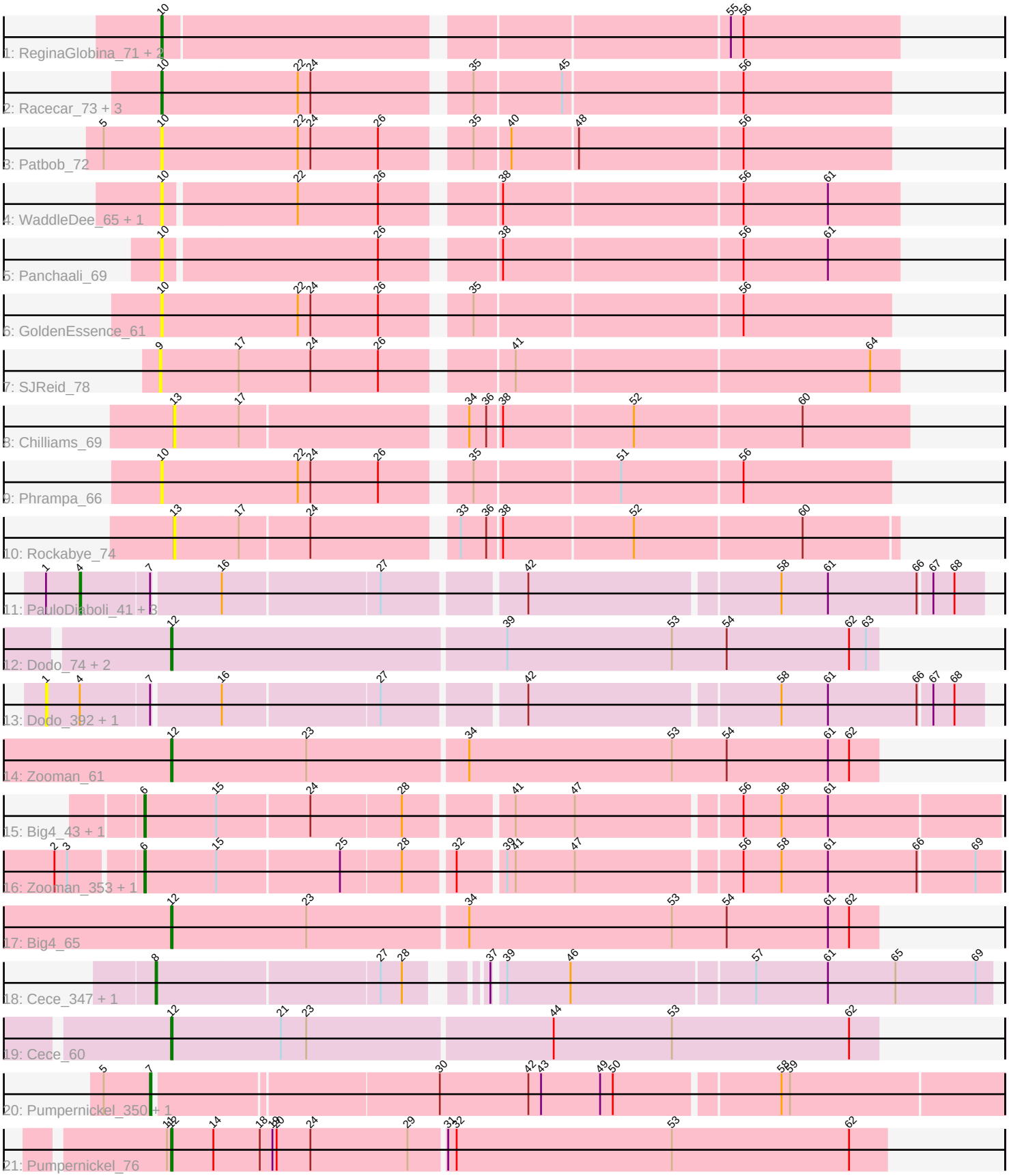
Pham 224738


1: ReginaGlobina_71 + 2
2: Racecar_73 + 3
3: Patbob_72
4: WaddleDee_65 + 1
5: Panchaali_69
6: GoldenEssence_61
7: SJReid_78
8: Chilliams_69
9: Phrampa_66
10: Rockabye_74
11: PauloDiaboli_41 + 3
12: Dodo_74 + 2
13: Dodo_392 + 1
14: Zooman_61
15: Big4_43 + 1
16: Zooman_353 + 1
17: Big4_65
18: Cece_347 + 1
19: Cece_60
20: Pumpernickel_350 + 1
21: Pumpernickel_76

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 224738 Report

This analysis was run 03/28/25 on database version 593.

Pham number 224738 has 37 members, 15 are drafts.

Phages represented in each track:
• Track 1 : ReginaGlobina_71, LeoJr_71, Atuin_66
• Track 2 : Racecar_73, Talia1610_72, Mimi_72, Bloom_76
• Track 3 : Patbob_72
• Track 4 : WaddleDee_65, Ellewin_63
• Track 5 : Panchaali_69
• Track 6 : GoldenEssence_61
• Track 7 : SJReid_78
• Track 8 : Chilliams_69
• Track 9 : Phrampa_66
• Track 10 : Rockabye_74
• Track 11 : PauloDiaboli_41, A3Wally_394, PauloDiaboli_396, A3Wally_41
• Track 12 : Dodo_74, PauloDiaboli_73, A3Wally_74
• Track 13 : Dodo_392, Dodo_42
• Track 14 : Zooman_61
• Track 15 : Big4_43, Big4_369
• Track 16 : Zooman_353, Zooman_40
• Track 17 : Big4_65
• Track 18 : Cece_347, Cece_45
• Track 19 : Cece_60
• Track 20 : Pumpernickel_350, Pumpernickel_49
• Track 21 : Pumpernickel_76

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 6 of the 22 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• A3Wally_74, Big4_65, Cece_60, Dodo_74, PauloDiaboli_73, Pumpernickel_76, Zooman_61,

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

Genes that do not have the "Most Annotated" start:
• A3Wally_394, A3Wally_41, Atuin_66, Big4_369, Big4_43, Bloom_76, Cece_347, Cece_45, Chilliams_69, Dodo_392, Dodo_42, Ellewin_63, GoldenEssence_61, LeoJr_71, Mimi_72, Panchaali_69, Patbob_72, PauloDiaboli_396, PauloDiaboli_41, Phrampa_66, Pumpernickel_350, Pumpernickel_49, Racecar_73, ReginaGlobina_71, Rockabye_74, SJReid_78, Talia1610_72, WaddleDee_65, Zooman_353, Zooman_40,

Summary by start number:

Start 1:
• Found in 6 of 37 (16.2%) of genes in pham
• No Manual Annotations of this start.
• Called 33.3% of time when present
• Phage (with cluster) where this start called: Dodo_392 (GD1), Dodo_42 (GD1),

Start 4:
• Found in 6 of 37 (16.2%) of genes in pham
• Manual Annotations of this start: 4 of 22
• Called 66.7% of time when present
• Phage (with cluster) where this start called: A3Wally_394 (GD1), A3Wally_41 (GD1), PauloDiaboli_396 (GD1), PauloDiaboli_41 (GD1),

Start 6:
• Found in 4 of 37 (10.8%) of genes in pham
• Manual Annotations of this start: 4 of 22
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Big4_369 (GD2), Big4_43 (GD2), Zooman_353 (GD2), Zooman_40 (GD2),

Start 7:
• Found in 8 of 37 (21.6%) of genes in pham
• Manual Annotations of this start: 2 of 22
• Called 25.0% of time when present
• Phage (with cluster) where this start called: Pumpernickel_350 (GD4), Pumpernickel_49 (GD4),

Start 8:
• Found in 2 of 37 (5.4%) of genes in pham
• Manual Annotations of this start: 2 of 22
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Cece_347 (GD3), Cece_45 (GD3),

Start 9:
• Found in 1 of 37 (2.7%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: SJReid_78 (FC),

Start 10:
• Found in 13 of 37 (35.1%) of genes in pham
• Manual Annotations of this start: 4 of 22
• Called 100.0% of time when present

• Phage (with cluster) where this start called: Atuin_66 (FC), Bloom_76 (FC), Ellewin_63 (FC), GoldenEssence_61 (FC), LeoJr_71 (FC), Mimi_72 (FC), Panchaali_69 (FC), Patbob_72 (FC), Phrampa_66 (FC), Racecar_73 (FC), ReginaGlobina_71 (FC), Talia1610_72 (FC), WaddleDee_65 (FC),

Start 12:
• Found in 7 of 37 (18.9%) of genes in pham
• Manual Annotations of this start: 6 of 22
• Called 100.0% of time when present
• Phage (with cluster) where this start called: A3Wally_74 (GD1), Big4_65 (GD2), Cece_60 (GD3), Dodo_74 (GD1), PauloDiaboli_73 (GD1), Pumpernickel_76 (GD4), Zooman_61 (GD2),

Start 13:
• Found in 2 of 37 (5.4%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Chilliams_69 (FC), Rockabye_74 (FC),

Summary by clusters:

There are 5 clusters represented in this pham: GD3, GD1, GD2, FC, GD4,

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

Info for manual annotations of cluster GD1:
•Start number 4 was manually annotated 4 times for cluster GD1.
•Start number 12 was manually annotated 2 times for cluster GD1.

Info for manual annotations of cluster GD2:
•Start number 6 was manually annotated 4 times for cluster GD2.
•Start number 12 was manually annotated 2 times for cluster GD2.

Info for manual annotations of cluster GD3:
•Start number 8 was manually annotated 2 times for cluster GD3.
•Start number 12 was manually annotated 1 time for cluster GD3.

Info for manual annotations of cluster GD4:
•Start number 7 was manually annotated 2 times for cluster GD4.
•Start number 12 was manually annotated 1 time for cluster GD4.

Gene Information:

Gene: A3Wally_394 Start: 193489, Stop: 194094, Start Num: 4
Candidate Starts for A3Wally_394:
(1, 193465), (Start: 4 @193489 has 4 MA's), (Start: 7 @193537 has 2 MA's), (16, 193582), (27, 193690), (42, 193783), (58, 193954), (61, 193987), (66, 194050), (67, 194059), (68, 194074),

Gene: A3Wally_41 Start: 14268, Stop: 14873, Start Num: 4
Candidate Starts for A3Wally_41:

(1, 14244), (Start: 4 @14268 has 4 MA's), (Start: 7 @14316 has 2 MA's), (16, 14361), (27, 14469), (42, 14562), (58, 14733), (61, 14766), (66, 14829), (67, 14838), (68, 14853),

Gene: A3Wally_74 Start: 26233, Stop: 26730, Start Num: 12
Candidate Starts for A3Wally_74:
(Start: 12 @26233 has 6 MA's), (39, 26467), (53, 26584), (54, 26623), (62, 26710), (63, 26722),

Gene: Atuin_66 Start: 29715, Stop: 30212, Start Num: 10
Candidate Starts for Atuin_66:
(Start: 10 @29715 has 4 MA's), (55, 30093), (56, 30102),

Gene: Big4_43 Start: 16447, Stop: 17025, Start Num: 6
Candidate Starts for Big4_43:
(Start: 6 @16447 has 4 MA's), (15, 16498), (24, 16561), (28, 16624), (41, 16693), (47, 16735), (56, 16846), (58, 16873), (61, 16906),

Gene: Big4_369 Start: 191141, Stop: 191719, Start Num: 6
Candidate Starts for Big4_369:
(Start: 6 @191141 has 4 MA's), (15, 191192), (24, 191255), (28, 191318), (41, 191387), (47, 191429), (56, 191540), (58, 191567), (61, 191600),

Gene: Big4_65 Start: 26317, Stop: 26814, Start Num: 12
Candidate Starts for Big4_65:
(Start: 12 @26317 has 6 MA's), (23, 26413), (34, 26524), (53, 26668), (54, 26707), (61, 26779), (62, 26794),

Gene: Bloom_76 Start: 32332, Stop: 32826, Start Num: 10
Candidate Starts for Bloom_76:
(Start: 10 @32332 has 4 MA's), (22, 32428), (24, 32437), (35, 32539), (45, 32599), (56, 32722),

Gene: Cece_347 Start: 185392, Stop: 185943, Start Num: 8
Candidate Starts for Cece_347:
(Start: 8 @185392 has 2 MA's), (27, 185545), (28, 185560), (37, 185599), (39, 185605), (46, 185650), (57, 185776), (61, 185827), (65, 185875), (69, 185932),

Gene: Cece_60 Start: 24833, Stop: 25330, Start Num: 12
Candidate Starts for Cece_60:
(Start: 12 @24833 has 6 MA's), (21, 24911), (23, 24929), (44, 25100), (53, 25184), (62, 25310),

Gene: Cece_45 Start: 16958, Stop: 17509, Start Num: 8
Candidate Starts for Cece_45:
(Start: 8 @16958 has 2 MA's), (27, 17111), (28, 17126), (37, 17165), (39, 17171), (46, 17216), (57, 17342), (61, 17393), (65, 17441), (69, 17498),

Gene: Chilliams_69 Start: 32716, Stop: 33210, Start Num: 13
Candidate Starts for Chilliams_69:
(13, 32716), (17, 32761), (34, 32908), (36, 32920), (38, 32929), (52, 33019), (60, 33136),

Gene: Dodo_74 Start: 26555, Stop: 27052, Start Num: 12
Candidate Starts for Dodo_74:
(Start: 12 @26555 has 6 MA's), (39, 26789), (53, 26906), (54, 26945), (62, 27032), (63, 27044),

Gene: Dodo_392 Start: 192291, Stop: 192920, Start Num: 1

Candidate Starts for Dodo_392:
(1, 192291), (Start: 4 @192315 has 4 MA's), (Start: 7 @192363 has 2 MA's), (16, 192408), (27, 192516), (42, 192609), (58, 192780), (61, 192813), (66, 192876), (67, 192885), (68, 192900),

Gene: Dodo_42 Start: 14091, Stop: 14720, Start Num: 1
Candidate Starts for Dodo_42:
(1, 14091), (Start: 4 @14115 has 4 MA's), (Start: 7 @14163 has 2 MA's), (16, 14208), (27, 14316), (42, 14409), (58, 14580), (61, 14613), (66, 14676), (67, 14685), (68, 14700),

Gene: Ellewin_63 Start: 26206, Stop: 26700, Start Num: 10
Candidate Starts for Ellewin_63:
(Start: 10 @26206 has 4 MA's), (22, 26296), (26, 26353), (38, 26425), (56, 26590), (61, 26650),

Gene: GoldenEssence_61 Start: 26125, Stop: 26619, Start Num: 10
Candidate Starts for GoldenEssence_61:
(Start: 10 @26125 has 4 MA's), (22, 26221), (24, 26230), (26, 26278), (35, 26332), (56, 26515),

Gene: LeoJr_71 Start: 29855, Stop: 30352, Start Num: 10
Candidate Starts for LeoJr_71:
(Start: 10 @29855 has 4 MA's), (55, 30233), (56, 30242),

Gene: Mimi_72 Start: 31679, Stop: 32173, Start Num: 10
Candidate Starts for Mimi_72:
(Start: 10 @31679 has 4 MA's), (22, 31775), (24, 31784), (35, 31886), (45, 31946), (56, 32069),

Gene: Panchaali_69 Start: 27332, Stop: 27826, Start Num: 10
Candidate Starts for Panchaali_69:
(Start: 10 @27332 has 4 MA's), (26, 27479), (38, 27551), (56, 27716), (61, 27776),

Gene: Patbob_72 Start: 31972, Stop: 32466, Start Num: 10
Candidate Starts for Patbob_72:
(5, 31933), (Start: 10 @31972 has 4 MA's), (22, 32068), (24, 32077), (26, 32125), (35, 32179), (40, 32203), (48, 32248), (56, 32362),

Gene: PauloDiaboli_41 Start: 14108, Stop: 14713, Start Num: 4
Candidate Starts for PauloDiaboli_41:
(1, 14084), (Start: 4 @14108 has 4 MA's), (Start: 7 @14156 has 2 MA's), (16, 14201), (27, 14309), (42, 14402), (58, 14573), (61, 14606), (66, 14669), (67, 14678), (68, 14693),

Gene: PauloDiaboli_396 Start: 190737, Stop: 191342, Start Num: 4
Candidate Starts for PauloDiaboli_396:
(1, 190713), (Start: 4 @190737 has 4 MA's), (Start: 7 @190785 has 2 MA's), (16, 190830), (27, 190938), (42, 191031), (58, 191202), (61, 191235), (66, 191298), (67, 191307), (68, 191322),

Gene: PauloDiaboli_73 Start: 25590, Stop: 26087, Start Num: 12
Candidate Starts for PauloDiaboli_73:
(Start: 12 @25590 has 6 MA's), (39, 25824), (53, 25941), (54, 25980), (62, 26067), (63, 26079),

Gene: Phrampa_66 Start: 28999, Stop: 29493, Start Num: 10
Candidate Starts for Phrampa_66:
(Start: 10 @28999 has 4 MA's), (22, 29095), (24, 29104), (26, 29152), (35, 29206), (51, 29305), (56, 29389),

Gene: Pumpernickel_350 Start: 183775, Stop: 184356, Start Num: 7
Candidate Starts for Pumpernickel_350:
(5, 183742), (Start: 7 @183775 has 2 MA's), (30, 183967), (42, 184030), (43, 184039), (49, 184081), (50, 184090), (58, 184201), (59, 184207),

Gene: Pumpernickel_76 Start: 29614, Stop: 30117, Start Num: 12
Candidate Starts for Pumpernickel_76:
(11, 29611), (Start: 12 @29614 has 6 MA's), (14, 29644), (18, 29677), (19, 29686), (20, 29689), (24, 29713), (29, 29782), (31, 29806), (32, 29812), (53, 29965), (62, 30091),

Gene: Pumpernickel_49 Start: 17643, Stop: 18224, Start Num: 7
Candidate Starts for Pumpernickel_49:
(5, 17610), (Start: 7 @17643 has 2 MA's), (30, 17835), (42, 17898), (43, 17907), (49, 17949), (50, 17958), (58, 18069), (59, 18075),

Gene: Racecar_73 Start: 32332, Stop: 32826, Start Num: 10
Candidate Starts for Racecar_73:
(Start: 10 @32332 has 4 MA's), (22, 32428), (24, 32437), (35, 32539), (45, 32599), (56, 32722),

Gene: ReginaGlobina_71 Start: 30412, Stop: 30909, Start Num: 10
Candidate Starts for ReginaGlobina_71:
(Start: 10 @30412 has 4 MA's), (55, 30790), (56, 30799),

Gene: Rockabye_74 Start: 33070, Stop: 33555, Start Num: 13
Candidate Starts for Rockabye_74:
(13, 33070), (17, 33115), (24, 33163), (33, 33256), (36, 33274), (38, 33283), (52, 33373), (60, 33490),

Gene: SJReid_78 Start: 33536, Stop: 34036, Start Num: 9
Candidate Starts for SJReid_78:
(9, 33536), (17, 33590), (24, 33641), (26, 33689), (41, 33770), (64, 34016),

Gene: Talia1610_72 Start: 31697, Stop: 32191, Start Num: 10
Candidate Starts for Talia1610_72:
(Start: 10 @31697 has 4 MA's), (22, 31793), (24, 31802), (35, 31904), (45, 31964), (56, 32087),

Gene: WaddleDee_65 Start: 26331, Stop: 26825, Start Num: 10
Candidate Starts for WaddleDee_65:
(Start: 10 @26331 has 4 MA's), (22, 26421), (26, 26478), (38, 26550), (56, 26715), (61, 26775),

Gene: Zooman_61 Start: 24985, Stop: 25482, Start Num: 12
Candidate Starts for Zooman_61:
(Start: 12 @24985 has 6 MA's), (23, 25081), (34, 25192), (53, 25336), (54, 25375), (61, 25447), (62, 25462),

Gene: Zooman_353 Start: 191506, Stop: 192084, Start Num: 6
Candidate Starts for Zooman_353:
(2, 191449), (3, 191458), (Start: 6 @191506 has 4 MA's), (15, 191557), (25, 191641), (28, 191683), (32, 191716), (39, 191746), (41, 191752), (47, 191794), (56, 191905), (58, 191932), (61, 191965), (66, 192028), (69, 192067),

Gene: Zooman_40 Start: 15855, Stop: 16433, Start Num: 6
Candidate Starts for Zooman_40:

(2, 15798), (3, 15807), (Start: 6 @15855 has 4 MA's), (15, 15906), (25, 15990), (28, 16032), (32, 16065), (39, 16095), (41, 16101), (47, 16143), (56, 16254), (58, 16281), (61, 16314), (66, 16377), (69, 16416),