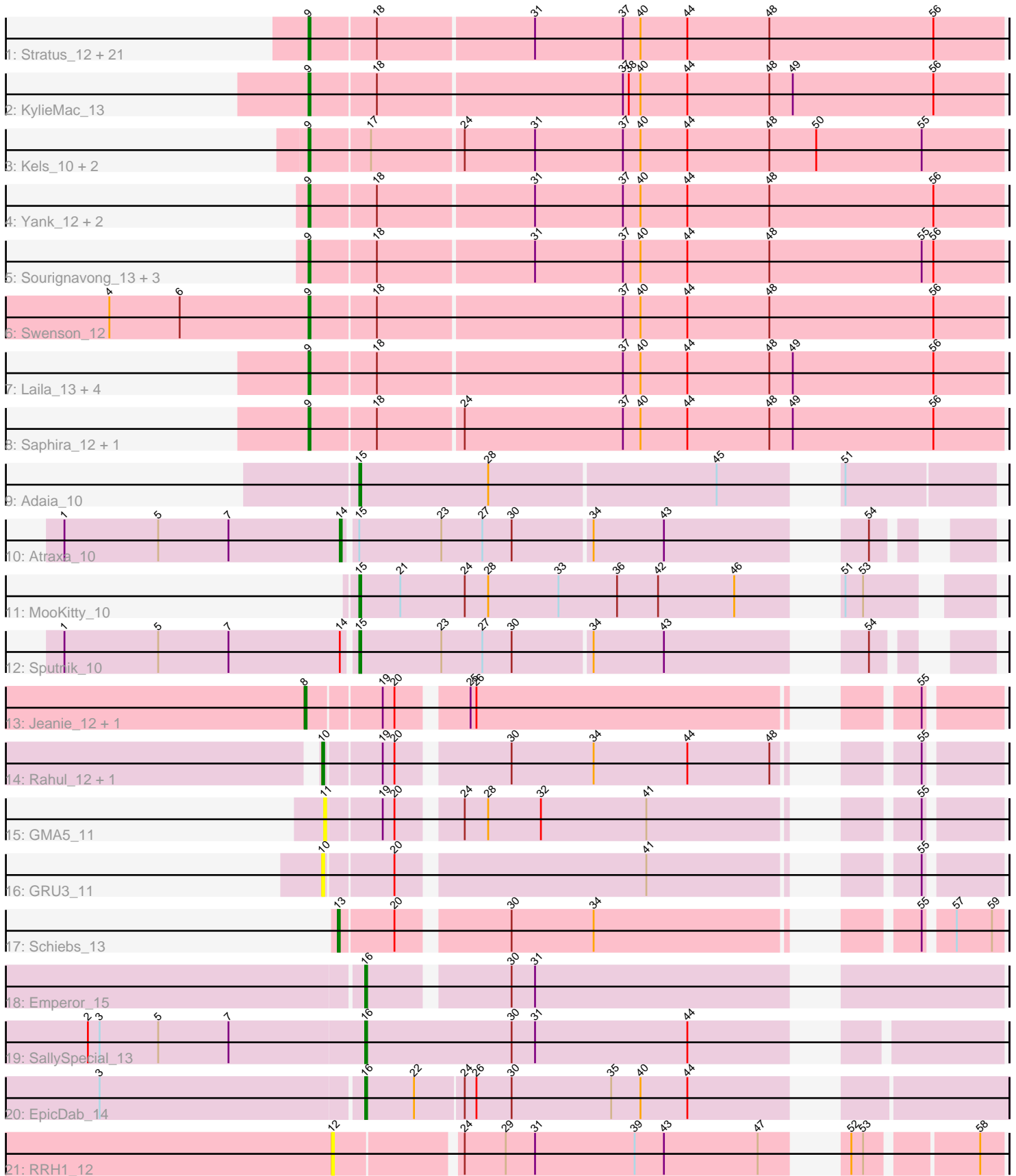


Pham 150422



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 150422 Report

This analysis was run 04/28/24 on database version 559.

Pham number 150422 has 56 members, 4 are drafts.

Phages represented in each track:

- Track 1 : Stratus_12, CGermain_12, Jessica_13, Mariposa_12, Massimo_12, Maggie_12, Guntur_12, Copper_12, Courtney3_12, Chestnut_12, TinoCrisci_12, Sandman_12, Prospero_12, Dewayne_12, Ronnie_12, Hunnie_12, Inspire2_12, LouisXIV_12, Azathoth_12, Arby_12, Moloch_12, TymAbreu_12
- Track 2 : KylieMac_13
- Track 3 : Kels_10, Arielagos_10, SerialPhiller_10
- Track 4 : Yank_12, Decurro_12, Muttie_12
- Track 5 : Sourignavong_13, Seume_12, Link_12, Toulouse_11
- Track 6 : Swenson_12
- Track 7 : Laila_13, Elkhorn_12, StewieGriff_12, Blair_12, Lore_12
- Track 8 : Saphira_12, Taj14_12
- Track 9 : Adaia_10
- Track 10 : Atraxa_10
- Track 11 : MooKitty_10
- Track 12 : Sputnik_10
- Track 13 : Jeanie_12, McGonagall_12
- Track 14 : Rahul_12, Coeur_12
- Track 15 : GMA5_11
- Track 16 : GRU3_11
- Track 17 : Schiebs_13
- Track 18 : Emperor_15
- Track 19 : SallySpecial_13
- Track 20 : EpicDab_14
- Track 21 : RRH1_12

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

The start number called the most often in the published annotations is 9, it was called in 40 of the 52 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Arby_12, Arielagos_10, Azathoth_12, Blair_12, CGermain_12, Chestnut_12, Copper_12, Courtney3_12, Decurro_12, Dewayne_12, Elkhorn_12, Guntur_12, Hunnie_12, Inspire2_12, Jessica_13, Kels_10, KylieMac_13, Laila_13, Link_12,

Lore_12, LouisXIV_12, Maggie_12, Mariposa_12, Massimo_12, Moloch_12, Muttie_12, Prospero_12, Ronnie_12, Sandman_12, Saphira_12, SerialPhiller_10, Seume_12, Sourignavong_13, StewieGriff_12, Stratus_12, Swenson_12, Taj14_12, TinoCrisci_12, Toulouse_11, TymAbreu_12, Yank_12,

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

-

Genes that do not have the "Most Annotated" start:

- Adaia_10, Atraxa_10, Coeur_12, Emperor_15, EpicDab_14, GMA5_11, GRU3_11, Jeanie_12, McGonagall_12, Mookitty_10, RRH1_12, Rahul_12, SallySpecial_13, Schiebs_13, Sputnik_10,

Summary by start number:

Start 8:

- 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_12 (CW1), McGonagall_12 (CW1),

Start 9:

- 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_12 (AN), Arielagos_10 (AN), Azathoth_12 (AN), Blair_12 (AN), CGermain_12 (AN), Chestnut_12 (AN), Copper_12 (AN), Courtney3_12 (AN), Decurro_12 (AN), Dewayne_12 (AN), Elkhorn_12 (AN), Guntur_12 (AN), Hunnie_12 (AN), Inspire2_12 (AN), Jessica_13 (AN), Kels_10 (AN), KylieMac_13 (AN), Laila_13 (AN), Link_12 (AN), Lore_12 (AN), LouisXIV_12 (AN), Maggie_12 (AN), Mariposa_12 (AN), Massimo_12 (AN), Moloch_12 (AN), Muttie_12 (AN), Prospero_12 (AN), Ronnie_12 (AN), Sandman_12 (AN), Saphira_12 (AN), SerialPhiller_10 (AN), Seume_12 (AN), Sourignavong_13 (AN), StewieGriff_12 (AN), Stratus_12 (AN), Swenson_12 (AN), Taj14_12 (AN), TinoCrisci_12 (AN), Toulouse_11 (AN), TymAbreu_12 (AN), Yank_12 (AN),

Start 10:

- Found in 3 of 56 (5.4%) 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: Coeur_12 (CW2), GRU3_11 (CW2), Rahul_12 (CW2),

Start 11:

- 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: GMA5_11 (CW2),

Start 12:

- 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_12 (singleton),

Start 13:

- 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_13 (CW3),

Start 14:

- Found in 2 of 56 (3.6%) of genes in pham
- Manual Annotations of this start: 1 of 52
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Atraxa_10 (AX),

Start 15:

- Found in 4 of 56 (7.1%) of genes in pham
- Manual Annotations of this start: 3 of 52
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Adaia_10 (AX), MooKitty_10 (AX), Sputnik_10 (AX),

Start 16:

- Found in 3 of 56 (5.4%) of genes in pham
- Manual Annotations of this start: 3 of 52
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Emperor_15 (DM), EpicDab_14 (DM), SallySpecial_13 (DM),

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 9 was manually annotated 40 times for cluster AN.

Info for manual annotations of cluster AX:

- Start number 14 was manually annotated 1 time for cluster AX.
- Start number 15 was manually annotated 3 times for cluster AX.

Info for manual annotations of cluster CW1:

- Start number 8 was manually annotated 2 times for cluster CW1.

Info for manual annotations of cluster CW2:

- Start number 10 was manually annotated 2 times for cluster CW2.

Info for manual annotations of cluster CW3:

- Start number 13 was manually annotated 1 time for cluster CW3.

Info for manual annotations of cluster DM:

- Start number 16 was manually annotated 3 times for cluster DM.

Gene Information:

Gene: Adaia_10 Start: 6411, Stop: 6704, Start Num: 15

Candidate Starts for Adaia_10:

(Start: 15 @6411 has 3 MA's), (28, 6477), (45, 6591), (51, 6630),

Gene: Arby_12 Start: 6821, Stop: 7171, Start Num: 9

Candidate Starts for Arby_12:

(Start: 9 @6821 has 40 MA's), (18, 6854), (31, 6932), (37, 6977), (40, 6986), (44, 7010), (48, 7052), (56, 7136),

Gene: Arielagos_10 Start: 6457, Stop: 6807, Start Num: 9

Candidate Starts for Arielagos_10:

(Start: 9 @6457 has 40 MA's), (17, 6487), (24, 6532), (31, 6568), (37, 6613), (40, 6622), (44, 6646), (48, 6688), (50, 6712), (55, 6766),

Gene: Atraxa_10 Start: 6483, Stop: 6761, Start Num: 14

Candidate Starts for Atraxa_10:

(1, 6342), (5, 6390), (7, 6426), (Start: 14 @6483 has 1 MA's), (Start: 15 @6489 has 3 MA's), (23, 6531), (27, 6552), (30, 6567), (34, 6606), (43, 6642), (54, 6720),

Gene: Azathoth_12 Start: 6821, Stop: 7171, Start Num: 9

Candidate Starts for Azathoth_12:

(Start: 9 @6821 has 40 MA's), (18, 6854), (31, 6932), (37, 6977), (40, 6986), (44, 7010), (48, 7052), (56, 7136),

Gene: Blair_12 Start: 6818, Stop: 7168, Start Num: 9

Candidate Starts for Blair_12:

(Start: 9 @6818 has 40 MA's), (18, 6851), (37, 6974), (40, 6983), (44, 7007), (48, 7049), (49, 7061), (56, 7133),

Gene: CGermain_12 Start: 6821, Stop: 7171, Start Num: 9

Candidate Starts for CGermain_12:

(Start: 9 @6821 has 40 MA's), (18, 6854), (31, 6932), (37, 6977), (40, 6986), (44, 7010), (48, 7052), (56, 7136),

Gene: Chestnut_12 Start: 6821, Stop: 7171, Start Num: 9

Candidate Starts for Chestnut_12:

(Start: 9 @6821 has 40 MA's), (18, 6854), (31, 6932), (37, 6977), (40, 6986), (44, 7010), (48, 7052), (56, 7136),

Gene: Coeur_12 Start: 7713, Stop: 8006, Start Num: 10

Candidate Starts for Coeur_12:

(Start: 10 @7713 has 2 MA's), (19, 7740), (20, 7746), (30, 7797), (34, 7839), (44, 7887), (48, 7929), (55, 7971),

Gene: Copper_12 Start: 6821, Stop: 7171, Start Num: 9

Candidate Starts for Copper_12:

(Start: 9 @6821 has 40 MA's), (18, 6854), (31, 6932), (37, 6977), (40, 6986), (44, 7010), (48, 7052), (56, 7136),

Gene: Courtney3_12 Start: 6821, Stop: 7171, Start Num: 9

Candidate Starts for Courtney3_12:

(Start: 9 @6821 has 40 MA's), (18, 6854), (31, 6932), (37, 6977), (40, 6986), (44, 7010), (48, 7052), (56, 7136),

Gene: Decurro_12 Start: 6821, Stop: 7171, Start Num: 9

Candidate Starts for Decurro_12:

(Start: 9 @6821 has 40 MA's), (18, 6854), (31, 6932), (37, 6977), (40, 6986), (44, 7010), (48, 7052), (56, 7136),

Gene: Dewayne_12 Start: 6821, Stop: 7171, Start Num: 9

Candidate Starts for Dewayne_12:

(Start: 9 @6821 has 40 MA's), (18, 6854), (31, 6932), (37, 6977), (40, 6986), (44, 7010), (48, 7052), (56, 7136),

Gene: Elkhorn_12 Start: 6818, Stop: 7168, Start Num: 9

Candidate Starts for Elkhorn_12:

(Start: 9 @6818 has 40 MA's), (18, 6851), (37, 6974), (40, 6983), (44, 7007), (48, 7049), (49, 7061), (56, 7133),

Gene: Emperor_15 Start: 8942, Stop: 9232, Start Num: 16

Candidate Starts for Emperor_15:

(Start: 16 @8942 has 3 MA's), (30, 9008), (31, 9020),

Gene: EpicDab_14 Start: 8901, Stop: 9197, Start Num: 16

Candidate Starts for EpicDab_14:

(3, 8769), (Start: 16 @8901 has 3 MA's), (22, 8925), (24, 8949), (26, 8955), (30, 8973), (35, 9024), (40, 9039), (44, 9063),

Gene: GMA5_11 Start: 7567, Stop: 7860, Start Num: 11

Candidate Starts for GMA5_11:

(11, 7567), (19, 7594), (20, 7600), (24, 7627), (28, 7639), (32, 7666), (41, 7720), (55, 7825),

Gene: GRU3_11 Start: 7630, Stop: 7923, Start Num: 10

Candidate Starts for GRU3_11:

(Start: 10 @7630 has 2 MA's), (20, 7663), (41, 7783), (55, 7888),

Gene: Guntur_12 Start: 6821, Stop: 7171, Start Num: 9

Candidate Starts for Guntur_12:

(Start: 9 @6821 has 40 MA's), (18, 6854), (31, 6932), (37, 6977), (40, 6986), (44, 7010), (48, 7052), (56, 7136),

Gene: Hunnie_12 Start: 6821, Stop: 7171, Start Num: 9

Candidate Starts for Hunnie_12:

(Start: 9 @6821 has 40 MA's), (18, 6854), (31, 6932), (37, 6977), (40, 6986), (44, 7010), (48, 7052), (56, 7136),

Gene: Inspire2_12 Start: 6821, Stop: 7171, Start Num: 9

Candidate Starts for Inspire2_12:

(Start: 9 @6821 has 40 MA's), (18, 6854), (31, 6932), (37, 6977), (40, 6986), (44, 7010), (48, 7052), (56, 7136),

Gene: Jeanie_12 Start: 7522, Stop: 7824, Start Num: 8

Candidate Starts for Jeanie_12:

(Start: 8 @7522 has 2 MA's), (19, 7558), (20, 7564), (25, 7594), (26, 7597), (55, 7789),

Gene: Jessica_13 Start: 6821, Stop: 7171, Start Num: 9

Candidate Starts for Jessica_13:

(Start: 9 @6821 has 40 MA's), (18, 6854), (31, 6932), (37, 6977), (40, 6986), (44, 7010), (48, 7052), (56, 7136),

Gene: Kels_10 Start: 6382, Stop: 6732, Start Num: 9

Candidate Starts for Kels_10:

(Start: 9 @6382 has 40 MA's), (17, 6412), (24, 6457), (31, 6493), (37, 6538), (40, 6547), (44, 6571), (48, 6613), (50, 6637), (55, 6691),

Gene: KylieMac_13 Start: 6805, Stop: 7155, Start Num: 9

Candidate Starts for KylieMac_13:

(Start: 9 @6805 has 40 MA's), (18, 6838), (37, 6961), (38, 6964), (40, 6970), (44, 6994), (48, 7036), (49, 7048), (56, 7120),

Gene: Laila_13 Start: 6818, Stop: 7168, Start Num: 9

Candidate Starts for Laila_13:

(Start: 9 @6818 has 40 MA's), (18, 6851), (37, 6974), (40, 6983), (44, 7007), (48, 7049), (49, 7061), (56, 7133),

Gene: Link_12 Start: 6820, Stop: 7170, Start Num: 9

Candidate Starts for Link_12:

(Start: 9 @6820 has 40 MA's), (18, 6853), (31, 6931), (37, 6976), (40, 6985), (44, 7009), (48, 7051), (55, 7129), (56, 7135),

Gene: Lore_12 Start: 6818, Stop: 7168, Start Num: 9

Candidate Starts for Lore_12:

(Start: 9 @6818 has 40 MA's), (18, 6851), (37, 6974), (40, 6983), (44, 7007), (48, 7049), (49, 7061), (56, 7133),

Gene: LouisXIV_12 Start: 6821, Stop: 7171, Start Num: 9

Candidate Starts for LouisXIV_12:

(Start: 9 @6821 has 40 MA's), (18, 6854), (31, 6932), (37, 6977), (40, 6986), (44, 7010), (48, 7052), (56, 7136),

Gene: Maggie_12 Start: 6821, Stop: 7171, Start Num: 9

Candidate Starts for Maggie_12:

(Start: 9 @6821 has 40 MA's), (18, 6854), (31, 6932), (37, 6977), (40, 6986), (44, 7010), (48, 7052), (56, 7136),

Gene: Mariposa_12 Start: 6821, Stop: 7171, Start Num: 9

Candidate Starts for Mariposa_12:

(Start: 9 @6821 has 40 MA's), (18, 6854), (31, 6932), (37, 6977), (40, 6986), (44, 7010), (48, 7052), (56, 7136),

Gene: Massimo_12 Start: 6821, Stop: 7171, Start Num: 9

Candidate Starts for Massimo_12:

(Start: 9 @6821 has 40 MA's), (18, 6854), (31, 6932), (37, 6977), (40, 6986), (44, 7010), (48, 7052), (56, 7136),

Gene: McGonagall_12 Start: 7522, Stop: 7824, Start Num: 8

Candidate Starts for McGonagall_12:

(Start: 8 @7522 has 2 MA's), (19, 7558), (20, 7564), (25, 7594), (26, 7597), (55, 7789),

Gene: Moloch_12 Start: 6895, Stop: 7245, Start Num: 9

Candidate Starts for Moloch_12:

(Start: 9 @6895 has 40 MA's), (18, 6928), (31, 7006), (37, 7051), (40, 7060), (44, 7084), (48, 7126), (56, 7210),

Gene: MooKitty_10 Start: 6396, Stop: 6680, Start Num: 15

Candidate Starts for MooKitty_10:

(Start: 15 @6396 has 3 MA's), (21, 6417), (24, 6450), (28, 6462), (33, 6498), (36, 6528), (42, 6549), (46, 6588), (51, 6618), (53, 6627),

Gene: Muttlie_12 Start: 6821, Stop: 7171, Start Num: 9

Candidate Starts for Muttlie_12:

(Start: 9 @6821 has 40 MA's), (18, 6854), (31, 6932), (37, 6977), (40, 6986), (44, 7010), (48, 7052), (56, 7136),

Gene: Prospero_12 Start: 6821, Stop: 7171, Start Num: 9

Candidate Starts for Prospero_12:

(Start: 9 @6821 has 40 MA's), (18, 6854), (31, 6932), (37, 6977), (40, 6986), (44, 7010), (48, 7052), (56, 7136),

Gene: RRH1_12 Start: 8025, Stop: 8324, Start Num: 12

Candidate Starts for RRH1_12:

(12, 8025), (24, 8085), (29, 8106), (31, 8121), (39, 8172), (43, 8187), (47, 8235), (52, 8256), (53, 8262), (58, 8313),

Gene: Rahul_12 Start: 7734, Stop: 8027, Start Num: 10

Candidate Starts for Rahul_12:

(Start: 10 @7734 has 2 MA's), (19, 7761), (20, 7767), (30, 7818), (34, 7860), (44, 7908), (48, 7950), (55, 7992),

Gene: Ronnie_12 Start: 6821, Stop: 7171, Start Num: 9

Candidate Starts for Ronnie_12:

(Start: 9 @6821 has 40 MA's), (18, 6854), (31, 6932), (37, 6977), (40, 6986), (44, 7010), (48, 7052), (56, 7136),

Gene: SallySpecial_13 Start: 7888, Stop: 8181, Start Num: 16

Candidate Starts for SallySpecial_13:

(2, 7747), (3, 7753), (5, 7783), (7, 7819), (Start: 16 @7888 has 3 MA's), (30, 7963), (31, 7975), (44, 8053),

Gene: Sandman_12 Start: 6895, Stop: 7245, Start Num: 9

Candidate Starts for Sandman_12:

(Start: 9 @6895 has 40 MA's), (18, 6928), (31, 7006), (37, 7051), (40, 7060), (44, 7084), (48, 7126), (56, 7210),

Gene: Saphira_12 Start: 6819, Stop: 7169, Start Num: 9

Candidate Starts for Saphira_12:

(Start: 9 @6819 has 40 MA's), (18, 6852), (24, 6894), (37, 6975), (40, 6984), (44, 7008), (48, 7050), (49, 7062), (56, 7134),

Gene: Schiebs_13 Start: 7323, Stop: 7610, Start Num: 13

Candidate Starts for Schiebs_13:

(Start: 13 @7323 has 1 MA's), (20, 7350), (30, 7401), (34, 7443), (55, 7575), (57, 7587), (59, 7605),

Gene: SerialPhiller_10 Start: 6457, Stop: 6807, Start Num: 9

Candidate Starts for SerialPhiller_10:

(Start: 9 @6457 has 40 MA's), (17, 6487), (24, 6532), (31, 6568), (37, 6613), (40, 6622), (44, 6646), (48, 6688), (50, 6712), (55, 6766),

Gene: Seume_12 Start: 6616, Stop: 6966, Start Num: 9

Candidate Starts for Seume_12:

(Start: 9 @6616 has 40 MA's), (18, 6649), (31, 6727), (37, 6772), (40, 6781), (44, 6805), (48, 6847), (55, 6925), (56, 6931),

Gene: Sourignavong_13 Start: 6921, Stop: 7271, Start Num: 9

Candidate Starts for Sourignavong_13:

(Start: 9 @6921 has 40 MA's), (18, 6954), (31, 7032), (37, 7077), (40, 7086), (44, 7110), (48, 7152), (55, 7230), (56, 7236),

Gene: Sputnik_10 Start: 6489, Stop: 6761, Start Num: 15

Candidate Starts for Sputnik_10:

(1, 6342), (5, 6390), (7, 6426), (Start: 14 @6483 has 1 MA's), (Start: 15 @6489 has 3 MA's), (23, 6531), (27, 6552), (30, 6567), (34, 6606), (43, 6642), (54, 6720),

Gene: StewieGriff_12 Start: 6818, Stop: 7168, Start Num: 9

Candidate Starts for StewieGriff_12:

(Start: 9 @6818 has 40 MA's), (18, 6851), (37, 6974), (40, 6983), (44, 7007), (48, 7049), (49, 7061), (56, 7133),

Gene: Stratus_12 Start: 6895, Stop: 7245, Start Num: 9

Candidate Starts for Stratus_12:

(Start: 9 @6895 has 40 MA's), (18, 6928), (31, 7006), (37, 7051), (40, 7060), (44, 7084), (48, 7126), (56, 7210),

Gene: Swenson_12 Start: 6942, Stop: 7292, Start Num: 9

Candidate Starts for Swenson_12:

(4, 6840), (6, 6876), (Start: 9 @6942 has 40 MA's), (18, 6975), (37, 7098), (40, 7107), (44, 7131), (48, 7173), (56, 7257),

Gene: Taj14_12 Start: 6798, Stop: 7148, Start Num: 9

Candidate Starts for Taj14_12:

(Start: 9 @6798 has 40 MA's), (18, 6831), (24, 6873), (37, 6954), (40, 6963), (44, 6987), (48, 7029), (49, 7041), (56, 7113),

Gene: TinoCrisci_12 Start: 6821, Stop: 7171, Start Num: 9

Candidate Starts for TinoCrisci_12:

(Start: 9 @6821 has 40 MA's), (18, 6854), (31, 6932), (37, 6977), (40, 6986), (44, 7010), (48, 7052), (56, 7136),

Gene: Toulouse_11 Start: 6616, Stop: 6966, Start Num: 9

Candidate Starts for Toulouse_11:

(Start: 9 @6616 has 40 MA's), (18, 6649), (31, 6727), (37, 6772), (40, 6781), (44, 6805), (48, 6847), (55, 6925), (56, 6931),

Gene: TymAbreu_12 Start: 6821, Stop: 7171, Start Num: 9

Candidate Starts for TymAbreu_12:

(Start: 9 @6821 has 40 MA's), (18, 6854), (31, 6932), (37, 6977), (40, 6986), (44, 7010), (48, 7052), (56, 7136),

Gene: Yank_12 Start: 6821, Stop: 7171, Start Num: 9

Candidate Starts for Yank_12:

(Start: 9 @6821 has 40 MA's), (18, 6854), (31, 6932), (37, 6977), (40, 6986), (44, 7010), (48, 7052), (56, 7136),