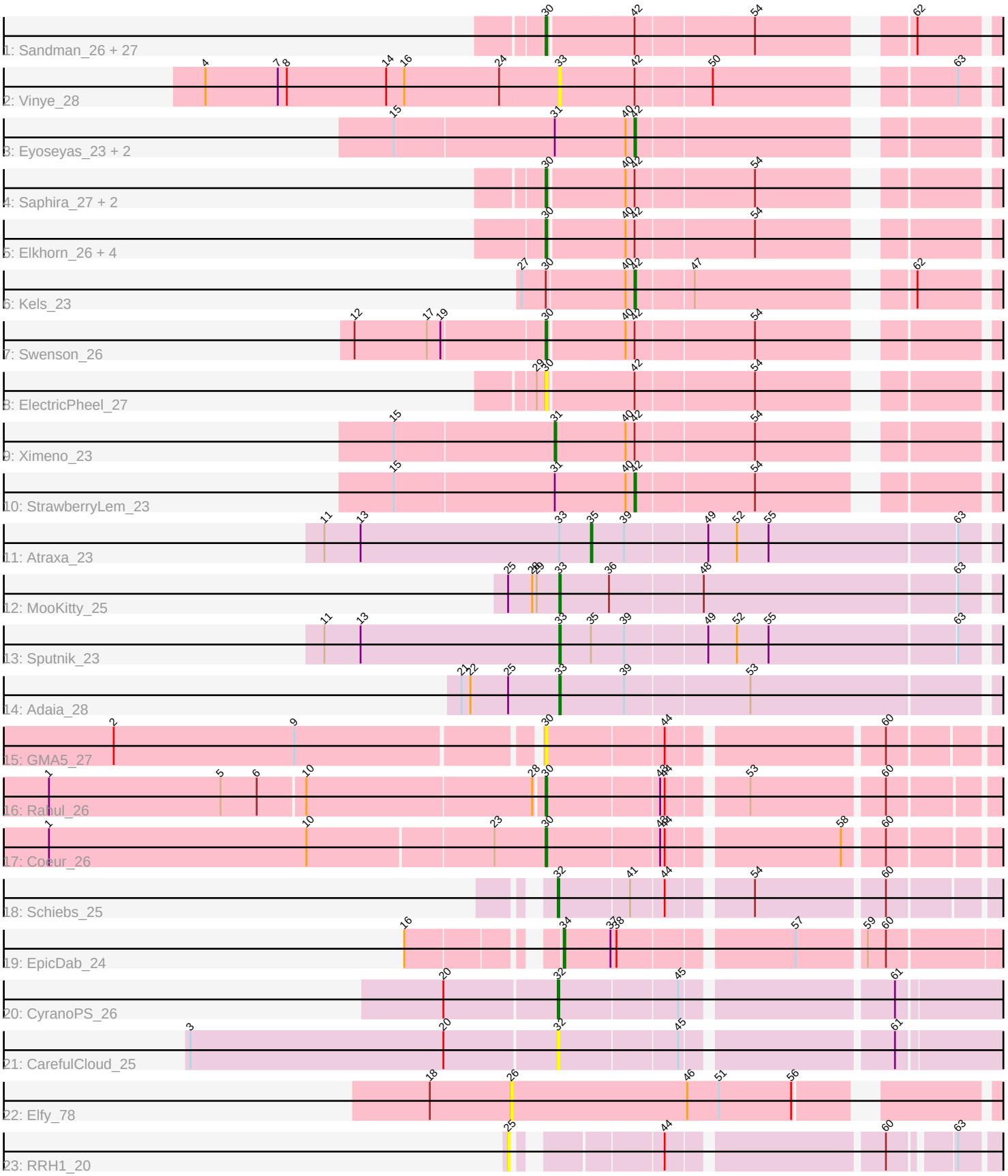
Pham 305034


1: Sandman_26 + 27
2: Vinye_28
3: Eyoseyas_23 + 2
4: Saphira_27 + 2
5: Elkhorn_26 + 4
6: Kels_23
7: Swenson_26
8: ElectricPheel_27
9: Ximeno_23
10: StrawberryLem_23
11: Atraxa_23
12: MooKitty_25
13: Sputnik_23
14: Adaia_28
15: GMA5_27
16: Rahul_26
17: Coeur_26
18: Schiebs_25
19: EpicDab_24
20: CyranoPS_26
21: CarefulCloud_25
22: Elfy_78
23: RRH1_20

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 305034 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 305034 has 58 members, 7 are drafts.

Phages represented in each track:
- Track 1 : Sandman_26, Dewayne_26, Sourignavong_27, CGermain_26, Ronnie_26, LouisXIV_26, Inspire2_26, Hunnie_26, Stratus_26, Muttlie_26, Azathoth_26, Courtney3_26, TinoCrisci_26, Arby_26, Moloch_26, TymAbreu_26, Decurro_26, Guntur_26, Maggie_26, Mariposa_26, Prospero_26, Massimo_26, Copper_26, Chestnut_27, Yank_26, Seume_26, Link_26, Toulouse_25
- Track 2 : Vinye_28
- Track 3 : Eyoseyas_23, SerialPhiller_23, Arielagos_23
- Track 4 : Saphira_27, Taj14_26, KylieMac_27
- Track 5 : Elkhorn_26, StewieGriff_26, Blair_26, Lore_26, Laila_28
- Track 6 : Kels_23
- Track 7 : Swenson_26
- Track 8 : ElectricPheel_27
- Track 9 : Ximeno_23
- Track 10 : StrawberryLem_23
- Track 11 : Atraxa_23
- Track 12 : MooKitty_25
- Track 13 : Sputnik_23
- Track 14 : Adaia_28
- Track 15 : GMA5_27
- Track 16 : Rahul_26
- Track 17 : Coeur_26
- Track 18 : Schiebs_25
- Track 19 : EpicDab_24
- Track 20 : CyranoPS_26
- Track 21 : CarefulCloud_25
- Track 22 : Elfy_78
- Track 23 : RRH1_20

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

The start number called the most often in the published annotations is 30, it was called in 39 of the 51 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Arby_26, Azathoth_26, Blair_26, CGermain_26, Chestnut_27, Coeur_26, Copper_26, Courtney3_26, Decurro_26, Dewayne_26, ElectricPheel_27, Elkhorn_26, GMA5_27, Guntur_26, Hunnie_26, Inspire2_26, KylieMac_27, Laila_28, Link_26, Lore_26, LouisXIV_26, Maggie_26, Mariposa_26, Massimo_26, Moloch_26, Muttlie_26, Prospero_26, Rahul_26, Ronnie_26, Sandman_26, Saphira_27, Seume_26, Sourignavong_27, StewieGriff_26, Stratus_26, Swenson_26, Taj14_26, TinoCrisci_26, Toulouse_25, TymAbreu_26, Yank_26,

Genes that have the "Most Annotated" start but do not call it:
• Kels_23,

Genes that do not have the "Most Annotated" start:
• Adaia_28, Arielagos_23, Atraxa_23, CarefulCloud_25, CyranoPS_26, Elfy_78, EpicDab_24, Eyoseyas_23, MooKitty_25, RRH1_20, Schiebs_25, SerialPhiller_23, Sputnik_23, StrawberryLem_23, Vinye_28, Ximeno_23,

Summary by start number:

Start 25:
• Found in 3 of 58 (5.2%) of genes in pham
• No Manual Annotations of this start.
• Called 33.3% of time when present
• Phage (with cluster) where this start called: RRH1_20 (singleton),

Start 26:
• Found in 1 of 58 (1.7%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Elfy_78 (FP),

Start 30:
• Found in 42 of 58 (72.4%) of genes in pham
• Manual Annotations of this start: 39 of 51
• Called 97.6% of time when present
• Phage (with cluster) where this start called: Arby_26 (AN), Azathoth_26 (AN), Blair_26 (AN), CGermain_26 (AN), Chestnut_27 (AN), Coeur_26 (CW2), Copper_26 (AN), Courtney3_26 (AN), Decurro_26 (AN), Dewayne_26 (AN), ElectricPheel_27 (AN), Elkhorn_26 (AN), GMA5_27 (CW2), Guntur_26 (AN), Hunnie_26 (AN), Inspire2_26 (AN), KylieMac_27 (AN), Laila_28 (AN), Link_26 (AN), Lore_26 (AN), LouisXIV_26 (AN), Maggie_26 (AN), Mariposa_26 (AN), Massimo_26 (AN), Moloch_26 (AN), Muttlie_26 (AN), Prospero_26 (AN), Rahul_26 (CW2), Ronnie_26 (AN), Sandman_26 (AN), Saphira_27 (AN), Seume_26 (AN), Sourignavong_27 (AN), StewieGriff_26 (AN), Stratus_26 (AN), Swenson_26 (AN), Taj14_26 (AN), TinoCrisci_26 (AN), Toulouse_25 (AN), TymAbreu_26 (AN), Yank_26 (AN),

Start 31:
• Found in 5 of 58 (8.6%) of genes in pham
• Manual Annotations of this start: 1 of 51
• Called 20.0% of time when present

• Phage (with cluster) where this start called: Ximeno_23 (AN),

Start 32:
• Found in 3 of 58 (5.2%) of genes in pham
• Manual Annotations of this start: 2 of 51
• Called 100.0% of time when present
• Phage (with cluster) where this start called: CarefulCloud_25 (ER), CyranoPS_26 (ER), Schiebs_25 (CW3),

Start 33:
• Found in 5 of 58 (8.6%) of genes in pham
• Manual Annotations of this start: 3 of 51
• Called 80.0% of time when present
• Phage (with cluster) where this start called: Adaia_28 (AX), MooKitty_25 (AX), Sputnik_23 (AX), Vinye_28 (AN),

Start 34:
• Found in 1 of 58 (1.7%) of genes in pham
• Manual Annotations of this start: 1 of 51
• Called 100.0% of time when present
• Phage (with cluster) where this start called: EpicDab_24 (DM),

Start 35:
• Found in 2 of 58 (3.4%) of genes in pham
• Manual Annotations of this start: 1 of 51
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Atraxa_23 (AX),

Start 42:
• Found in 45 of 58 (77.6%) of genes in pham
• Manual Annotations of this start: 4 of 51
• Called 11.1% of time when present
• Phage (with cluster) where this start called: Arielagos_23 (AN), Eyoseyas_23 (AN), Kels_23 (AN), SerialPhiller_23 (AN), StrawberryLem_23 (AN),

Summary by clusters:

There are 8 clusters represented in this pham: FP, singleton, DM, CW3, CW2, AN, AX, ER,

Info for manual annotations of cluster AN:
•Start number 30 was manually annotated 37 times for cluster AN.
•Start number 31 was manually annotated 1 time for cluster AN.
•Start number 42 was manually annotated 4 times for cluster AN.

Info for manual annotations of cluster AX:
•Start number 33 was manually annotated 3 times for cluster AX.
•Start number 35 was manually annotated 1 time for cluster AX.

Info for manual annotations of cluster CW2:
•Start number 30 was manually annotated 2 times for cluster CW2.

Info for manual annotations of cluster CW3:

•Start number 32 was manually annotated 1 time for cluster CW3.

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

Info for manual annotations of cluster ER:
•Start number 32 was manually annotated 1 time for cluster ER.

Gene Information:

Gene: Adaia_28 Start: 15533, Stop: 15820, Start Num: 33
Candidate Starts for Adaia_28:
(21, 15470), (22, 15476), (25, 15500), (Start: 33 @15533 has 3 MA's), (39, 15575), (53, 15653),

Gene: Arby_26 Start: 15263, Stop: 15529, Start Num: 30
Candidate Starts for Arby_26:
(Start: 30 @15263 has 39 MA's), (Start: 42 @15317 has 4 MA's), (54, 15392), (62, 15476),

Gene: Arielagos_23 Start: 15059, Stop: 15271, Start Num: 42
Candidate Starts for Arielagos_23:
(15, 14903), (Start: 31 @15008 has 1 MA's), (40, 15053), (Start: 42 @15059 has 4 MA's),

Gene: Atraxa_23 Start: 14644, Stop: 14904, Start Num: 35
Candidate Starts for Atraxa_23:
(11, 14467), (13, 14491), (Start: 33 @14623 has 3 MA's), (Start: 35 @14644 has 1 MA's), (39, 14665), (49, 14716), (52, 14734), (55, 14755), (63, 14875),

Gene: Azathoth_26 Start: 15263, Stop: 15529, Start Num: 30
Candidate Starts for Azathoth_26:
(Start: 30 @15263 has 39 MA's), (Start: 42 @15317 has 4 MA's), (54, 15392), (62, 15476),

Gene: Blair_26 Start: 15263, Stop: 15529, Start Num: 30
Candidate Starts for Blair_26:
(Start: 30 @15263 has 39 MA's), (40, 15311), (Start: 42 @15317 has 4 MA's), (54, 15392),

Gene: CGermain_26 Start: 15263, Stop: 15529, Start Num: 30
Candidate Starts for CGermain_26:
(Start: 30 @15263 has 39 MA's), (Start: 42 @15317 has 4 MA's), (54, 15392), (62, 15476),

Gene: CarefulCloud_25 Start: 14576, Stop: 14851, Start Num: 32
Candidate Starts for CarefulCloud_25:
(3, 14336), (20, 14504), (Start: 32 @14576 has 2 MA's), (45, 14651), (61, 14777),

Gene: Chestnut_27 Start: 15263, Stop: 15529, Start Num: 30
Candidate Starts for Chestnut_27:
(Start: 30 @15263 has 39 MA's), (Start: 42 @15317 has 4 MA's), (54, 15392), (62, 15476),

Gene: Coeur_26 Start: 15840, Stop: 16118, Start Num: 30
Candidate Starts for Coeur_26:

(1, 15516), (10, 15687), (23, 15807), (Start: 30 @15840 has 39 MA's), (43, 15912), (44, 15915), (58, 16020), (60, 16044),

Gene: Copper_26 Start: 15263, Stop: 15529, Start Num: 30
Candidate Starts for Copper_26:
(Start: 30 @15263 has 39 MA's), (Start: 42 @15317 has 4 MA's), (54, 15392), (62, 15476),

Gene: Courtney3_26 Start: 15263, Stop: 15529, Start Num: 30
Candidate Starts for Courtney3_26:
(Start: 30 @15263 has 39 MA's), (Start: 42 @15317 has 4 MA's), (54, 15392), (62, 15476),

Gene: CyranoPS_26 Start: 14576, Stop: 14851, Start Num: 32
Candidate Starts for CyranoPS_26:
(20, 14504), (Start: 32 @14576 has 2 MA's), (45, 14651), (61, 14777),

Gene: Decurro_26 Start: 15231, Stop: 15497, Start Num: 30
Candidate Starts for Decurro_26:
(Start: 30 @15231 has 39 MA's), (Start: 42 @15285 has 4 MA's), (54, 15360), (62, 15444),

Gene: Dewayne_26 Start: 15263, Stop: 15529, Start Num: 30
Candidate Starts for Dewayne_26:
(Start: 30 @15263 has 39 MA's), (Start: 42 @15317 has 4 MA's), (54, 15392), (62, 15476),

Gene: ElectricPheel_27 Start: 15304, Stop: 15570, Start Num: 30
Candidate Starts for ElectricPheel_27:
(29, 15298), (Start: 30 @15304 has 39 MA's), (Start: 42 @15358 has 4 MA's), (54, 15433),

Gene: Elfy_78 Start: 43714, Stop: 44013, Start Num: 26
Candidate Starts for Elfy_78:
(18, 43660), (26, 43714), (46, 43831), (51, 43852), (56, 43900),

Gene: Elkhorn_26 Start: 15263, Stop: 15529, Start Num: 30
Candidate Starts for Elkhorn_26:
(Start: 30 @15263 has 39 MA's), (40, 15311), (Start: 42 @15317 has 4 MA's), (54, 15392),

Gene: EpicDab_24 Start: 16340, Stop: 16612, Start Num: 34
Candidate Starts for EpicDab_24:
(16, 16259), (Start: 34 @16340 has 1 MA's), (37, 16370), (38, 16373), (57, 16478), (59, 16520), (60, 16532),

Gene: Eyoseyas_23 Start: 15059, Stop: 15271, Start Num: 42
Candidate Starts for Eyoseyas_23:
(15, 14903), (Start: 31 @15008 has 1 MA's), (40, 15053), (Start: 42 @15059 has 4 MA's),

Gene: GMA5_27 Start: 17062, Stop: 17340, Start Num: 30
Candidate Starts for GMA5_27:
(2, 16792), (9, 16912), (Start: 30 @17062 has 39 MA's), (44, 17137), (60, 17266),

Gene: Guntur_26 Start: 15263, Stop: 15529, Start Num: 30
Candidate Starts for Guntur_26:
(Start: 30 @15263 has 39 MA's), (Start: 42 @15317 has 4 MA's), (54, 15392), (62, 15476),

Gene: Hunnie_26 Start: 15263, Stop: 15529, Start Num: 30

Candidate Starts for Hunnie_26:
(Start: 30 @15263 has 39 MA's), (Start: 42 @15317 has 4 MA's), (54, 15392), (62, 15476),

Gene: Inspire2_26 Start: 15263, Stop: 15529, Start Num: 30
Candidate Starts for Inspire2_26:
(Start: 30 @15263 has 39 MA's), (Start: 42 @15317 has 4 MA's), (54, 15392), (62, 15476),

Gene: Kels_23 Start: 14592, Stop: 14804, Start Num: 42
Candidate Starts for Kels_23:
(27, 14523), (Start: 30 @14538 has 39 MA's), (40, 14586), (Start: 42 @14592 has 4 MA's), (47, 14628), (62, 14751),

Gene: KylieMac_27 Start: 15247, Stop: 15513, Start Num: 30
Candidate Starts for KylieMac_27:
(Start: 30 @15247 has 39 MA's), (40, 15295), (Start: 42 @15301 has 4 MA's), (54, 15376),

Gene: Laila_28 Start: 15263, Stop: 15529, Start Num: 30
Candidate Starts for Laila_28:
(Start: 30 @15263 has 39 MA's), (40, 15311), (Start: 42 @15317 has 4 MA's), (54, 15392),

Gene: Link_26 Start: 15228, Stop: 15494, Start Num: 30
Candidate Starts for Link_26:
(Start: 30 @15228 has 39 MA's), (Start: 42 @15282 has 4 MA's), (54, 15357), (62, 15441),

Gene: Lore_26 Start: 15263, Stop: 15529, Start Num: 30
Candidate Starts for Lore_26:
(Start: 30 @15263 has 39 MA's), (40, 15311), (Start: 42 @15317 has 4 MA's), (54, 15392),

Gene: LouisXIV_26 Start: 15263, Stop: 15529, Start Num: 30
Candidate Starts for LouisXIV_26:
(Start: 30 @15263 has 39 MA's), (Start: 42 @15317 has 4 MA's), (54, 15392), (62, 15476),

Gene: Maggie_26 Start: 15263, Stop: 15529, Start Num: 30
Candidate Starts for Maggie_26:
(Start: 30 @15263 has 39 MA's), (Start: 42 @15317 has 4 MA's), (54, 15392), (62, 15476),

Gene: Mariposa_26 Start: 15263, Stop: 15529, Start Num: 30
Candidate Starts for Mariposa_26:
(Start: 30 @15263 has 39 MA's), (Start: 42 @15317 has 4 MA's), (54, 15392), (62, 15476),

Gene: Massimo_26 Start: 15263, Stop: 15529, Start Num: 30
Candidate Starts for Massimo_26:
(Start: 30 @15263 has 39 MA's), (Start: 42 @15317 has 4 MA's), (54, 15392), (62, 15476),

Gene: Moloch_26 Start: 15337, Stop: 15603, Start Num: 30
Candidate Starts for Moloch_26:
(Start: 30 @15337 has 39 MA's), (Start: 42 @15391 has 4 MA's), (54, 15466), (62, 15550),

Gene: MooKitty_25 Start: 15668, Stop: 15949, Start Num: 33
Candidate Starts for MooKitty_25:
(25, 15635), (28, 15650), (29, 15653), (Start: 33 @15668 has 3 MA's), (36, 15701), (48, 15758), (63, 15920),

Gene: Muttlie_26 Start: 15231, Stop: 15497, Start Num: 30
Candidate Starts for Muttlie_26:
(Start: 30 @15231 has 39 MA's), (Start: 42 @15285 has 4 MA's), (54, 15360), (62, 15444),

Gene: Prospero_26 Start: 15263, Stop: 15529, Start Num: 30
Candidate Starts for Prospero_26:
(Start: 30 @15263 has 39 MA's), (Start: 42 @15317 has 4 MA's), (54, 15392), (62, 15476),

Gene: RRH1_20 Start: 13909, Stop: 14184, Start Num: 25
Candidate Starts for RRH1_20:
(25, 13909), (44, 13987), (60, 14116), (63, 14152),

Gene: Rahul_26 Start: 15845, Stop: 16123, Start Num: 30
Candidate Starts for Rahul_26:
(1, 15524), (5, 15638), (6, 15662), (10, 15692), (28, 15839), (Start: 30 @15845 has 39 MA's), (43, 15917), (44, 15920), (53, 15965), (60, 16049),

Gene: Ronnie_26 Start: 15263, Stop: 15529, Start Num: 30
Candidate Starts for Ronnie_26:
(Start: 30 @15263 has 39 MA's), (Start: 42 @15317 has 4 MA's), (54, 15392), (62, 15476),

Gene: Sandman_26 Start: 15337, Stop: 15603, Start Num: 30
Candidate Starts for Sandman_26:
(Start: 30 @15337 has 39 MA's), (Start: 42 @15391 has 4 MA's), (54, 15466), (62, 15550),

Gene: Saphira_27 Start: 15256, Stop: 15522, Start Num: 30
Candidate Starts for Saphira_27:
(Start: 30 @15256 has 39 MA's), (40, 15304), (Start: 42 @15310 has 4 MA's), (54, 15385),

Gene: Schiebs_25 Start: 14310, Stop: 14615, Start Num: 32
Candidate Starts for Schiebs_25:
(Start: 32 @14310 has 2 MA's), (41, 14355), (44, 14376), (54, 14424), (60, 14505),

Gene: SerialPhiller_23 Start: 15059, Stop: 15271, Start Num: 42
Candidate Starts for SerialPhiller_23:
(15, 14903), (Start: 31 @15008 has 1 MA's), (40, 15053), (Start: 42 @15059 has 4 MA's),

Gene: Seume_26 Start: 15026, Stop: 15292, Start Num: 30
Candidate Starts for Seume_26:
(Start: 30 @15026 has 39 MA's), (Start: 42 @15080 has 4 MA's), (54, 15155), (62, 15239),

Gene: Sourignavong_27 Start: 15332, Stop: 15598, Start Num: 30
Candidate Starts for Sourignavong_27:
(Start: 30 @15332 has 39 MA's), (Start: 42 @15386 has 4 MA's), (54, 15461), (62, 15545),

Gene: Sputnik_23 Start: 14623, Stop: 14904, Start Num: 33
Candidate Starts for Sputnik_23:
(11, 14467), (13, 14491), (Start: 33 @14623 has 3 MA's), (Start: 35 @14644 has 1 MA's), (39, 14665), (49, 14716), (52, 14734), (55, 14755), (63, 14875),

Gene: StewieGriff_26 Start: 15263, Stop: 15529, Start Num: 30
Candidate Starts for StewieGriff_26:
(Start: 30 @15263 has 39 MA's), (40, 15311), (Start: 42 @15317 has 4 MA's), (54, 15392),

Gene: Stratus_26 Start: 15337, Stop: 15603, Start Num: 30
Candidate Starts for Stratus_26:
(Start: 30 @15337 has 39 MA's), (Start: 42 @15391 has 4 MA's), (54, 15466), (62, 15550),

Gene: StrawberryLem_23 Start: 14969, Stop: 15181, Start Num: 42
Candidate Starts for StrawberryLem_23:
(15, 14813), (Start: 31 @14918 has 1 MA's), (40, 14963), (Start: 42 @14969 has 4 MA's), (54, 15044),

Gene: Swenson_26 Start: 15387, Stop: 15653, Start Num: 30
Candidate Starts for Swenson_26:
(12, 15264), (17, 15312), (19, 15321), (Start: 30 @15387 has 39 MA's), (40, 15435), (Start: 42 @15441 has 4 MA's), (54, 15516),

Gene: Taj14_26 Start: 15253, Stop: 15519, Start Num: 30
Candidate Starts for Taj14_26:
(Start: 30 @15253 has 39 MA's), (40, 15301), (Start: 42 @15307 has 4 MA's), (54, 15382),

Gene: TinoCrisci_26 Start: 15263, Stop: 15529, Start Num: 30
Candidate Starts for TinoCrisci_26:
(Start: 30 @15263 has 39 MA's), (Start: 42 @15317 has 4 MA's), (54, 15392), (62, 15476),

Gene: Toulouse_25 Start: 15026, Stop: 15292, Start Num: 30
Candidate Starts for Toulouse_25:
(Start: 30 @15026 has 39 MA's), (Start: 42 @15080 has 4 MA's), (54, 15155), (62, 15239),

Gene: TymAbreu_26 Start: 15263, Stop: 15529, Start Num: 30
Candidate Starts for TymAbreu_26:
(Start: 30 @15263 has 39 MA's), (Start: 42 @15317 has 4 MA's), (54, 15392), (62, 15476),

Gene: Vinye_28 Start: 15707, Stop: 15967, Start Num: 33
Candidate Starts for Vinye_28:
(4, 15473), (7, 15521), (8, 15527), (14, 15593), (16, 15605), (24, 15668), (Start: 33 @15707 has 3 MA's), (Start: 42 @15755 has 4 MA's), (50, 15803), (63, 15941),

Gene: Ximeno_23 Start: 15006, Stop: 15269, Start Num: 31
Candidate Starts for Ximeno_23:
(15, 14901), (Start: 31 @15006 has 1 MA's), (40, 15051), (Start: 42 @15057 has 4 MA's), (54, 15132),

Gene: Yank_26 Start: 15231, Stop: 15497, Start Num: 30
Candidate Starts for Yank_26:
(Start: 30 @15231 has 39 MA's), (Start: 42 @15285 has 4 MA's), (54, 15360), (62, 15444),