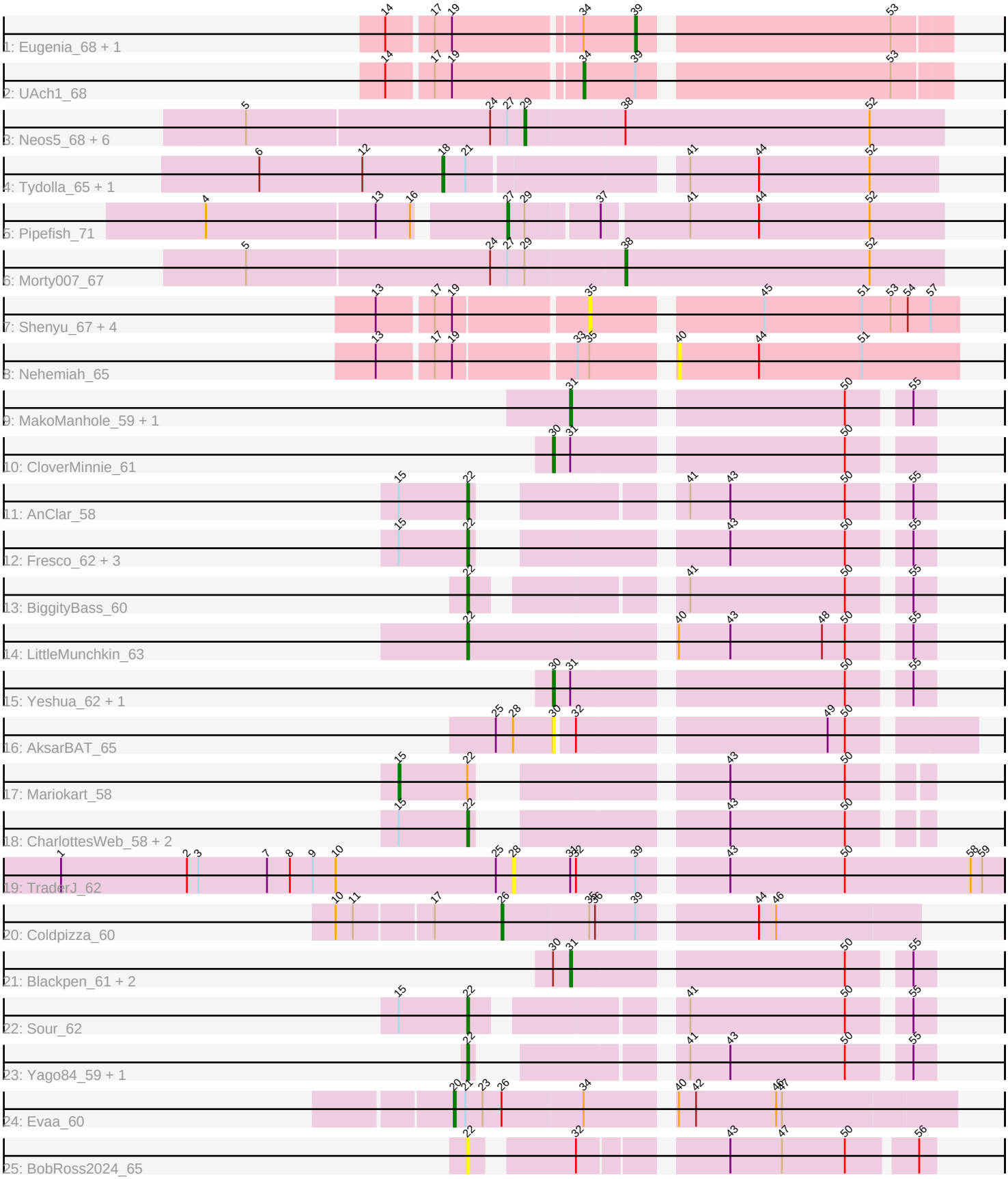
Pham 347750


1: Eugenia_68 + 1
2: UAch1_68
3: Neos5_68 + 6
4: Tydolla_65 + 1
5: Pipefish_71
6: Morty007_67
7: Shenyu_67 + 4
8: Nehemiah_65
9: MakoManhole_59 + 1
10: CloverMinnie_61
11: AnClar_58
12: Fresco_62 + 3
13: BiggityBass_60
14: LittleMunchkin_63
15: Yeshua_62 + 1
16: AksarBAT_65
17: Mariokart_58
18: CharlottesWeb_58 + 2
19: TraderJ_62
20: Coldpizza_60
21: Blackpen_61 + 2
22: Sour_62
23: Yago84_59 + 1
24: Evaa_60
25: BobRoss2024_65

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 347750 Report

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

Pham number 347750 has 47 members, 14 are drafts.

Phages represented in each track:
• Track 1 : Eugenia_68, HogWash_68
• Track 2 : UAch1_68
• Track 3 : Neos5_68, Chentzyk_70, SlippinJimmy_71, Briakila_68, Marley1013_69, Obutu_70, Phayeta_71
• Track 4 : Tydolla_65, HarveySr_67
• Track 5 : Pipefish_71
• Track 6 : Morty007_67
• Track 7 : Shenyu_67, StinkyVeggy_66, Nangang_66, DigitDog_67, KarasumaRum_66
• Track 8 : Nehemiah_65
• Track 9 : MakoManhole_59, CaiB_62
• Track 10 : CloverMinnie_61
• Track 11 : AnClar_58
• Track 12 : Fresco_62, Axumite_62, Shatter_62, Ligma_62
• Track 13 : BiggityBass_60
• Track 14 : LittleMunchkin_63
• Track 15 : Yeshua_62, AnarQue_64
• Track 16 : AksarBAT_65
• Track 17 : Mariokart_58
• Track 18 : CharlottesWeb_58, Coco2012_58, JellyBelly_57
• Track 19 : TraderJ_62
• Track 20 : Coldpizza_60
• Track 21 : Blackpen_61, Wooper_63, FelixTres_63
• Track 22 : Sour_62
• Track 23 : Yago84_59, Sisko_60
• Track 24 : Evaa_60
• Track 25 : BobRoss2024_65

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

The start number called the most often in the published annotations is 22, it was called in 11 of the 33 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• AnClar_58, Axumite_62, BiggityBass_60, BobRoss2024_65, CharlottesWeb_58, Coco2012_58, Fresco_62, JellyBelly_57, Ligma_62, LittleMunchkin_63, Shatter_62, Sisko_60, Sour_62, Yago84_59,

Genes that have the "Most Annotated" start but do not call it:
• Mariokart_58,

Genes that do not have the "Most Annotated" start:
• AksarBAT_65, AnarQue_64, Blackpen_61, Briakila_68, CaiB_62, Chentzyk_70, CloverMinnie_61, Coldpizza_60, DigitDog_67, Eugenia_68, Evaa_60, FelixTres_63, HarveySr_67, HogWash_68, KarasumaRum_66, MakoManhole_59, Marley1013_69, Morty007_67, Nangang_66, Nehemiah_65, Neos5_68, Obutu_70, Phayeta_71, Pipefish_71, Shenyu_67, SlippinJimmy_71, StinkyVeggy_66, TraderJ_62, Tydolla_65, UAch1_68, Wooper_63, Yeshua_62,

Summary by start number:

Start 15:
• Found in 10 of 47 (21.3%) of genes in pham
• Manual Annotations of this start: 1 of 33
• Called 10.0% of time when present
• Phage (with cluster) where this start called: Mariokart_58 (DR),

Start 18:
• Found in 2 of 47 (4.3%) of genes in pham
• Manual Annotations of this start: 2 of 33
• Called 100.0% of time when present
• Phage (with cluster) where this start called: HarveySr_67 (B3), Tydolla_65 (B3),

Start 20:
• Found in 1 of 47 (2.1%) of genes in pham
• Manual Annotations of this start: 1 of 33
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Evaa_60 (DR),

Start 22:
• Found in 15 of 47 (31.9%) of genes in pham
• Manual Annotations of this start: 11 of 33
• Called 93.3% of time when present
• Phage (with cluster) where this start called: AnClar_58 (DR), Axumite_62 (DR), BiggityBass_60 (DR), BobRoss2024_65 (DR), CharlottesWeb_58 (DR), Coco2012_58 (DR), Fresco_62 (DR), JellyBelly_57 (DR), Ligma_62 (DR), LittleMunchkin_63 (DR), Shatter_62 (DR), Sisko_60 (DR), Sour_62 (DR), Yago84_59 (DR),

Start 26:
• Found in 2 of 47 (4.3%) of genes in pham
• Manual Annotations of this start: 1 of 33
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Coldpizza_60 (DR),

Start 27:
• Found in 9 of 47 (19.1%) of genes in pham

• Manual Annotations of this start: 1 of 33
• Called 11.1% of time when present
• Phage (with cluster) where this start called: Pipefish_71 (B3),

Start 28:
• Found in 2 of 47 (4.3%) of genes in pham
• No Manual Annotations of this start.
• Called 50.0% of time when present
• Phage (with cluster) where this start called: TraderJ_62 (DR),

Start 29:
• Found in 9 of 47 (19.1%) of genes in pham
• Manual Annotations of this start: 6 of 33
• Called 77.8% of time when present
• Phage (with cluster) where this start called: Briakila_68 (B3), Chentzyk_70 (B3), Marley1013_69 (B3), Neos5_68 (B3), Obutu_70 (B3), Phayeta_71 (B3), SlippinJimmy_71 (B3),

Start 30:
• Found in 7 of 47 (14.9%) of genes in pham
• Manual Annotations of this start: 3 of 33
• Called 57.1% of time when present
• Phage (with cluster) where this start called: AksarBAT_65 (DR), AnarQue_64 (DR), CloverMinnie_61 (DR), Yeshua_62 (DR),

Start 31:
• Found in 9 of 47 (19.1%) of genes in pham
• Manual Annotations of this start: 4 of 33
• Called 55.6% of time when present
• Phage (with cluster) where this start called: Blackpen_61 (DR), CaiB_62 (DR), FelixTres_63 (DR), MakoManhole_59 (DR), Wooper_63 (DR),

Start 34:
• Found in 4 of 47 (8.5%) of genes in pham
• Manual Annotations of this start: 1 of 33
• Called 25.0% of time when present
• Phage (with cluster) where this start called: UAch1_68 (B1),

Start 35:
• Found in 7 of 47 (14.9%) of genes in pham
• No Manual Annotations of this start.
• Called 71.4% of time when present
• Phage (with cluster) where this start called: DigitDog_67 (B5), KarasumaRum_66 (B5), Nangang_66 (B5), Shenyu_67 (B5), StinkyVeggy_66 (B5),

Start 38:
• Found in 8 of 47 (17.0%) of genes in pham
• Manual Annotations of this start: 1 of 33
• Called 12.5% of time when present
• Phage (with cluster) where this start called: Morty007_67 (B3),

Start 39:
• Found in 5 of 47 (10.6%) of genes in pham

• Manual Annotations of this start: 1 of 33
• Called 40.0% of time when present
• Phage (with cluster) where this start called: Eugenia_68 (B1), HogWash_68 (B1),

Start 40:
• Found in 3 of 47 (6.4%) of genes in pham
• No Manual Annotations of this start.
• Called 33.3% of time when present
• Phage (with cluster) where this start called: Nehemiah_65 (B5),

Summary by clusters:

There are 4 clusters represented in this pham: B5, DR, B1, B3,

Info for manual annotations of cluster B1:
•Start number 34 was manually annotated 1 time for cluster B1.
•Start number 39 was manually annotated 1 time for cluster B1.

Info for manual annotations of cluster B3:
•Start number 18 was manually annotated 2 times for cluster B3.
•Start number 27 was manually annotated 1 time for cluster B3.
•Start number 29 was manually annotated 6 times for cluster B3.
•Start number 38 was manually annotated 1 time for cluster B3.

Info for manual annotations of cluster DR:
•Start number 15 was manually annotated 1 time for cluster DR.
•Start number 20 was manually annotated 1 time for cluster DR.
•Start number 22 was manually annotated 11 times for cluster DR.
•Start number 26 was manually annotated 1 time for cluster DR.
•Start number 30 was manually annotated 3 times for cluster DR.
•Start number 31 was manually annotated 4 times for cluster DR.

Gene Information:

Gene: AksarBAT_65 Start: 51976, Stop: 52173, Start Num: 30
Candidate Starts for AksarBAT_65:
(25, 51946), (28, 51955), (Start: 30 @51976 has 3 MA's), (32, 51985), (49, 52105), (50, 52114),

Gene: AnClar_58 Start: 51779, Stop: 51976, Start Num: 22
Candidate Starts for AnClar_58:
(Start: 15 @51743 has 1 MA's), (Start: 22 @51779 has 11 MA's), (41, 51857), (43, 51878), (50, 51938), (55, 51965),

Gene: AnarQue_64 Start: 52219, Stop: 52398, Start Num: 30
Candidate Starts for AnarQue_64:
(Start: 30 @52219 has 3 MA's), (Start: 31 @52228 has 4 MA's), (50, 52360), (55, 52387),

Gene: Axumite_62 Start: 50626, Stop: 50826, Start Num: 22
Candidate Starts for Axumite_62:
(Start: 15 @50590 has 1 MA's), (Start: 22 @50626 has 11 MA's), (43, 50728), (50, 50788), (55, 50815),

Gene: BiggityBass_60 Start: 52323, Stop: 52532, Start Num: 22
Candidate Starts for BiggityBass_60:
(Start: 22 @52323 has 11 MA's), (41, 52413), (50, 52494), (55, 52521),

Gene: Blackpen_61 Start: 50667, Stop: 50837, Start Num: 31
Candidate Starts for Blackpen_61:
(Start: 30 @50658 has 3 MA's), (Start: 31 @50667 has 4 MA's), (50, 50799), (55, 50826),

Gene: BobRoss2024_65 Start: 51837, Stop: 52049, Start Num: 22
Candidate Starts for BobRoss2024_65:
(Start: 22 @51837 has 11 MA's), (32, 51882), (43, 51948), (47, 51975), (50, 52008), (56, 52041),

Gene: Briakila_68 Start: 57517, Stop: 57732, Start Num: 29
Candidate Starts for Briakila_68:
(5, 57373), (24, 57499), (Start: 27 @57508 has 1 MA's), (Start: 29 @57517 has 6 MA's), (Start: 38 @57568 has 1 MA's), (52, 57694),

Gene: CaiB_62 Start: 52012, Stop: 52182, Start Num: 31
Candidate Starts for CaiB_62:
(Start: 31 @52012 has 4 MA's), (50, 52144), (55, 52171),

Gene: CharlottesWeb_58 Start: 49213, Stop: 49410, Start Num: 22
Candidate Starts for CharlottesWeb_58:
(Start: 15 @49177 has 1 MA's), (Start: 22 @49213 has 11 MA's), (43, 49315), (50, 49375),

Gene: Chentzyk_70 Start: 58269, Stop: 58484, Start Num: 29
Candidate Starts for Chentzyk_70:
(5, 58125), (24, 58251), (Start: 27 @58260 has 1 MA's), (Start: 29 @58269 has 6 MA's), (Start: 38 @58320 has 1 MA's), (52, 58446),

Gene: CloverMinnie_61 Start: 51166, Stop: 51345, Start Num: 30
Candidate Starts for CloverMinnie_61:
(Start: 30 @51166 has 3 MA's), (Start: 31 @51175 has 4 MA's), (50, 51307),

Gene: Coco2012_58 Start: 49204, Stop: 49401, Start Num: 22
Candidate Starts for Coco2012_58:
(Start: 15 @49168 has 1 MA's), (Start: 22 @49204 has 11 MA's), (43, 49306), (50, 49366),

Gene: Coldpizza_60 Start: 52423, Stop: 52629, Start Num: 26
Candidate Starts for Coldpizza_60:
(10, 52342), (11, 52351), (17, 52390), (Start: 26 @52423 has 1 MA's), (35, 52468), (36, 52471), (Start: 39 @52492 has 1 MA's), (44, 52546), (46, 52555),

Gene: DigitDog_67 Start: 58467, Stop: 58649, Start Num: 35
Candidate Starts for DigitDog_67:
(13, 58365), (17, 58392), (19, 58401), (35, 58467), (45, 58548), (51, 58599), (53, 58614), (54, 58623), (57, 58635),

Gene: Eugenia_68 Start: 57577, Stop: 57729, Start Num: 39
Candidate Starts for Eugenia_68:
(14, 57457), (17, 57478), (19, 57487), (Start: 34 @57550 has 1 MA's), (Start: 39 @57577 has 1 MA's), (53, 57700),

Gene: Evaa_60 Start: 49769, Stop: 50017, Start Num: 20
Candidate Starts for Evaa_60:
(Start: 20 @49769 has 1 MA's), (21, 49775), (23, 49784), (Start: 26 @49793 has 1 MA's), (Start: 34 @49835 has 1 MA's), (40, 49874), (42, 49883), (46, 49925), (47, 49928),

Gene: FelixTres_63 Start: 51482, Stop: 51652, Start Num: 31
Candidate Starts for FelixTres_63:
(Start: 30 @51473 has 3 MA's), (Start: 31 @51482 has 4 MA's), (50, 51614), (55, 51641),

Gene: Fresco_62 Start: 50626, Stop: 50826, Start Num: 22
Candidate Starts for Fresco_62:
(Start: 15 @50590 has 1 MA's), (Start: 22 @50626 has 11 MA's), (43, 50728), (50, 50788), (55, 50815),

Gene: HarveySr_67 Start: 56727, Stop: 56969, Start Num: 18
Candidate Starts for HarveySr_67:
(6, 56631), (12, 56685), (Start: 18 @56727 has 2 MA's), (21, 56739), (41, 56841), (44, 56877), (52, 56934),

Gene: HogWash_68 Start: 57799, Stop: 57951, Start Num: 39
Candidate Starts for HogWash_68:
(14, 57679), (17, 57700), (19, 57709), (Start: 34 @57772 has 1 MA's), (Start: 39 @57799 has 1 MA's), (53, 57922),

Gene: JellyBelly_57 Start: 49210, Stop: 49407, Start Num: 22
Candidate Starts for JellyBelly_57:
(Start: 15 @49174 has 1 MA's), (Start: 22 @49210 has 11 MA's), (43, 49312), (50, 49372),

Gene: KarasumaRum_66 Start: 58294, Stop: 58476, Start Num: 35
Candidate Starts for KarasumaRum_66:
(13, 58192), (17, 58219), (19, 58228), (35, 58294), (45, 58375), (51, 58426), (53, 58441), (54, 58450), (57, 58462),

Gene: Ligma_62 Start: 50626, Stop: 50826, Start Num: 22
Candidate Starts for Ligma_62:
(Start: 15 @50590 has 1 MA's), (Start: 22 @50626 has 11 MA's), (43, 50728), (50, 50788), (55, 50815),

Gene: LittleMunchkin_63 Start: 53357, Stop: 53581, Start Num: 22
Candidate Starts for LittleMunchkin_63:
(Start: 22 @53357 has 11 MA's), (40, 53456), (43, 53483), (48, 53531), (50, 53543), (55, 53570),

Gene: MakoManhole_59 Start: 50530, Stop: 50700, Start Num: 31
Candidate Starts for MakoManhole_59:
(Start: 31 @50530 has 4 MA's), (50, 50662), (55, 50689),

Gene: Mariokart_58 Start: 49462, Stop: 49695, Start Num: 15
Candidate Starts for Mariokart_58:
(Start: 15 @49462 has 1 MA's), (Start: 22 @49498 has 11 MA's), (43, 49600), (50, 49660),

Gene: Marley1013_69 Start: 58226, Stop: 58441, Start Num: 29
Candidate Starts for Marley1013_69:
(5, 58082), (24, 58208), (Start: 27 @58217 has 1 MA's), (Start: 29 @58226 has 6 MA's), (Start: 38 @58277 has 1 MA's), (52, 58403),

Gene: Morty007_67 Start: 58277, Stop: 58441, Start Num: 38
Candidate Starts for Morty007_67:
(5, 58082), (24, 58208), (Start: 27 @58217 has 1 MA's), (Start: 29 @58226 has 6 MA's), (Start: 38 @58277 has 1 MA's), (52, 58403),

Gene: Nangang_66 Start: 58493, Stop: 58675, Start Num: 35
Candidate Starts for Nangang_66:
(13, 58391), (17, 58418), (19, 58427), (35, 58493), (45, 58574), (51, 58625), (53, 58640), (54, 58649), (57, 58661),

Gene: Nehemiah_65 Start: 58285, Stop: 58431, Start Num: 40
Candidate Starts for Nehemiah_65:
(13, 58147), (17, 58174), (19, 58183), (33, 58243), (35, 58249), (40, 58285), (44, 58327), (51, 58381),

Gene: Neos5_68 Start: 57688, Stop: 57903, Start Num: 29
Candidate Starts for Neos5_68:
(5, 57544), (24, 57670), (Start: 27 @57679 has 1 MA's), (Start: 29 @57688 has 6 MA's), (Start: 38 @57739 has 1 MA's), (52, 57865),

Gene: Obutu_70 Start: 57908, Stop: 58123, Start Num: 29
Candidate Starts for Obutu_70:
(5, 57764), (24, 57890), (Start: 27 @57899 has 1 MA's), (Start: 29 @57908 has 6 MA's), (Start: 38 @57959 has 1 MA's), (52, 58085),

Gene: Phayeta_71 Start: 57812, Stop: 58027, Start Num: 29
Candidate Starts for Phayeta_71:
(5, 57668), (24, 57794), (Start: 27 @57803 has 1 MA's), (Start: 29 @57812 has 6 MA's), (Start: 38 @57863 has 1 MA's), (52, 57989),

Gene: Pipefish_71 Start: 58442, Stop: 58660, Start Num: 27
Candidate Starts for Pipefish_71:
(4, 58295), (13, 58382), (16, 58400), (Start: 27 @58442 has 1 MA's), (Start: 29 @58451 has 6 MA's), (37, 58487), (41, 58529), (44, 58565), (52, 58622),

Gene: Shatter_62 Start: 50626, Stop: 50826, Start Num: 22
Candidate Starts for Shatter_62:
(Start: 15 @50590 has 1 MA's), (Start: 22 @50626 has 11 MA's), (43, 50728), (50, 50788), (55, 50815),

Gene: Shenyu_67 Start: 58862, Stop: 59044, Start Num: 35
Candidate Starts for Shenyu_67:
(13, 58760), (17, 58787), (19, 58796), (35, 58862), (45, 58943), (51, 58994), (53, 59009), (54, 59018), (57, 59030),

Gene: Sisko_60 Start: 50847, Stop: 51044, Start Num: 22
Candidate Starts for Sisko_60:
(Start: 22 @50847 has 11 MA's), (41, 50925), (43, 50946), (50, 51006), (55, 51033),

Gene: SlippinJimmy_71 Start: 58709, Stop: 58924, Start Num: 29
Candidate Starts for SlippinJimmy_71:
(5, 58565), (24, 58691), (Start: 27 @58700 has 1 MA's), (Start: 29 @58709 has 6 MA's), (Start: 38 @58760 has 1 MA's), (52, 58886),

Gene: Sour_62 Start: 53064, Stop: 53273, Start Num: 22
Candidate Starts for Sour_62:
(Start: 15 @53028 has 1 MA's), (Start: 22 @53064 has 11 MA's), (41, 53154), (50, 53235), (55, 53262),

Gene: StinkyVeggy_66 Start: 58294, Stop: 58476, Start Num: 35
Candidate Starts for StinkyVeggy_66:
(13, 58192), (17, 58219), (19, 58228), (35, 58294), (45, 58375), (51, 58426), (53, 58441), (54, 58450), (57, 58462),

Gene: TraderJ_62 Start: 51541, Stop: 51786, Start Num: 28
Candidate Starts for TraderJ_62:
(1, 51304), (2, 51370), (3, 51376), (7, 51412), (8, 51424), (9, 51436), (10, 51448), (25, 51532), (28, 51541), (Start: 31 @51571 has 4 MA's), (32, 51574), (Start: 39 @51604 has 1 MA's), (43, 51643), (50, 51703), (58, 51769), (59, 51775),

Gene: Tydolla_65 Start: 57176, Stop: 57418, Start Num: 18
Candidate Starts for Tydolla_65:
(6, 57080), (12, 57134), (Start: 18 @57176 has 2 MA's), (21, 57188), (41, 57290), (44, 57326), (52, 57383),

Gene: UAch1_68 Start: 57127, Stop: 57306, Start Num: 34
Candidate Starts for UAch1_68:
(14, 57034), (17, 57055), (19, 57064), (Start: 34 @57127 has 1 MA's), (Start: 39 @57154 has 1 MA's), (53, 57277),

Gene: Wooper_63 Start: 51561, Stop: 51731, Start Num: 31
Candidate Starts for Wooper_63:
(Start: 30 @51552 has 3 MA's), (Start: 31 @51561 has 4 MA's), (50, 51693), (55, 51720),

Gene: Yago84_59 Start: 50332, Stop: 50529, Start Num: 22
Candidate Starts for Yago84_59:
(Start: 22 @50332 has 11 MA's), (41, 50410), (43, 50431), (50, 50491), (55, 50518),

Gene: Yeshua_62 Start: 51529, Stop: 51708, Start Num: 30
Candidate Starts for Yeshua_62:
(Start: 30 @51529 has 3 MA's), (Start: 31 @51538 has 4 MA's), (50, 51670), (55, 51697),