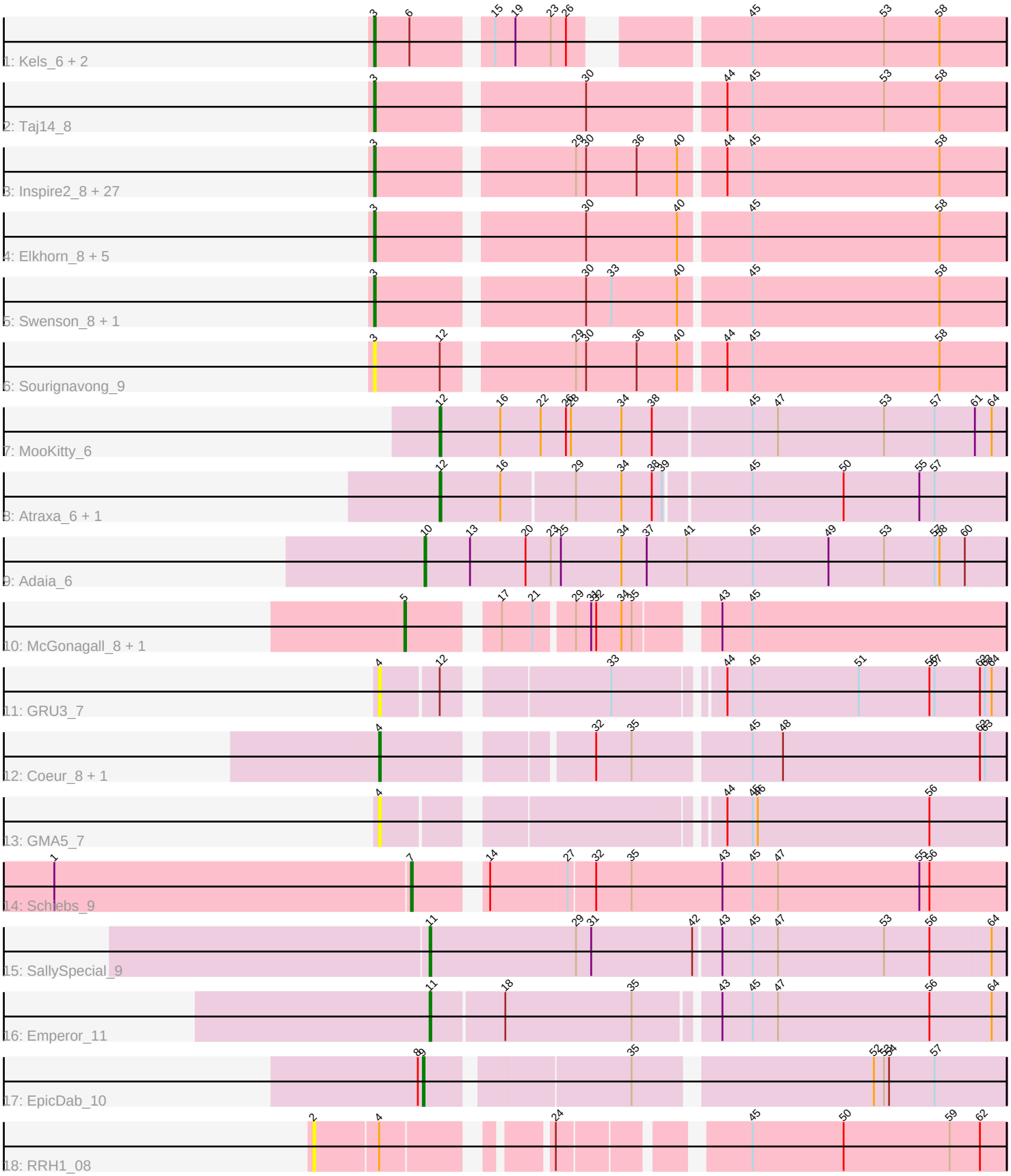
Pham 161892


1: Kels_6 + 2
2: Taj14_8
3: Inspire2_8 + 27
4: Elkhorn_8 + 5
5: Swenson_8 + 1
6: Sourignavong_9
7: MooKitty_6
8: Atraxa_6 + 1
9: Adaia_6
10: McGonagall_8 + 1
11: GRU3_7
12: Coeur_8 + 1
13: GMA5_7
14: Schiebs_9
15: SallySpecial_9
16: Emperor_11
17: EpicDab_10
18: RRH1_08

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 161892 Report

This analysis was run 05/04/24 on database version 560.

Pham number 161892 has 56 members, 4 are drafts.

Phages represented in each track:
• Track 1 : Kels_6, SerialPhiller_6, Arielagos_6
• Track 2 : Taj14_8
• Track 3 : Inspire2_8, Guntur_8, Sandman_8, TinoCrisci_8, LouisXIV_8, Muttlie_8, Moloch_8, Courtney3_8, Copper_8, Chestnut_8, Ronnie_8, Toulouse_7, Jessica_9, Maggie_8, Yank_8, Stratus_8, Seume_8, CGermain_8, Massimo_8, Azathoth_8, Link_8, Mariposa_8, Decurro_8, Arby_8, Dewayne_8, Hunnie_8, Prospero_8, TymAbreu_8
• Track 4 : Elkhorn_8, Laila_9, Blair_8, Lore_8, KylieMac_9, StewieGriff_8
• Track 5 : Swenson_8, Saphira_8
• Track 6 : Sourignavong_9
• Track 7 : MooKitty_6
• Track 8 : Atraxa_6, Sputnik_6
• Track 9 : Adaia_6
• Track 10 : McGonagall_8, Jeanie_8
• Track 11 : GRU3_7
• Track 12 : Coeur_8, Rahul_8
• Track 13 : GMA5_7
• Track 14 : Schiebs_9
• Track 15 : SallySpecial_9
• Track 16 : Emperor_11
• Track 17 : EpicDab_10
• Track 18 : RRH1_08

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

The start number called the most often in the published annotations is 3, it was called in 40 of the 52 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Arby_8, Arielagos_6, Azathoth_8, Blair_8, CGermain_8, Chestnut_8, Copper_8, Courtney3_8, Decurro_8, Dewayne_8, Elkhorn_8, Guntur_8, Hunnie_8, Inspire2_8, Jessica_9, Kels_6, KylieMac_9, Laila_9, Link_8, Lore_8, LouisXIV_8, Maggie_8, Mariposa_8, Massimo_8, Moloch_8, Muttlie_8, Prospero_8, Ronnie_8, Sandman_8, Saphira_8, SerialPhiller_6, Seume_8, Sourignavong_9, StewieGriff_8, Stratus_8,

Swenson_8, Taj14_8, TinoCrisci_8, Toulouse_7, TymAbreu_8, Yank_8,

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

Genes that do not have the "Most Annotated" start:
• Adaia_6, Atraxa_6, Coeur_8, Emperor_11, EpicDab_10, GMA5_7, GRU3_7, Jeanie_8, McGonagall_8, MooKitty_6, RRH1_08, Rahul_8, SallySpecial_9, Schiebs_9, Sputnik_6,

Summary by start number:

Start 2:
• Found in 1 of 56 (1.8%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: RRH1_08 (singleton),

Start 3:
• Found in 41 of 56 (73.2%) of genes in pham
• Manual Annotations of this start: 40 of 52
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Arby_8 (AN), Arielagos_6 (AN), Azathoth_8 (AN), Blair_8 (AN), CGermain_8 (AN), Chestnut_8 (AN), Copper_8 (AN), Courtney3_8 (AN), Decurro_8 (AN), Dewayne_8 (AN), Elkhorn_8 (AN), Guntur_8 (AN), Hunnie_8 (AN), Inspire2_8 (AN), Jessica_9 (AN), Kels_6 (AN), KylieMac_9 (AN), Laila_9 (AN), Link_8 (AN), Lore_8 (AN), LouisXIV_8 (AN), Maggie_8 (AN), Mariposa_8 (AN), Massimo_8 (AN), Moloch_8 (AN), Muttlie_8 (AN), Prospero_8 (AN), Ronnie_8 (AN), Sandman_8 (AN), Saphira_8 (AN), SerialPhiller_6 (AN), Seume_8 (AN), Sourignavong_9 (AN), StewieGriff_8 (AN), Stratus_8 (AN), Swenson_8 (AN), Taj14_8 (AN), TinoCrisci_8 (AN), Toulouse_7 (AN), TymAbreu_8 (AN), Yank_8 (AN),

Start 4:
• Found in 5 of 56 (8.9%) of genes in pham
• Manual Annotations of this start: 2 of 52
• Called 80.0% of time when present
• Phage (with cluster) where this start called: Coeur_8 (CW2), GMA5_7 (CW2), GRU3_7 (CW2), Rahul_8 (CW2),

Start 5:
• Found in 2 of 56 (3.6%) of genes in pham
• Manual Annotations of this start: 2 of 52
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Jeanie_8 (CW1), McGonagall_8 (CW1),

Start 7:
• Found in 1 of 56 (1.8%) of genes in pham
• Manual Annotations of this start: 1 of 52
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Schiebs_9 (CW3),

Start 9:

• Found in 1 of 56 (1.8%) of genes in pham
• Manual Annotations of this start: 1 of 52
• Called 100.0% of time when present
• Phage (with cluster) where this start called: EpicDab_10 (DM),

Start 10:
• Found in 1 of 56 (1.8%) of genes in pham
• Manual Annotations of this start: 1 of 52
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Adaia_6 (AX),

Start 11:
• Found in 2 of 56 (3.6%) of genes in pham
• Manual Annotations of this start: 2 of 52
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Emperor_11 (DM), SallySpecial_9 (DM),

Start 12:
• Found in 5 of 56 (8.9%) of genes in pham
• Manual Annotations of this start: 3 of 52
• Called 60.0% of time when present
• Phage (with cluster) where this start called: Atraxa_6 (AX), MooKitty_6 (AX), Sputnik_6 (AX),

Summary by clusters:

There are 7 clusters represented in this pham: singleton, DM, CW1, CW3, CW2, AN, AX,

Info for manual annotations of cluster AN:
•Start number 3 was manually annotated 40 times for cluster AN.

Info for manual annotations of cluster AX:
•Start number 10 was manually annotated 1 time for cluster AX.
•Start number 12 was manually annotated 3 times for cluster AX.

Info for manual annotations of cluster CW1:
•Start number 5 was manually annotated 2 times for cluster CW1.

Info for manual annotations of cluster CW2:
•Start number 4 was manually annotated 2 times for cluster CW2.

Info for manual annotations of cluster CW3:
•Start number 7 was manually annotated 1 time for cluster CW3.

Info for manual annotations of cluster DM:
•Start number 9 was manually annotated 1 time for cluster DM.
•Start number 11 was manually annotated 2 times for cluster DM.

Gene Information:

Gene: Adaia_6 Start: 4849, Stop: 5193, Start Num: 10
Candidate Starts for Adaia_6:
(Start: 10 @4849 has 1 MA's), (13, 4876), (20, 4909), (23, 4924), (25, 4930), (34, 4966), (37, 4981), (41, 5005), (45, 5044), (49, 5089), (53, 5122), (57, 5152), (58, 5155), (60, 5170),

Gene: Arby_8 Start: 5291, Stop: 5647, Start Num: 3
Candidate Starts for Arby_8:
(Start: 3 @5291 has 40 MA's), (29, 5399), (30, 5405), (36, 5435), (40, 5459), (44, 5483), (45, 5498), (58, 5609),

Gene: Arielagos_6 Start: 4949, Stop: 5284, Start Num: 3
Candidate Starts for Arielagos_6:
(Start: 3 @4949 has 40 MA's), (6, 4970), (15, 5009), (19, 5021), (23, 5042), (26, 5051), (45, 5135), (53, 5213), (58, 5246),

Gene: Atraxa_6 Start: 4957, Stop: 5283, Start Num: 12
Candidate Starts for Atraxa_6:
(Start: 12 @4957 has 3 MA's), (16, 4993), (29, 5035), (34, 5062), (38, 5080), (39, 5086), (45, 5134), (50, 5188), (55, 5233), (57, 5242),

Gene: Azathoth_8 Start: 5291, Stop: 5647, Start Num: 3
Candidate Starts for Azathoth_8:
(Start: 3 @5291 has 40 MA's), (29, 5399), (30, 5405), (36, 5435), (40, 5459), (44, 5483), (45, 5498), (58, 5609),

Gene: Blair_8 Start: 5293, Stop: 5649, Start Num: 3
Candidate Starts for Blair_8:
(Start: 3 @5293 has 40 MA's), (30, 5407), (40, 5461), (45, 5500), (58, 5611),

Gene: CGermain_8 Start: 5291, Stop: 5647, Start Num: 3
Candidate Starts for CGermain_8:
(Start: 3 @5291 has 40 MA's), (29, 5399), (30, 5405), (36, 5435), (40, 5459), (44, 5483), (45, 5498), (58, 5609),

Gene: Chestnut_8 Start: 5291, Stop: 5647, Start Num: 3
Candidate Starts for Chestnut_8:
(Start: 3 @5291 has 40 MA's), (29, 5399), (30, 5405), (36, 5435), (40, 5459), (44, 5483), (45, 5498), (58, 5609),

Gene: Coeur_8 Start: 6193, Stop: 6537, Start Num: 4
Candidate Starts for Coeur_8:
(Start: 4 @6193 has 2 MA's), (32, 6301), (35, 6322), (45, 6388), (48, 6406), (62, 6523), (63, 6526),

Gene: Copper_8 Start: 5291, Stop: 5647, Start Num: 3
Candidate Starts for Copper_8:
(Start: 3 @5291 has 40 MA's), (29, 5399), (30, 5405), (36, 5435), (40, 5459), (44, 5483), (45, 5498), (58, 5609),

Gene: Courtney3_8 Start: 5291, Stop: 5647, Start Num: 3
Candidate Starts for Courtney3_8:
(Start: 3 @5291 has 40 MA's), (29, 5399), (30, 5405), (36, 5435), (40, 5459), (44, 5483), (45, 5498), (58, 5609),

Gene: Decurro_8 Start: 5291, Stop: 5647, Start Num: 3
Candidate Starts for Decurro_8:
(Start: 3 @5291 has 40 MA's), (29, 5399), (30, 5405), (36, 5435), (40, 5459), (44, 5483), (45, 5498), (58, 5609),

Gene: Dewayne_8 Start: 5291, Stop: 5647, Start Num: 3
Candidate Starts for Dewayne_8:
(Start: 3 @5291 has 40 MA's), (29, 5399), (30, 5405), (36, 5435), (40, 5459), (44, 5483), (45, 5498), (58, 5609),

Gene: Elkhorn_8 Start: 5293, Stop: 5649, Start Num: 3
Candidate Starts for Elkhorn_8:
(Start: 3 @5293 has 40 MA's), (30, 5407), (40, 5461), (45, 5500), (58, 5611),

Gene: Emperor_11 Start: 7418, Stop: 7747, Start Num: 11
Candidate Starts for Emperor_11:
(Start: 11 @7418 has 2 MA's), (18, 7460), (35, 7535), (43, 7580), (45, 7598), (47, 7613), (56, 7703), (64, 7739),

Gene: EpicDab_10 Start: 7408, Stop: 7728, Start Num: 9
Candidate Starts for EpicDab_10:
(8, 7405), (Start: 9 @7408 has 1 MA's), (35, 7519), (52, 7651), (53, 7657), (54, 7660), (57, 7687),

Gene: GMA5_7 Start: 6050, Stop: 6391, Start Num: 4
Candidate Starts for GMA5_7:
(Start: 4 @6050 has 2 MA's), (44, 6227), (45, 6242), (46, 6245), (56, 6347),

Gene: GRU3_7 Start: 6107, Stop: 6448, Start Num: 4
Candidate Starts for GRU3_7:
(Start: 4 @6107 has 2 MA's), (Start: 12 @6140 has 3 MA's), (33, 6227), (44, 6284), (45, 6299), (51, 6362), (56, 6404), (57, 6407), (62, 6434), (63, 6437), (64, 6440),

Gene: Guntur_8 Start: 5291, Stop: 5647, Start Num: 3
Candidate Starts for Guntur_8:
(Start: 3 @5291 has 40 MA's), (29, 5399), (30, 5405), (36, 5435), (40, 5459), (44, 5483), (45, 5498), (58, 5609),

Gene: Hunnie_8 Start: 5291, Stop: 5647, Start Num: 3
Candidate Starts for Hunnie_8:
(Start: 3 @5291 has 40 MA's), (29, 5399), (30, 5405), (36, 5435), (40, 5459), (44, 5483), (45, 5498), (58, 5609),

Gene: Inspire2_8 Start: 5291, Stop: 5647, Start Num: 3
Candidate Starts for Inspire2_8:
(Start: 3 @5291 has 40 MA's), (29, 5399), (30, 5405), (36, 5435), (40, 5459), (44, 5483), (45, 5498), (58, 5609),

Gene: Jeanie_8 Start: 6026, Stop: 6349, Start Num: 5
Candidate Starts for Jeanie_8:
(Start: 5 @6026 has 2 MA's), (17, 6071), (21, 6089), (29, 6110), (31, 6119), (32, 6122), (34, 6137), (35, 6143), (43, 6182), (45, 6200),

Gene: Jessica_9 Start: 5291, Stop: 5647, Start Num: 3

Candidate Starts for Jessica_9:
(Start: 3 @5291 has 40 MA's), (29, 5399), (30, 5405), (36, 5435), (40, 5459), (44, 5483), (45, 5498), (58, 5609),

Gene: Kels_6 Start: 4874, Stop: 5209, Start Num: 3
Candidate Starts for Kels_6:
(Start: 3 @4874 has 40 MA's), (6, 4895), (15, 4934), (19, 4946), (23, 4967), (26, 4976), (45, 5060), (53, 5138), (58, 5171),

Gene: KylieMac_9 Start: 5280, Stop: 5636, Start Num: 3
Candidate Starts for KylieMac_9:
(Start: 3 @5280 has 40 MA's), (30, 5394), (40, 5448), (45, 5487), (58, 5598),

Gene: Laila_9 Start: 5293, Stop: 5649, Start Num: 3
Candidate Starts for Laila_9:
(Start: 3 @5293 has 40 MA's), (30, 5407), (40, 5461), (45, 5500), (58, 5611),

Gene: Link_8 Start: 5291, Stop: 5647, Start Num: 3
Candidate Starts for Link_8:
(Start: 3 @5291 has 40 MA's), (29, 5399), (30, 5405), (36, 5435), (40, 5459), (44, 5483), (45, 5498), (58, 5609),

Gene: Lore_8 Start: 5293, Stop: 5649, Start Num: 3
Candidate Starts for Lore_8:
(Start: 3 @5293 has 40 MA's), (30, 5407), (40, 5461), (45, 5500), (58, 5611),

Gene: LouisXIV_8 Start: 5291, Stop: 5647, Start Num: 3
Candidate Starts for LouisXIV_8:
(Start: 3 @5291 has 40 MA's), (29, 5399), (30, 5405), (36, 5435), (40, 5459), (44, 5483), (45, 5498), (58, 5609),

Gene: Maggie_8 Start: 5291, Stop: 5647, Start Num: 3
Candidate Starts for Maggie_8:
(Start: 3 @5291 has 40 MA's), (29, 5399), (30, 5405), (36, 5435), (40, 5459), (44, 5483), (45, 5498), (58, 5609),

Gene: Mariposa_8 Start: 5291, Stop: 5647, Start Num: 3
Candidate Starts for Mariposa_8:
(Start: 3 @5291 has 40 MA's), (29, 5399), (30, 5405), (36, 5435), (40, 5459), (44, 5483), (45, 5498), (58, 5609),

Gene: Massimo_8 Start: 5291, Stop: 5647, Start Num: 3
Candidate Starts for Massimo_8:
(Start: 3 @5291 has 40 MA's), (29, 5399), (30, 5405), (36, 5435), (40, 5459), (44, 5483), (45, 5498), (58, 5609),

Gene: McGonagall_8 Start: 6026, Stop: 6349, Start Num: 5
Candidate Starts for McGonagall_8:
(Start: 5 @6026 has 2 MA's), (17, 6071), (21, 6089), (29, 6110), (31, 6119), (32, 6122), (34, 6137), (35, 6143), (43, 6182), (45, 6200),

Gene: Moloch_8 Start: 5365, Stop: 5721, Start Num: 3
Candidate Starts for Moloch_8:

(Start: 3 @5365 has 40 MA's), (29, 5473), (30, 5479), (36, 5509), (40, 5533), (44, 5557), (45, 5572), (58, 5683),

Gene: MooKitty_6 Start: 4861, Stop: 5193, Start Num: 12
Candidate Starts for MooKitty_6:
(Start: 12 @4861 has 3 MA's), (16, 4897), (22, 4921), (26, 4936), (28, 4939), (34, 4969), (38, 4987), (45, 5044), (47, 5059), (53, 5122), (57, 5152), (61, 5176), (64, 5185),

Gene: Muttlie_8 Start: 5291, Stop: 5647, Start Num: 3
Candidate Starts for Muttlie_8:
(Start: 3 @5291 has 40 MA's), (29, 5399), (30, 5405), (36, 5435), (40, 5459), (44, 5483), (45, 5498), (58, 5609),

Gene: Prospero_8 Start: 5291, Stop: 5647, Start Num: 3
Candidate Starts for Prospero_8:
(Start: 3 @5291 has 40 MA's), (29, 5399), (30, 5405), (36, 5435), (40, 5459), (44, 5483), (45, 5498), (58, 5609),

Gene: RRH1_08 Start: 6428, Stop: 6784, Start Num: 2
Candidate Starts for RRH1_08:
(2, 6428), (Start: 4 @6464 has 2 MA's), (24, 6542), (45, 6635), (50, 6689), (59, 6752), (62, 6770),

Gene: Rahul_8 Start: 6208, Stop: 6552, Start Num: 4
Candidate Starts for Rahul_8:
(Start: 4 @6208 has 2 MA's), (32, 6316), (35, 6337), (45, 6403), (48, 6421), (62, 6538), (63, 6541),

Gene: Ronnie_8 Start: 5291, Stop: 5647, Start Num: 3
Candidate Starts for Ronnie_8:
(Start: 3 @5291 has 40 MA's), (29, 5399), (30, 5405), (36, 5435), (40, 5459), (44, 5483), (45, 5498), (58, 5609),

Gene: SallySpecial_9 Start: 6348, Stop: 6686, Start Num: 11
Candidate Starts for SallySpecial_9:
(Start: 11 @6348 has 2 MA's), (29, 6435), (31, 6444), (42, 6504), (43, 6519), (45, 6537), (47, 6552), (53, 6615), (56, 6642), (64, 6678),

Gene: Sandman_8 Start: 5365, Stop: 5721, Start Num: 3
Candidate Starts for Sandman_8:
(Start: 3 @5365 has 40 MA's), (29, 5473), (30, 5479), (36, 5509), (40, 5533), (44, 5557), (45, 5572), (58, 5683),

Gene: Saphira_8 Start: 5293, Stop: 5649, Start Num: 3
Candidate Starts for Saphira_8:
(Start: 3 @5293 has 40 MA's), (30, 5407), (33, 5422), (40, 5461), (45, 5500), (58, 5611),

Gene: Schiebs_9 Start: 5793, Stop: 6128, Start Num: 7
Candidate Starts for Schiebs_9:
(1, 5583), (Start: 7 @5793 has 1 MA's), (14, 5826), (27, 5871), (32, 5886), (35, 5907), (43, 5961), (45, 5979), (47, 5994), (55, 6078), (56, 6084),

Gene: SerialPhiller_6 Start: 4949, Stop: 5284, Start Num: 3
Candidate Starts for SerialPhiller_6:

(Start: 3 @4949 has 40 MA's), (6, 4970), (15, 5009), (19, 5021), (23, 5042), (26, 5051), (45, 5135), (53, 5213), (58, 5246),

Gene: Seume_8 Start: 5087, Stop: 5443, Start Num: 3
Candidate Starts for Seume_8:
(Start: 3 @5087 has 40 MA's), (29, 5195), (30, 5201), (36, 5231), (40, 5255), (44, 5279), (45, 5294), (58, 5405),

Gene: Sourignavong_9 Start: 5392, Stop: 5748, Start Num: 3
Candidate Starts for Sourignavong_9:
(Start: 3 @5392 has 40 MA's), (Start: 12 @5431 has 3 MA's), (29, 5500), (30, 5506), (36, 5536), (40, 5560), (44, 5584), (45, 5599), (58, 5710),

Gene: Sputnik_6 Start: 4957, Stop: 5283, Start Num: 12
Candidate Starts for Sputnik_6:
(Start: 12 @4957 has 3 MA's), (16, 4993), (29, 5035), (34, 5062), (38, 5080), (39, 5086), (45, 5134), (50, 5188), (55, 5233), (57, 5242),

Gene: StewieGriff_8 Start: 5293, Stop: 5649, Start Num: 3
Candidate Starts for StewieGriff_8:
(Start: 3 @5293 has 40 MA's), (30, 5407), (40, 5461), (45, 5500), (58, 5611),

Gene: Stratus_8 Start: 5365, Stop: 5721, Start Num: 3
Candidate Starts for Stratus_8:
(Start: 3 @5365 has 40 MA's), (29, 5473), (30, 5479), (36, 5509), (40, 5533), (44, 5557), (45, 5572), (58, 5683),

Gene: Swenson_8 Start: 5416, Stop: 5772, Start Num: 3
Candidate Starts for Swenson_8:
(Start: 3 @5416 has 40 MA's), (30, 5530), (33, 5545), (40, 5584), (45, 5623), (58, 5734),

Gene: Taj14_8 Start: 5272, Stop: 5628, Start Num: 3
Candidate Starts for Taj14_8:
(Start: 3 @5272 has 40 MA's), (30, 5386), (44, 5464), (45, 5479), (53, 5557), (58, 5590),

Gene: TinoCrisci_8 Start: 5291, Stop: 5647, Start Num: 3
Candidate Starts for TinoCrisci_8:
(Start: 3 @5291 has 40 MA's), (29, 5399), (30, 5405), (36, 5435), (40, 5459), (44, 5483), (45, 5498), (58, 5609),

Gene: Toulouse_7 Start: 5087, Stop: 5443, Start Num: 3
Candidate Starts for Toulouse_7:
(Start: 3 @5087 has 40 MA's), (29, 5195), (30, 5201), (36, 5231), (40, 5255), (44, 5279), (45, 5294), (58, 5405),

Gene: TymAbreu_8 Start: 5291, Stop: 5647, Start Num: 3
Candidate Starts for TymAbreu_8:
(Start: 3 @5291 has 40 MA's), (29, 5399), (30, 5405), (36, 5435), (40, 5459), (44, 5483), (45, 5498), (58, 5609),

Gene: Yank_8 Start: 5291, Stop: 5647, Start Num: 3
Candidate Starts for Yank_8:

(Start: 3 @5291 has 40 MA's), (29, 5399), (30, 5405), (36, 5435), (40, 5459), (44, 5483), (45, 5498), (58, 5609),