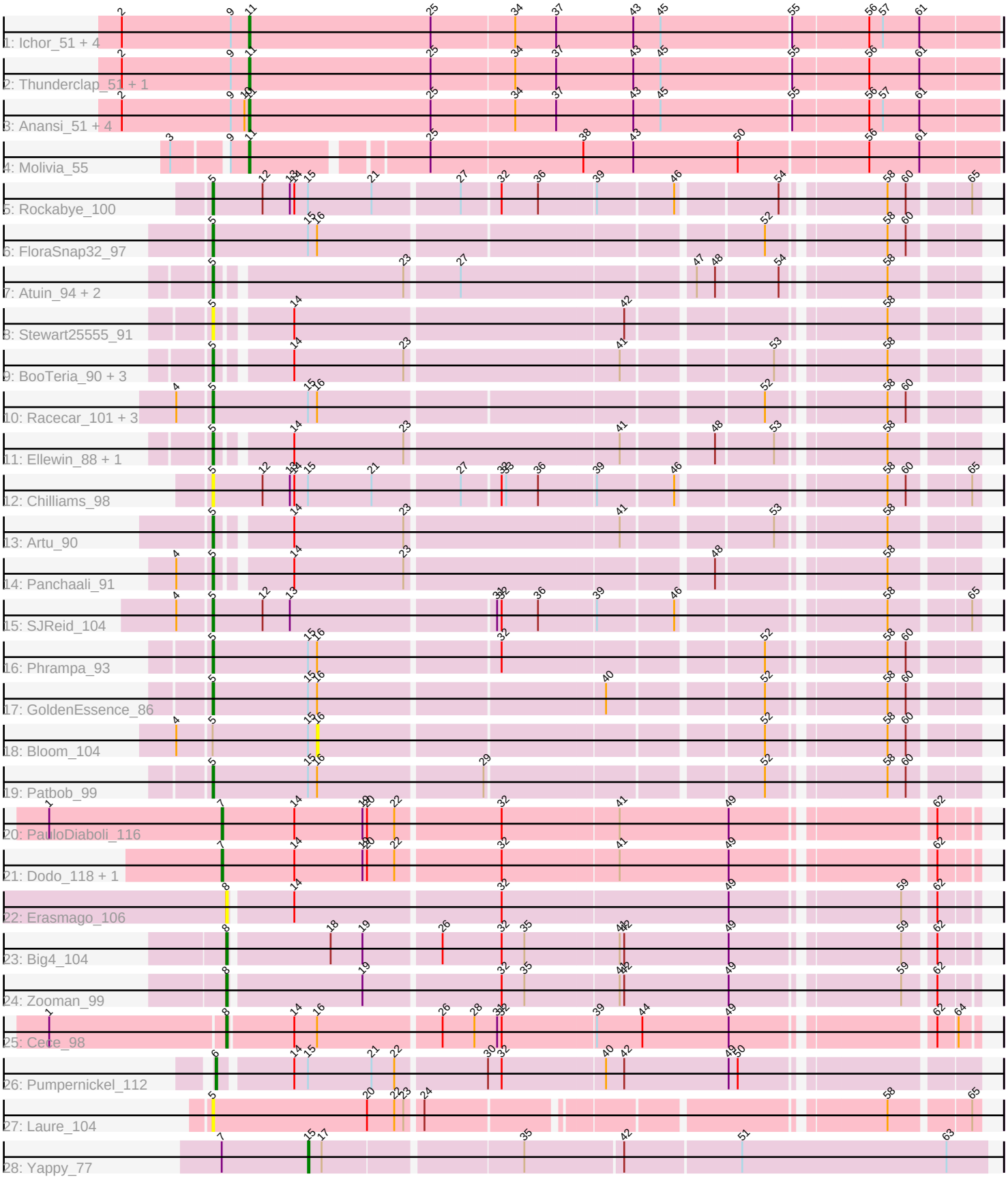
Pham 347749


1: Ichor_51 + 4
2: Thunderclap_51 + 1
3: Anansi_51 + 4
4: Molivia_55
5: Rockabye_100
6: FloraSnap32_97
7: Atuin_94 + 2
8: Stewart25555_91
9: BooTeria_90 + 3
10: Racecar_101 + 3
11: Ellewin_88 + 1
12: Chilliams_98
13: Artu_90
14: Panchaali_91
15: SJReid_104
16: Phrampa_93
17: GoldenEssence_86
18: Bloom_104
19: Patbob_99
20: PaulloDiaboli_116
21: Dodo_118 + 1
22: Erasmago_106
23: Big4_104
24: Zooman_99
25: Cece_98
26: Pumpernickel_112
27: Laure_104
28: Yappy_77

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 347749 Report

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

Pham number 347749 has 47 members, 9 are drafts.

Phages represented in each track:
- Track 1 : Ichor_51, Jaek_51, Yeezus_51, Boersma_53, Amigo_51
- Track 2 : Thunderclap_51, Rings_50
- Track 3 : Anansi_51, Amavida_54, SorJuana_51, Heylee_54, Gorgeous_51
- Track 4 : Molivia_55
- Track 5 : Rockabye_100
- Track 6 : FloraSnap32_97
- Track 7 : Atuin_94, LeoJr_99, ReginaGlobina_99
- Track 8 : Stewart25555_91
- Track 9 : BooTeria_90, DunneganBoMo_89, Emmetator_92, WaddleDee_87
- Track 10 : Racecar_101, FrostedClock_100, Mimi_100, Talia1610_100
- Track 11 : Ellewin_88, KSunshine22_94
- Track 12 : Chilliams_98
- Track 13 : Artu_90
- Track 14 : Panchaali_91
- Track 15 : SJReid_104
- Track 16 : Phrampa_93
- Track 17 : GoldenEssence_86
- Track 18 : Bloom_104
- Track 19 : Patbob_99
- Track 20 : PauloDiaboli_116
- Track 21 : Dodo_118, A3Wally_116
- Track 22 : Erasmago_106
- Track 23 : Big4_104
- Track 24 : Zooman_99
- Track 25 : Cece_98
- Track 26 : Pumpernickel_112
- Track 27 : Laure_104
- Track 28 : Yappy_77

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

The start number called the most often in the published annotations is 5, it was called in 17 of the 38 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Artu_90, Atuin_94, BooTeria_90, Chilliams_98, DunneganBoMo_89, Ellewin_88, Emmetator_92, FloraSnap32_97, FrostedClock_100, GoldenEssence_86, KSunshine22_94, Laure_104, LeoJr_99, Mimi_100, Panchaali_91, Patbob_99, Phrampa_93, Racecar_101, ReginaGlobina_99, Rockabye_100, SJReid_104, Stewart25555_91, Talia1610_100, WaddleDee_87,

Genes that have the "Most Annotated" start but do not call it:
• Bloom_104,

Genes that do not have the "Most Annotated" start:
• A3Wally_116, Amavida_54, Amigo_51, Anansi_51, Big4_104, Boersma_53, Cece_98, Dodo_118, Erasmago_106, Gorgeous_51, Heylee_54, Ichor_51, Jaek_51, Molivia_55, PauloDiaboli_116, Pumpernickel_112, Rings_50, SorJuana_51, Thunderclap_51, Yappy_77, Yeezus_51, Zooman_99,

Summary by start number:

Start 5:
• Found in 25 of 47 (53.2%) of genes in pham
• Manual Annotations of this start: 17 of 38
• Called 96.0% of time when present
• Phage (with cluster) where this start called: Artu_90 (FC), Atuin_94 (FC), BooTeria_90 (FC), Chilliams_98 (FC), DunneganBoMo_89 (FC), Ellewin_88 (FC), Emmetator_92 (FC), FloraSnap32_97 (FC), FrostedClock_100 (FC), GoldenEssence_86 (FC), KSunshine22_94 (FC), Laure_104 (UNK), LeoJr_99 (FC), Mimi_100 (FC), Panchaali_91 (FC), Patbob_99 (FC), Phrampa_93 (FC), Racecar_101 (FC), ReginaGlobina_99 (FC), Rockabye_100 (FC), SJReid_104 (FC), Stewart25555_91 (FC), Talia1610_100 (FC), WaddleDee_87 (FC),

Start 6:
• Found in 1 of 47 (2.1%) 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: Pumpernickel_112 (GD4),

Start 7:
• Found in 4 of 47 (8.5%) of genes in pham
• Manual Annotations of this start: 3 of 38
• Called 75.0% of time when present
• Phage (with cluster) where this start called: A3Wally_116 (GD1), Dodo_118 (GD1), PauloDiaboli_116 (GD1),

Start 8:
• Found in 4 of 47 (8.5%) of genes in pham
• Manual Annotations of this start: 3 of 38
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Big4_104 (GD2), Cece_98 (GD3), Erasmago_106 (GD2), Zooman_99 (GD2),

Start 11:
• Found in 13 of 47 (27.7%) of genes in pham
• Manual Annotations of this start: 13 of 38

• Called 100.0% of time when present
• Phage (with cluster) where this start called: Amavida_54 (AQ), Amigo_51 (AQ), Anansi_51 (AQ), Boersma_53 (AQ), Gorgeous_51 (AQ), Heylee_54 (AQ), Ichor_51 (AQ), Jaek_51 (AQ), Molivia_55 (AQ), Rings_50 (AQ), SorJuana_51 (AQ), Thunderclap_51 (AQ), Yeezus_51 (AQ),

Start 15:
• Found in 13 of 47 (27.7%) of genes in pham
• Manual Annotations of this start: 1 of 38
• Called 7.7% of time when present
• Phage (with cluster) where this start called: Yappy_77 (singleton),

Start 16:
• Found in 10 of 47 (21.3%) of genes in pham
• No Manual Annotations of this start.
• Called 10.0% of time when present
• Phage (with cluster) where this start called: Bloom_104 (FC),

Summary by clusters:

There are 8 clusters represented in this pham: GD1, GD2, GD3, GD4, singleton, AQ, FC, UNK,

Info for manual annotations of cluster AQ:
•Start number 11 was manually annotated 13 times for cluster AQ.

Info for manual annotations of cluster FC:
•Start number 5 was manually annotated 17 times for cluster FC.

Info for manual annotations of cluster GD1:
•Start number 7 was manually annotated 3 times for cluster GD1.

Info for manual annotations of cluster GD2:
•Start number 8 was manually annotated 2 times for cluster GD2.

Info for manual annotations of cluster GD3:
•Start number 8 was manually annotated 1 time for cluster GD3.

Info for manual annotations of cluster GD4:
•Start number 6 was manually annotated 1 time for cluster GD4.

Gene Information:

Gene: A3Wally_116 Start: 79965, Stop: 79498, Start Num: 7
Candidate Starts for A3Wally_116:
(Start: 7 @79965 has 3 MA's), (14, 79917), (19, 79872), (20, 79869), (22, 79851), (32, 79785), (41, 79710), (49, 79638), (62, 79521),

Gene: Amavida_54 Start: 34114, Stop: 33629, Start Num: 11
Candidate Starts for Amavida_54:

(2, 34198), (9, 34126), (10, 34117), (Start: 11 @34114 has 13 MA's), (25, 33994), (34, 33940), (37, 33913), (43, 33862), (45, 33844), (55, 33760), (56, 33712), (57, 33703), (61, 33679),

Gene: Amigo_51 Start: 34001, Stop: 33516, Start Num: 11
Candidate Starts for Amigo_51:
(2, 34085), (9, 34013), (Start: 11 @34001 has 13 MA's), (25, 33881), (34, 33827), (37, 33800), (43, 33749), (45, 33731), (55, 33647), (56, 33599), (57, 33590), (61, 33566),

Gene: Anansi_51 Start: 33936, Stop: 33451, Start Num: 11
Candidate Starts for Anansi_51:
(2, 34020), (9, 33948), (10, 33939), (Start: 11 @33936 has 13 MA's), (25, 33816), (34, 33762), (37, 33735), (43, 33684), (45, 33666), (55, 33582), (56, 33534), (57, 33525), (61, 33501),

Gene: Artu_90 Start: 76740, Stop: 77192, Start Num: 5
Candidate Starts for Artu_90:
(Start: 5 @76740 has 17 MA's), (14, 76782), (23, 76854), (41, 76989), (53, 77079), (58, 77139),

Gene: Atuin_94 Start: 80139, Stop: 80591, Start Num: 5
Candidate Starts for Atuin_94:
(Start: 5 @80139 has 17 MA's), (23, 80253), (27, 80286), (47, 80430), (48, 80442), (54, 80481), (58, 80538),

Gene: Big4_104 Start: 78878, Stop: 78420, Start Num: 8
Candidate Starts for Big4_104:
(Start: 8 @78878 has 3 MA's), (18, 78815), (19, 78794), (26, 78746), (32, 78707), (35, 78692), (41, 78632), (42, 78629), (49, 78560), (59, 78461), (62, 78443),

Gene: Bloom_104 Start: 80312, Stop: 80704, Start Num: 16
Candidate Starts for Bloom_104:
(4, 80222), (Start: 5 @80243 has 17 MA's), (Start: 15 @80306 has 1 MA's), (16, 80312), (52, 80585), (58, 80651), (60, 80663),

Gene: Boersma_53 Start: 34001, Stop: 33516, Start Num: 11
Candidate Starts for Boersma_53:
(2, 34085), (9, 34013), (Start: 11 @34001 has 13 MA's), (25, 33881), (34, 33827), (37, 33800), (43, 33749), (45, 33731), (55, 33647), (56, 33599), (57, 33590), (61, 33566),

Gene: BooTeria_90 Start: 76805, Stop: 77257, Start Num: 5
Candidate Starts for BooTeria_90:
(Start: 5 @76805 has 17 MA's), (14, 76847), (23, 76919), (41, 77054), (53, 77144), (58, 77204),

Gene: Cece_98 Start: 81819, Stop: 81358, Start Num: 8
Candidate Starts for Cece_98:
(1, 81933), (Start: 8 @81819 has 3 MA's), (14, 81777), (16, 81762), (26, 81684), (28, 81663), (31, 81648), (32, 81645), (39, 81585), (44, 81555), (49, 81498), (62, 81381), (64, 81369),

Gene: Chilliams_98 Start: 73042, Stop: 73503, Start Num: 5
Candidate Starts for Chilliams_98:
(Start: 5 @73042 has 17 MA's), (12, 73075), (13, 73093), (14, 73096), (Start: 15 @73105 has 1 MA's), (21, 73147), (27, 73201), (32, 73225), (33, 73228), (36, 73249), (39, 73285), (46, 73333), (58, 73450), (60, 73462), (65, 73498),

Gene: Dodo_118 Start: 80275, Stop: 79808, Start Num: 7

Candidate Starts for Dodo_118:
(Start: 7 @80275 has 3 MA's), (14, 80227), (19, 80182), (20, 80179), (22, 80161), (32, 80095), (41, 80020), (49, 79948), (62, 79831),

Gene: DunneganBoMo_89 Start: 76074, Stop: 76526, Start Num: 5
Candidate Starts for DunneganBoMo_89:
(Start: 5 @76074 has 17 MA's), (14, 76116), (23, 76188), (41, 76323), (53, 76413), (58, 76473),

Gene: Ellewin_88 Start: 75485, Stop: 75937, Start Num: 5
Candidate Starts for Ellewin_88:
(Start: 5 @75485 has 17 MA's), (14, 75527), (23, 75599), (41, 75734), (48, 75788), (53, 75824), (58, 75884),

Gene: Emmetator_92 Start: 76077, Stop: 76529, Start Num: 5
Candidate Starts for Emmetator_92:
(Start: 5 @76077 has 17 MA's), (14, 76119), (23, 76191), (41, 76326), (53, 76416), (58, 76476),

Gene: Erasmago_106 Start: 76564, Stop: 76106, Start Num: 8
Candidate Starts for Erasmago_106:
(Start: 8 @76564 has 3 MA's), (14, 76525), (32, 76393), (49, 76246), (59, 76147), (62, 76129),

Gene: FloraSnap32_97 Start: 79140, Stop: 79601, Start Num: 5
Candidate Starts for FloraSnap32_97:
(Start: 5 @79140 has 17 MA's), (Start: 15 @79203 has 1 MA's), (16, 79209), (52, 79482), (58, 79548), (60, 79560),

Gene: FrostedClock_100 Start: 80440, Stop: 80901, Start Num: 5
Candidate Starts for FrostedClock_100:
(4, 80419), (Start: 5 @80440 has 17 MA's), (Start: 15 @80503 has 1 MA's), (16, 80509), (52, 80782), (58, 80848), (60, 80860),

Gene: GoldenEssence_86 Start: 74035, Stop: 74496, Start Num: 5
Candidate Starts for GoldenEssence_86:
(Start: 5 @74035 has 17 MA's), (Start: 15 @74098 has 1 MA's), (16, 74104), (40, 74284), (52, 74377), (58, 74443), (60, 74455),

Gene: Gorgeous_51 Start: 33936, Stop: 33451, Start Num: 11
Candidate Starts for Gorgeous_51:
(2, 34020), (9, 33948), (10, 33939), (Start: 11 @33936 has 13 MA's), (25, 33816), (34, 33762), (37, 33735), (43, 33684), (45, 33666), (55, 33582), (56, 33534), (57, 33525), (61, 33501),

Gene: Heylee_54 Start: 34114, Stop: 33629, Start Num: 11
Candidate Starts for Heylee_54:
(2, 34198), (9, 34126), (10, 34117), (Start: 11 @34114 has 13 MA's), (25, 33994), (34, 33940), (37, 33913), (43, 33862), (45, 33844), (55, 33760), (56, 33712), (57, 33703), (61, 33679),

Gene: Ichor_51 Start: 34001, Stop: 33516, Start Num: 11
Candidate Starts for Ichor_51:
(2, 34085), (9, 34013), (Start: 11 @34001 has 13 MA's), (25, 33881), (34, 33827), (37, 33800), (43, 33749), (45, 33731), (55, 33647), (56, 33599), (57, 33590), (61, 33566),

Gene: Jaek_51 Start: 34001, Stop: 33516, Start Num: 11
Candidate Starts for Jaek_51:

(2, 34085), (9, 34013), (Start: 11 @34001 has 13 MA's), (25, 33881), (34, 33827), (37, 33800), (43, 33749), (45, 33731), (55, 33647), (56, 33599), (57, 33590), (61, 33566),

Gene: KSunshine22_94 Start: 77134, Stop: 77586, Start Num: 5
Candidate Starts for KSunshine22_94:
(Start: 5 @77134 has 17 MA's), (14, 77176), (23, 77248), (41, 77383), (48, 77437), (53, 77473), (58, 77533),

Gene: Laure_104 Start: 73076, Stop: 73531, Start Num: 5
Candidate Starts for Laure_104:
(Start: 5 @73076 has 17 MA's), (20, 73178), (22, 73196), (23, 73202), (24, 73211), (58, 73478), (65, 73526),

Gene: LeoJr_99 Start: 80375, Stop: 80827, Start Num: 5
Candidate Starts for LeoJr_99:
(Start: 5 @80375 has 17 MA's), (23, 80489), (27, 80522), (47, 80666), (48, 80678), (54, 80717), (58, 80774),

Gene: Mimi_100 Start: 79590, Stop: 80051, Start Num: 5
Candidate Starts for Mimi_100:
(4, 79569), (Start: 5 @79590 has 17 MA's), (Start: 15 @79653 has 1 MA's), (16, 79659), (52, 79932), (58, 79998), (60, 80010),

Gene: Molivia_55 Start: 33003, Stop: 32533, Start Num: 11
Candidate Starts for Molivia_55:
(3, 33045), (9, 33015), (Start: 11 @33003 has 13 MA's), (25, 32898), (38, 32799), (43, 32766), (50, 32697), (56, 32616), (61, 32583),

Gene: Panchaali_91 Start: 77087, Stop: 77539, Start Num: 5
Candidate Starts for Panchaali_91:
(4, 77066), (Start: 5 @77087 has 17 MA's), (14, 77129), (23, 77201), (48, 77390), (58, 77486),

Gene: Patbob_99 Start: 80325, Stop: 80786, Start Num: 5
Candidate Starts for Patbob_99:
(Start: 5 @80325 has 17 MA's), (Start: 15 @80388 has 1 MA's), (16, 80394), (29, 80499), (52, 80667), (58, 80733), (60, 80745),

Gene: PauloDiaboli_116 Start: 79310, Stop: 78843, Start Num: 7
Candidate Starts for PauloDiaboli_116:
(1, 79424), (Start: 7 @79310 has 3 MA's), (14, 79262), (19, 79217), (20, 79214), (22, 79196), (32, 79130), (41, 79055), (49, 78983), (62, 78866),

Gene: Phrampa_93 Start: 81823, Stop: 82284, Start Num: 5
Candidate Starts for Phrampa_93:
(Start: 5 @81823 has 17 MA's), (Start: 15 @81886 has 1 MA's), (16, 81892), (32, 82006), (52, 82165), (58, 82231), (60, 82243),

Gene: Pumpernickel_112 Start: 80618, Stop: 80151, Start Num: 6
Candidate Starts for Pumpernickel_112:
(Start: 6 @80618 has 1 MA's), (14, 80573), (Start: 15 @80564 has 1 MA's), (21, 80522), (22, 80507), (30, 80450), (32, 80441), (40, 80375), (42, 80363), (49, 80294), (50, 80288),

Gene: Racecar_101 Start: 80243, Stop: 80704, Start Num: 5

Candidate Starts for Racecar_101:
(4, 80222), (Start: 5 @80243 has 17 MA's), (Start: 15 @80306 has 1 MA's), (16, 80312), (52, 80585), (58, 80651), (60, 80663),

Gene: ReginaGlobina_99 Start: 79940, Stop: 80392, Start Num: 5
Candidate Starts for ReginaGlobina_99:
(Start: 5 @79940 has 17 MA's), (23, 80054), (27, 80087), (47, 80231), (48, 80243), (54, 80282), (58, 80339),

Gene: Rings_50 Start: 34076, Stop: 33588, Start Num: 11
Candidate Starts for Rings_50:
(2, 34160), (9, 34088), (Start: 11 @34076 has 13 MA's), (25, 33956), (34, 33902), (37, 33875), (43, 33824), (45, 33806), (55, 33722), (56, 33674), (61, 33641),

Gene: Rockabye_100 Start: 73477, Stop: 73938, Start Num: 5
Candidate Starts for Rockabye_100:
(Start: 5 @73477 has 17 MA's), (12, 73510), (13, 73528), (14, 73531), (Start: 15 @73540 has 1 MA's), (21, 73582), (27, 73636), (32, 73660), (36, 73684), (39, 73720), (46, 73768), (54, 73828), (58, 73885), (60, 73897), (65, 73933),

Gene: SJReid_104 Start: 72591, Stop: 73052, Start Num: 5
Candidate Starts for SJReid_104:
(4, 72570), (Start: 5 @72591 has 17 MA's), (12, 72624), (13, 72642), (31, 72771), (32, 72774), (36, 72798), (39, 72834), (46, 72882), (58, 72999), (65, 73047),

Gene: SorJuana_51 Start: 33936, Stop: 33451, Start Num: 11
Candidate Starts for SorJuana_51:
(2, 34020), (9, 33948), (10, 33939), (Start: 11 @33936 has 13 MA's), (25, 33816), (34, 33762), (37, 33735), (43, 33684), (45, 33666), (55, 33582), (56, 33534), (57, 33525), (61, 33501),

Gene: Stewart25555_91 Start: 76846, Stop: 77298, Start Num: 5
Candidate Starts for Stewart25555_91:
(Start: 5 @76846 has 17 MA's), (14, 76888), (42, 77098), (58, 77245),

Gene: Talia1610_100 Start: 79608, Stop: 80069, Start Num: 5
Candidate Starts for Talia1610_100:
(4, 79587), (Start: 5 @79608 has 17 MA's), (Start: 15 @79671 has 1 MA's), (16, 79677), (52, 79950), (58, 80016), (60, 80028),

Gene: Thunderclap_51 Start: 34030, Stop: 33545, Start Num: 11
Candidate Starts for Thunderclap_51:
(2, 34114), (9, 34042), (Start: 11 @34030 has 13 MA's), (25, 33910), (34, 33856), (37, 33829), (43, 33778), (45, 33760), (55, 33676), (56, 33628), (61, 33595),

Gene: WaddleDee_87 Start: 75260, Stop: 75712, Start Num: 5
Candidate Starts for WaddleDee_87:
(Start: 5 @75260 has 17 MA's), (14, 75302), (23, 75374), (41, 75509), (53, 75599), (58, 75659),

Gene: Yappy_77 Start: 37292, Stop: 36861, Start Num: 15
Candidate Starts for Yappy_77:
(Start: 7 @37349 has 3 MA's), (Start: 15 @37292 has 1 MA's), (17, 37283), (35, 37160), (42, 37097), (51, 37022), (63, 36887),

Gene: Yeezus_51 Start: 34000, Stop: 33515, Start Num: 11
Candidate Starts for Yeezus_51:
(2, 34084), (9, 34012), (Start: 11 @34000 has 13 MA's), (25, 33880), (34, 33826), (37, 33799), (43, 33748), (45, 33730), (55, 33646), (56, 33598), (57, 33589), (61, 33565),

Gene: Zooman_99 Start: 76723, Stop: 76265, Start Num: 8
Candidate Starts for Zooman_99:
(Start: 8 @76723 has 3 MA's), (19, 76639), (32, 76552), (35, 76537), (41, 76477), (42, 76474), (49, 76405), (59, 76306), (62, 76288),