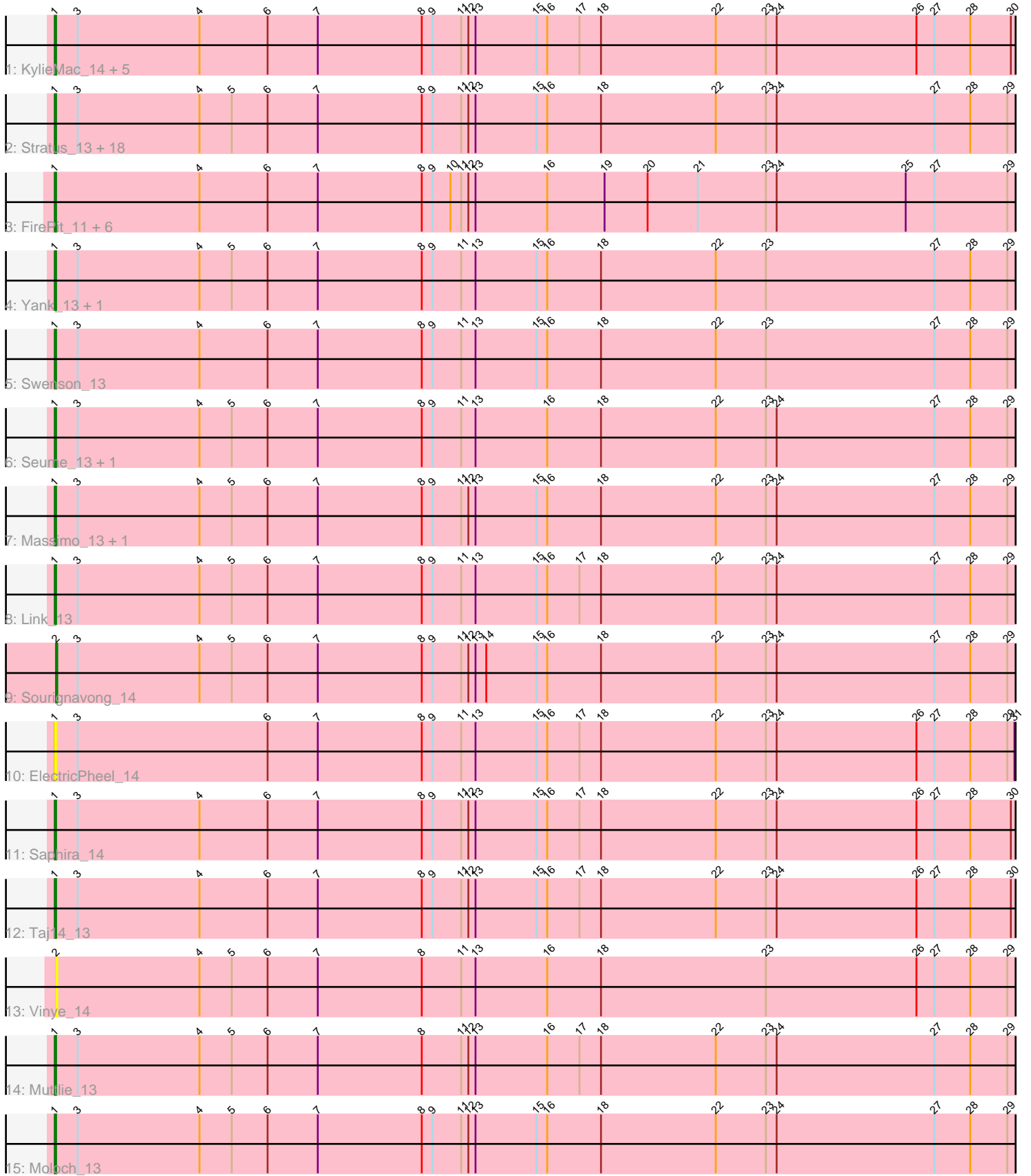


# Zoomed Pham 292918



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 292918 Report

This analysis was run 04/18/26 on database version 643.

Pham number 292918 has 47 members, 6 are drafts.

Phages represented in each track:

- Track 1 : KylieMac\_14, Laila\_15, Blair\_13, Elkhorn\_13, StewieGriff\_13, Lore\_13
- Track 2 : Stratus\_13, Prospero\_13, Jessica\_14, TymAbreu\_13, Mariposa\_13, Maggie\_13, Guntur\_13, Copper\_13, Chestnut\_13, Sandman\_13, CGermain\_13, Dewayne\_13, Ronnie\_13, Courtney3\_13, Inspire2\_13, LouisXIV\_13, Hunnie\_13, Azathoth\_13, Arby\_13
- Track 3 : FirePit\_11, Kels\_11, Arielagos\_11, Ximeno\_11, StrawberryLem\_11, Eyoseyas\_11, SerialPhiller\_11
- Track 4 : Yank\_13, Decurro\_13
- Track 5 : Swenson\_13
- Track 6 : Seume\_13, Toulouse\_12
- Track 7 : Massimo\_13, TinoCrisci\_13
- Track 8 : Link\_13
- Track 9 : Sourignavong\_14
- Track 10 : ElectricPheel\_14
- Track 11 : Saphira\_14
- Track 12 : Taj14\_13
- Track 13 : Vinye\_14
- Track 14 : Muttie\_13
- Track 15 : Moloch\_13

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

The start number called the most often in the published annotations is 1, it was called in 40 of the 41 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Arby\_13, Arielagos\_11, Azathoth\_13, Blair\_13, CGermain\_13, Chestnut\_13, Copper\_13, Courtney3\_13, Decurro\_13, Dewayne\_13, ElectricPheel\_14, Elkhorn\_13, Eyoseyas\_11, FirePit\_11, Guntur\_13, Hunnie\_13, Inspire2\_13, Jessica\_14, Kels\_11, KylieMac\_14, Laila\_15, Link\_13, Lore\_13, LouisXIV\_13, Maggie\_13, Mariposa\_13, Massimo\_13, Moloch\_13, Muttie\_13, Prospero\_13, Ronnie\_13, Sandman\_13, Saphira\_14, SerialPhiller\_11, Seume\_13, StewieGriff\_13, Stratus\_13, StrawberryLem\_11, Swenson\_13, Taj14\_13, TinoCrisci\_13, Toulouse\_12, TymAbreu\_13, Ximeno\_11, Yank\_13,

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

- 

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

- Sourignavong\_14, Vinye\_14,

### Summary by start number:

Start 1:

- Found in 45 of 47 ( 95.7% ) of genes in pham
- Manual Annotations of this start: 40 of 41
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Arby\_13 (AN), Arielagos\_11 (AN), Azathoth\_13 (AN), Blair\_13 (AN), CGermain\_13 (AN), Chestnut\_13 (AN), Copper\_13 (AN), Courtney3\_13 (AN), Decurro\_13 (AN), Dewayne\_13 (AN), ElectricPheel\_14 (AN), Elkhorn\_13 (AN), Eyoseyas\_11 (AN), FirePit\_11 (AN), Guntur\_13 (AN), Hunnie\_13 (AN), Inspire2\_13 (AN), Jessica\_14 (AN), Kels\_11 (AN), KylieMac\_14 (AN), Laila\_15 (AN), Link\_13 (AN), Lore\_13 (AN), LouisXIV\_13 (AN), Maggie\_13 (AN), Mariposa\_13 (AN), Massimo\_13 (AN), Moloch\_13 (AN), Muttlie\_13 (AN), Prospero\_13 (AN), Ronnie\_13 (AN), Sandman\_13 (AN), Saphira\_14 (AN), SerialPhiller\_11 (AN), Seume\_13 (AN), StewieGriff\_13 (AN), Stratus\_13 (AN), StrawberryLem\_11 (AN), Swenson\_13 (AN), Taj14\_13 (AN), TinoCrisci\_13 (AN), Toulouse\_12 (AN), TymAbreu\_13 (AN), Ximeno\_11 (AN), Yank\_13 (AN),

Start 2:

- Found in 2 of 47 ( 4.3% ) of genes in pham
- Manual Annotations of this start: 1 of 41
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Sourignavong\_14 (AN), Vinye\_14 (AN),

### Summary by clusters:

There is one cluster represented in this pham: AN

Info for manual annotations of cluster AN:

- Start number 1 was manually annotated 40 times for cluster AN.
- Start number 2 was manually annotated 1 time for cluster AN.

### Gene Information:

Gene: Arby\_13 Start: 7282, Stop: 9279, Start Num: 1

Candidate Starts for Arby\_13:

(Start: 1 @7282 has 40 MA's), (3, 7300), (4, 7402), (5, 7429), (6, 7459), (7, 7501), (8, 7588), (9, 7597), (11, 7621), (12, 7627), (13, 7633), (15, 7684), (16, 7693), (18, 7738), (22, 7834), (23, 7876), (24, 7885), (27, 8017), (28, 8047), (29, 8077), (32, 8086), (33, 8110), (36, 8182), (37, 8188), (39, 8206), (40, 8230), (41, 8233), (42, 8254), (43, 8266), (44, 8284), (47, 8335), (48, 8338), (55, 8467), (59, 8587), (61, 8623), (66, 8674), (67, 8686), (69, 8728), (70, 8740), (71, 8749), (72, 8785), (75, 8818), (76, 8854), (78, 8950), (81, 9001), (82, 9004), (88, 9184), (93, 9235), (94, 9253), (95, 9256),

Gene: Arielagos\_11 Start: 6936, Stop: 8759, Start Num: 1

Candidate Starts for Arielagos\_11:

(Start: 1 @6936 has 40 MA's), (4, 7056), (6, 7113), (7, 7155), (8, 7242), (9, 7251), (10, 7266), (11, 7275), (12, 7281), (13, 7287), (16, 7347), (19, 7395), (20, 7431), (21, 7473), (23, 7530), (24, 7539), (25, 7647), (27, 7671), (29, 7731), (33, 7764), (36, 7836), (37, 7842), (39, 7860), (42, 7908), (46, 7980), (48, 7992), (56, 8088), (57, 8103), (58, 8124), (59, 8145), (60, 8166), (61, 8178), (75, 8298), (79, 8439), (80, 8472), (84, 8523), (86, 8595), (90, 8673),

Gene: Azathoth\_13 Start: 7282, Stop: 9279, Start Num: 1

Candidate Starts for Azathoth\_13:

(Start: 1 @7282 has 40 MA's), (3, 7300), (4, 7402), (5, 7429), (6, 7459), (7, 7501), (8, 7588), (9, 7597), (11, 7621), (12, 7627), (13, 7633), (15, 7684), (16, 7693), (18, 7738), (22, 7834), (23, 7876), (24, 7885), (27, 8017), (28, 8047), (29, 8077), (32, 8086), (33, 8110), (36, 8182), (37, 8188), (39, 8206), (40, 8230), (41, 8233), (42, 8254), (43, 8266), (44, 8284), (47, 8335), (48, 8338), (55, 8467), (59, 8587), (61, 8623), (66, 8674), (67, 8686), (69, 8728), (70, 8740), (71, 8749), (72, 8785), (75, 8818), (76, 8854), (78, 8950), (81, 9001), (82, 9004), (88, 9184), (93, 9235), (94, 9253), (95, 9256),

Gene: Blair\_13 Start: 7279, Stop: 9276, Start Num: 1

Candidate Starts for Blair\_13:

(Start: 1 @7279 has 40 MA's), (3, 7297), (4, 7399), (6, 7456), (7, 7498), (8, 7585), (9, 7594), (11, 7618), (12, 7624), (13, 7630), (15, 7681), (16, 7690), (17, 7717), (18, 7735), (22, 7831), (23, 7873), (24, 7882), (26, 7999), (27, 8014), (28, 8044), (30, 8077), (32, 8083), (33, 8107), (36, 8179), (37, 8185), (39, 8203), (42, 8251), (43, 8263), (47, 8332), (48, 8335), (49, 8344), (51, 8431), (55, 8464), (58, 8551), (59, 8584), (61, 8620), (62, 8629), (63, 8638), (67, 8683), (68, 8707), (70, 8737), (71, 8746), (72, 8782), (73, 8791), (75, 8815), (76, 8851), (78, 8947), (79, 8956), (81, 8998), (88, 9181), (92, 9223), (93, 9232), (95, 9253),

Gene: CGermain\_13 Start: 7282, Stop: 9279, Start Num: 1

Candidate Starts for CGermain\_13:

(Start: 1 @7282 has 40 MA's), (3, 7300), (4, 7402), (5, 7429), (6, 7459), (7, 7501), (8, 7588), (9, 7597), (11, 7621), (12, 7627), (13, 7633), (15, 7684), (16, 7693), (18, 7738), (22, 7834), (23, 7876), (24, 7885), (27, 8017), (28, 8047), (29, 8077), (32, 8086), (33, 8110), (36, 8182), (37, 8188), (39, 8206), (40, 8230), (41, 8233), (42, 8254), (43, 8266), (44, 8284), (47, 8335), (48, 8338), (55, 8467), (59, 8587), (61, 8623), (66, 8674), (67, 8686), (69, 8728), (70, 8740), (71, 8749), (72, 8785), (75, 8818), (76, 8854), (78, 8950), (81, 9001), (82, 9004), (88, 9184), (93, 9235), (94, 9253), (95, 9256),

Gene: Chestnut\_13 Start: 7282, Stop: 9279, Start Num: 1

Candidate Starts for Chestnut\_13:

(Start: 1 @7282 has 40 MA's), (3, 7300), (4, 7402), (5, 7429), (6, 7459), (7, 7501), (8, 7588), (9, 7597), (11, 7621), (12, 7627), (13, 7633), (15, 7684), (16, 7693), (18, 7738), (22, 7834), (23, 7876), (24, 7885), (27, 8017), (28, 8047), (29, 8077), (32, 8086), (33, 8110), (36, 8182), (37, 8188), (39, 8206), (40, 8230), (41, 8233), (42, 8254), (43, 8266), (44, 8284), (47, 8335), (48, 8338), (55, 8467), (59, 8587), (61, 8623), (66, 8674), (67, 8686), (69, 8728), (70, 8740), (71, 8749), (72, 8785), (75, 8818), (76, 8854), (78, 8950), (81, 9001), (82, 9004), (88, 9184), (93, 9235), (94, 9253), (95, 9256),

Gene: Copper\_13 Start: 7282, Stop: 9279, Start Num: 1

Candidate Starts for Copper\_13:

(Start: 1 @7282 has 40 MA's), (3, 7300), (4, 7402), (5, 7429), (6, 7459), (7, 7501), (8, 7588), (9, 7597), (11, 7621), (12, 7627), (13, 7633), (15, 7684), (16, 7693), (18, 7738), (22, 7834), (23, 7876), (24, 7885), (27, 8017), (28, 8047), (29, 8077), (32, 8086), (33, 8110), (36, 8182), (37, 8188), (39, 8206), (40, 8230), (41, 8233), (42, 8254), (43, 8266), (44, 8284), (47, 8335), (48, 8338), (55, 8467), (59, 8587), (61, 8623), (66, 8674), (67, 8686), (69, 8728), (70, 8740), (71, 8749), (72, 8785), (75, 8818), (76, 8854), (78, 8950), (81, 9001), (82, 9004), (88, 9184), (93, 9235), (94, 9253), (95, 9256),

Gene: Courtney3\_13 Start: 7282, Stop: 9279, Start Num: 1

Candidate Starts for Courtney3\_13:

(Start: 1 @7282 has 40 MA's), (3, 7300), (4, 7402), (5, 7429), (6, 7459), (7, 7501), (8, 7588), (9, 7597), (11, 7621), (12, 7627), (13, 7633), (15, 7684), (16, 7693), (18, 7738), (22, 7834), (23, 7876), (24, 7885), (27, 8017), (28, 8047), (29, 8077), (32, 8086), (33, 8110), (36, 8182), (37, 8188), (39, 8206), (40, 8230), (41, 8233), (42, 8254), (43, 8266), (44, 8284), (47, 8335), (48, 8338), (55, 8467), (59, 8587), (61, 8623), (66, 8674), (67, 8686), (69, 8728), (70, 8740), (71, 8749), (72, 8785), (75, 8818), (76, 8854), (78, 8950), (81, 9001), (82, 9004), (88, 9184), (93, 9235), (94, 9253), (95, 9256),

Gene: Decurro\_13 Start: 7282, Stop: 9279, Start Num: 1

Candidate Starts for Decurro\_13:

(Start: 1 @7282 has 40 MA's), (3, 7300), (4, 7402), (5, 7429), (6, 7459), (7, 7501), (8, 7588), (9, 7597), (11, 7621), (13, 7633), (15, 7684), (16, 7693), (18, 7738), (22, 7834), (23, 7876), (27, 8017), (28, 8047), (29, 8077), (32, 8086), (33, 8110), (36, 8182), (37, 8188), (39, 8206), (40, 8230), (41, 8233), (42, 8254), (43, 8266), (44, 8284), (47, 8335), (48, 8338), (49, 8347), (55, 8467), (58, 8554), (59, 8587), (61, 8623), (66, 8674), (67, 8686), (69, 8728), (70, 8740), (71, 8749), (72, 8785), (75, 8818), (76, 8854), (78, 8950), (81, 9001), (82, 9004), (88, 9184), (93, 9235), (94, 9253), (95, 9256),

Gene: Dewayne\_13 Start: 7282, Stop: 9279, Start Num: 1

Candidate Starts for Dewayne\_13:

(Start: 1 @7282 has 40 MA's), (3, 7300), (4, 7402), (5, 7429), (6, 7459), (7, 7501), (8, 7588), (9, 7597), (11, 7621), (12, 7627), (13, 7633), (15, 7684), (16, 7693), (18, 7738), (22, 7834), (23, 7876), (24, 7885), (27, 8017), (28, 8047), (29, 8077), (32, 8086), (33, 8110), (36, 8182), (37, 8188), (39, 8206), (40, 8230), (41, 8233), (42, 8254), (43, 8266), (44, 8284), (47, 8335), (48, 8338), (55, 8467), (59, 8587), (61, 8623), (66, 8674), (67, 8686), (69, 8728), (70, 8740), (71, 8749), (72, 8785), (75, 8818), (76, 8854), (78, 8950), (81, 9001), (82, 9004), (88, 9184), (93, 9235), (94, 9253), (95, 9256),

Gene: ElectricPheel\_14 Start: 7353, Stop: 9350, Start Num: 1

Candidate Starts for ElectricPheel\_14:

(Start: 1 @7353 has 40 MA's), (3, 7371), (6, 7530), (7, 7572), (8, 7659), (9, 7668), (11, 7692), (13, 7704), (15, 7755), (16, 7764), (17, 7791), (18, 7809), (22, 7905), (23, 7947), (24, 7956), (26, 8073), (27, 8088), (28, 8118), (29, 8148), (31, 8154), (33, 8181), (37, 8259), (39, 8277), (42, 8325), (43, 8337), (47, 8406), (48, 8409), (49, 8418), (51, 8505), (55, 8538), (58, 8625), (59, 8658), (62, 8703), (67, 8757), (68, 8781), (69, 8799), (70, 8811), (71, 8820), (72, 8856), (75, 8889), (76, 8925), (78, 9021), (79, 9030), (81, 9072), (88, 9255), (91, 9294), (92, 9297), (93, 9306), (95, 9327),

Gene: Elkhorn\_13 Start: 7279, Stop: 9276, Start Num: 1

Candidate Starts for Elkhorn\_13:

(Start: 1 @7279 has 40 MA's), (3, 7297), (4, 7399), (6, 7456), (7, 7498), (8, 7585), (9, 7594), (11, 7618), (12, 7624), (13, 7630), (15, 7681), (16, 7690), (17, 7717), (18, 7735), (22, 7831), (23, 7873), (24, 7882), (26, 7999), (27, 8014), (28, 8044), (30, 8077), (32, 8083), (33, 8107), (36, 8179), (37, 8185), (39, 8203), (42, 8251), (43, 8263), (47, 8332), (48, 8335), (49, 8344), (51, 8431), (55, 8464), (58, 8551), (59, 8584), (61, 8620), (62, 8629), (63, 8638), (67, 8683), (68, 8707), (70, 8737), (71, 8746), (72, 8782), (73, 8791), (75, 8815), (76, 8851), (78, 8947), (79, 8956), (81, 8998), (88, 9181), (92, 9223), (93, 9232), (95, 9253),

Gene: Eyoseyas\_11 Start: 6936, Stop: 8759, Start Num: 1

Candidate Starts for Eyoseyas\_11:

(Start: 1 @6936 has 40 MA's), (4, 7056), (6, 7113), (7, 7155), (8, 7242), (9, 7251), (10, 7266), (11, 7275), (12, 7281), (13, 7287), (16, 7347), (19, 7395), (20, 7431), (21, 7473), (23, 7530), (24, 7539), (25, 7647), (27, 7671), (29, 7731), (33, 7764), (36, 7836), (37, 7842), (39, 7860), (42, 7908), (46, 7980), (48, 7992), (56, 8088), (57, 8103), (58, 8124), (59, 8145), (60, 8166), (61, 8178), (75, 8298), (79, 8439), (80, 8472), (84, 8523), (86, 8595), (90, 8673),

Gene: FirePit\_11 Start: 6936, Stop: 8759, Start Num: 1

Candidate Starts for FirePit\_11:

(Start: 1 @6936 has 40 MA's), (4, 7056), (6, 7113), (7, 7155), (8, 7242), (9, 7251), (10, 7266), (11, 7275), (12, 7281), (13, 7287), (16, 7347), (19, 7395), (20, 7431), (21, 7473), (23, 7530), (24, 7539), (25, 7647), (27, 7671), (29, 7731), (33, 7764), (36, 7836), (37, 7842), (39, 7860), (42, 7908), (46, 7980), (48, 7992), (56, 8088), (57, 8103), (58, 8124), (59, 8145), (60, 8166), (61, 8178), (75, 8298), (79, 8439), (80, 8472), (84, 8523), (86, 8595), (90, 8673),

Gene: Guntur\_13 Start: 7282, Stop: 9279, Start Num: 1

Candidate Starts for Guntur\_13:

(Start: 1 @7282 has 40 MA's), (3, 7300), (4, 7402), (5, 7429), (6, 7459), (7, 7501), (8, 7588), (9, 7597), (11, 7621), (12, 7627), (13, 7633), (15, 7684), (16, 7693), (18, 7738), (22, 7834), (23, 7876), (24, 7885), (27, 8017), (28, 8047), (29, 8077), (32, 8086), (33, 8110), (36, 8182), (37, 8188), (39, 8206), (40, 8230), (41, 8233), (42, 8254), (43, 8266), (44, 8284), (47, 8335), (48, 8338), (55, 8467), (59, 8587), (61, 8623), (66, 8674), (67, 8686), (69, 8728), (70, 8740), (71, 8749), (72, 8785), (75, 8818), (76, 8854), (78, 8950), (81, 9001), (82, 9004), (88, 9184), (93, 9235), (94, 9253), (95, 9256),

Gene: Hunnie\_13 Start: 7282, Stop: 9279, Start Num: 1

Candidate Starts for Hunnie\_13:

(Start: 1 @7282 has 40 MA's), (3, 7300), (4, 7402), (5, 7429), (6, 7459), (7, 7501), (8, 7588), (9, 7597), (11, 7621), (12, 7627), (13, 7633), (15, 7684), (16, 7693), (18, 7738), (22, 7834), (23, 7876), (24, 7885), (27, 8017), (28, 8047), (29, 8077), (32, 8086), (33, 8110), (36, 8182), (37, 8188), (39, 8206), (40, 8230), (41, 8233), (42, 8254), (43, 8266), (44, 8284), (47, 8335), (48, 8338), (55, 8467), (59, 8587), (61, 8623), (66, 8674), (67, 8686), (69, 8728), (70, 8740), (71, 8749), (72, 8785), (75, 8818), (76, 8854), (78, 8950), (81, 9001), (82, 9004), (88, 9184), (93, 9235), (94, 9253), (95, 9256),

Gene: Inspire2\_13 Start: 7282, Stop: 9279, Start Num: 1

Candidate Starts for Inspire2\_13:

(Start: 1 @7282 has 40 MA's), (3, 7300), (4, 7402), (5, 7429), (6, 7459), (7, 7501), (8, 7588), (9, 7597), (11, 7621), (12, 7627), (13, 7633), (15, 7684), (16, 7693), (18, 7738), (22, 7834), (23, 7876), (24, 7885), (27, 8017), (28, 8047), (29, 8077), (32, 8086), (33, 8110), (36, 8182), (37, 8188), (39, 8206), (40, 8230), (41, 8233), (42, 8254), (43, 8266), (44, 8284), (47, 8335), (48, 8338), (55, 8467), (59, 8587), (61, 8623), (66, 8674), (67, 8686), (69, 8728), (70, 8740), (71, 8749), (72, 8785), (75, 8818), (76, 8854), (78, 8950), (81, 9001), (82, 9004), (88, 9184), (93, 9235), (94, 9253), (95, 9256),

Gene: Jessica\_14 Start: 7282, Stop: 9279, Start Num: 1

Candidate Starts for Jessica\_14:

(Start: 1 @7282 has 40 MA's), (3, 7300), (4, 7402), (5, 7429), (6, 7459), (7, 7501), (8, 7588), (9, 7597), (11, 7621), (12, 7627), (13, 7633), (15, 7684), (16, 7693), (18, 7738), (22, 7834), (23, 7876), (24, 7885), (27, 8017), (28, 8047), (29, 8077), (32, 8086), (33, 8110), (36, 8182), (37, 8188), (39, 8206), (40, 8230), (41, 8233), (42, 8254), (43, 8266), (44, 8284), (47, 8335), (48, 8338), (55, 8467), (59, 8587), (61, 8623), (66, 8674), (67, 8686), (69, 8728), (70, 8740), (71, 8749), (72, 8785), (75, 8818), (76, 8854), (78, 8950), (81, 9001), (82, 9004), (88, 9184), (93, 9235), (94, 9253), (95, 9256),

Gene: Kels\_11 Start: 6861, Stop: 8684, Start Num: 1

Candidate Starts for Kels\_11:

(Start: 1 @6861 has 40 MA's), (4, 6981), (6, 7038), (7, 7080), (8, 7167), (9, 7176), (10, 7191), (11, 7200), (12, 7206), (13, 7212), (16, 7272), (19, 7320), (20, 7356), (21, 7398), (23, 7455), (24, 7464), (25, 7572), (27, 7596), (29, 7656), (33, 7689), (36, 7761), (37, 7767), (39, 7785), (42, 7833), (46, 7905), (48, 7917), (56, 8013), (57, 8028), (58, 8049), (59, 8070), (60, 8091), (61, 8103), (75, 8223), (79, 8364), (80, 8397), (84, 8448), (86, 8520), (90, 8598),

Gene: KylieMac\_14 Start: 7266, Stop: 9263, Start Num: 1

Candidate Starts for KylieMac\_14:

(Start: 1 @7266 has 40 MA's), (3, 7284), (4, 7386), (6, 7443), (7, 7485), (8, 7572), (9, 7581), (11, 7605), (12, 7611), (13, 7617), (15, 7668), (16, 7677), (17, 7704), (18, 7722), (22, 7818), (23, 7860), (24, 7869), (26, 7986), (27, 8001), (28, 8031), (30, 8064), (32, 8070), (33, 8094), (36, 8166), (37, 8172), (39, 8190), (42, 8238), (43, 8250), (47, 8319), (48, 8322), (49, 8331), (51, 8418), (55, 8451), (58, 8538), (59, 8571), (61, 8607), (62, 8616), (63, 8625), (67, 8670), (68, 8694), (70, 8724), (71, 8733), (72, 8769), (73, 8778), (75, 8802), (76, 8838), (78, 8934), (79, 8943), (81, 8985), (88, 9168), (92, 9210), (93, 9219), (95, 9240),

Gene: Laila\_15 Start: 7279, Stop: 9276, Start Num: 1

Candidate Starts for Laila\_15:

(Start: 1 @7279 has 40 MA's), (3, 7297), (4, 7399), (6, 7456), (7, 7498), (8, 7585), (9, 7594), (11, 7618), (12, 7624), (13, 7630), (15, 7681), (16, 7690), (17, 7717), (18, 7735), (22, 7831), (23, 7873), (24, 7882), (26, 7999), (27, 8014), (28, 8044), (30, 8077), (32, 8083), (33, 8107), (36, 8179), (37, 8185), (39, 8203), (42, 8251), (43, 8263), (47, 8332), (48, 8335), (49, 8344), (51, 8431), (55, 8464), (58, 8551), (59, 8584), (61, 8620), (62, 8629), (63, 8638), (67, 8683), (68, 8707), (70, 8737), (71, 8746), (72, 8782), (73, 8791), (75, 8815), (76, 8851), (78, 8947), (79, 8956), (81, 8998), (88, 9181), (92, 9223), (93, 9232), (95, 9253),

Gene: Link\_13 Start: 7281, Stop: 9278, Start Num: 1

Candidate Starts for Link\_13:

(Start: 1 @7281 has 40 MA's), (3, 7299), (4, 7401), (5, 7428), (6, 7458), (7, 7500), (8, 7587), (9, 7596), (11, 7620), (13, 7632), (15, 7683), (16, 7692), (17, 7719), (18, 7737), (22, 7833), (23, 7875), (24, 7884), (27, 8016), (28, 8046), (29, 8076), (32, 8085), (33, 8109), (36, 8181), (37, 8187), (39, 8205), (40, 8229), (41, 8232), (42, 8253), (43, 8265), (44, 8283), (47, 8334), (48, 8337), (49, 8346), (55, 8466), (58, 8553), (59, 8586), (61, 8622), (66, 8673), (67, 8685), (69, 8727), (70, 8739), (71, 8748), (72, 8784), (75, 8817), (76, 8853), (78, 8949), (81, 9000), (82, 9003), (88, 9183), (93, 9234), (94, 9252), (95, 9255),

Gene: Lore\_13 Start: 7279, Stop: 9276, Start Num: 1

Candidate Starts for Lore\_13:

(Start: 1 @7279 has 40 MA's), (3, 7297), (4, 7399), (6, 7456), (7, 7498), (8, 7585), (9, 7594), (11, 7618), (12, 7624), (13, 7630), (15, 7681), (16, 7690), (17, 7717), (18, 7735), (22, 7831), (23, 7873), (24, 7882), (26, 7999), (27, 8014), (28, 8044), (30, 8077), (32, 8083), (33, 8107), (36, 8179), (37, 8185), (39, 8203), (42, 8251), (43, 8263), (47, 8332), (48, 8335), (49, 8344), (51, 8431), (55, 8464), (58, 8551), (59, 8584), (61, 8620), (62, 8629), (63, 8638), (67, 8683), (68, 8707), (70, 8737), (71, 8746), (72, 8782), (73, 8791), (75, 8815), (76, 8851), (78, 8947), (79, 8956), (81, 8998), (88, 9181), (92, 9223), (93, 9232), (95, 9253),

Gene: LouisXIV\_13 Start: 7282, Stop: 9279, Start Num: 1

Candidate Starts for LouisXIV\_13:

(Start: 1 @7282 has 40 MA's), (3, 7300), (4, 7402), (5, 7429), (6, 7459), (7, 7501), (8, 7588), (9, 7597), (11, 7621), (12, 7627), (13, 7633), (15, 7684), (16, 7693), (18, 7738), (22, 7834), (23, 7876), (24, 7885), (27, 8017), (28, 8047), (29, 8077), (32, 8086), (33, 8110), (36, 8182), (37, 8188), (39, 8206), (40, 8230), (41, 8233), (42, 8254), (43, 8266), (44, 8284), (47, 8335), (48, 8338), (55, 8467), (59, 8587), (61, 8623), (66, 8674), (67, 8686), (69, 8728), (70, 8740), (71, 8749), (72, 8785), (75, 8818), (76, 8854), (78, 8950), (81, 9001), (82, 9004), (88, 9184), (93, 9235), (94, 9253), (95, 9256),

Gene: Maggie\_13 Start: 7282, Stop: 9279, Start Num: 1

Candidate Starts for Maggie\_13:

(Start: 1 @7282 has 40 MA's), (3, 7300), (4, 7402), (5, 7429), (6, 7459), (7, 7501), (8, 7588), (9, 7597), (11, 7621), (12, 7627), (13, 7633), (15, 7684), (16, 7693), (18, 7738), (22, 7834), (23, 7876), (24, 7885), (27, 8017), (28, 8047), (29, 8077), (32, 8086), (33, 8110), (36, 8182), (37, 8188), (39, 8206), (40, 8230),

(41, 8233), (42, 8254), (43, 8266), (44, 8284), (47, 8335), (48, 8338), (55, 8467), (59, 8587), (61, 8623), (66, 8674), (67, 8686), (69, 8728), (70, 8740), (71, 8749), (72, 8785), (75, 8818), (76, 8854), (78, 8950), (81, 9001), (82, 9004), (88, 9184), (93, 9235), (94, 9253), (95, 9256),

Gene: Mariposa\_13 Start: 7282, Stop: 9279, Start Num: 1

Candidate Starts for Mariposa\_13:

(Start: 1 @7282 has 40 MA's), (3, 7300), (4, 7402), (5, 7429), (6, 7459), (7, 7501), (8, 7588), (9, 7597), (11, 7621), (12, 7627), (13, 7633), (15, 7684), (16, 7693), (18, 7738), (22, 7834), (23, 7876), (24, 7885), (27, 8017), (28, 8047), (29, 8077), (32, 8086), (33, 8110), (36, 8182), (37, 8188), (39, 8206), (40, 8230), (41, 8233), (42, 8254), (43, 8266), (44, 8284), (47, 8335), (48, 8338), (55, 8467), (59, 8587), (61, 8623), (66, 8674), (67, 8686), (69, 8728), (70, 8740), (71, 8749), (72, 8785), (75, 8818), (76, 8854), (78, 8950), (81, 9001), (82, 9004), (88, 9184), (93, 9235), (94, 9253), (95, 9256),

Gene: Massimo\_13 Start: 7282, Stop: 9279, Start Num: 1

Candidate Starts for Massimo\_13:

(Start: 1 @7282 has 40 MA's), (3, 7300), (4, 7402), (5, 7429), (6, 7459), (7, 7501), (8, 7588), (9, 7597), (11, 7621), (12, 7627), (13, 7633), (15, 7684), (16, 7693), (18, 7738), (22, 7834), (23, 7876), (24, 7885), (27, 8017), (28, 8047), (29, 8077), (32, 8086), (33, 8110), (35, 8173), (36, 8182), (37, 8188), (39, 8206), (40, 8230), (41, 8233), (42, 8254), (43, 8266), (44, 8284), (47, 8335), (48, 8338), (55, 8467), (59, 8587), (61, 8623), (66, 8674), (67, 8686), (69, 8728), (70, 8740), (71, 8749), (72, 8785), (75, 8818), (76, 8854), (78, 8950), (81, 9001), (82, 9004), (88, 9184), (93, 9235), (94, 9253), (95, 9256),

Gene: Moloch\_13 Start: 7356, Stop: 9353, Start Num: 1

Candidate Starts for Moloch\_13:

(Start: 1 @7356 has 40 MA's), (3, 7374), (4, 7476), (5, 7503), (6, 7533), (7, 7575), (8, 7662), (9, 7671), (11, 7695), (12, 7701), (13, 7707), (15, 7758), (16, 7767), (18, 7812), (22, 7908), (23, 7950), (24, 7959), (27, 8091), (28, 8121), (29, 8151), (32, 8160), (33, 8184), (36, 8256), (37, 8262), (39, 8280), (40, 8304), (41, 8307), (42, 8328), (43, 8340), (44, 8358), (47, 8409), (48, 8412), (55, 8541), (59, 8661), (61, 8697), (66, 8748), (67, 8760), (69, 8802), (70, 8814), (71, 8823), (72, 8859), (75, 8892), (76, 8928), (78, 9024), (81, 9075), (82, 9078), (83, 9108), (88, 9258), (93, 9309), (94, 9327), (95, 9330),

Gene: Muttie\_13 Start: 7282, Stop: 9279, Start Num: 1

Candidate Starts for Muttie\_13:

(Start: 1 @7282 has 40 MA's), (3, 7300), (4, 7402), (5, 7429), (6, 7459), (7, 7501), (8, 7588), (11, 7621), (12, 7627), (13, 7633), (16, 7693), (17, 7720), (18, 7738), (22, 7834), (23, 7876), (24, 7885), (27, 8017), (28, 8047), (29, 8077), (32, 8086), (33, 8110), (36, 8182), (37, 8188), (39, 8206), (40, 8230), (41, 8233), (42, 8254), (43, 8266), (44, 8284), (47, 8335), (48, 8338), (49, 8347), (51, 8434), (55, 8467), (58, 8554), (59, 8587), (61, 8623), (66, 8674), (67, 8686), (69, 8728), (70, 8740), (71, 8749), (72, 8785), (75, 8818), (76, 8854), (78, 8950), (81, 9001), (82, 9004), (88, 9184), (93, 9235), (94, 9253), (95, 9256),

Gene: Prospero\_13 Start: 7282, Stop: 9279, Start Num: 1

Candidate Starts for Prospero\_13:

(Start: 1 @7282 has 40 MA's), (3, 7300), (4, 7402), (5, 7429), (6, 7459), (7, 7501), (8, 7588), (9, 7597), (11, 7621), (12, 7627), (13, 7633), (15, 7684), (16, 7693), (18, 7738), (22, 7834), (23, 7876), (24, 7885), (27, 8017), (28, 8047), (29, 8077), (32, 8086), (33, 8110), (36, 8182), (37, 8188), (39, 8206), (40, 8230), (41, 8233), (42, 8254), (43, 8266), (44, 8284), (47, 8335), (48, 8338), (55, 8467), (59, 8587), (61, 8623), (66, 8674), (67, 8686), (69, 8728), (70, 8740), (71, 8749), (72, 8785), (75, 8818), (76, 8854), (78, 8950), (81, 9001), (82, 9004), (88, 9184), (93, 9235), (94, 9253), (95, 9256),

Gene: Ronnie\_13 Start: 7282, Stop: 9279, Start Num: 1

Candidate Starts for Ronnie\_13:

(Start: 1 @7282 has 40 MA's), (3, 7300), (4, 7402), (5, 7429), (6, 7459), (7, 7501), (8, 7588), (9, 7597), (11, 7621), (12, 7627), (13, 7633), (15, 7684), (16, 7693), (18, 7738), (22, 7834), (23, 7876), (24, 7885),

(27, 8017), (28, 8047), (29, 8077), (32, 8086), (33, 8110), (36, 8182), (37, 8188), (39, 8206), (40, 8230), (41, 8233), (42, 8254), (43, 8266), (44, 8284), (47, 8335), (48, 8338), (55, 8467), (59, 8587), (61, 8623), (66, 8674), (67, 8686), (69, 8728), (70, 8740), (71, 8749), (72, 8785), (75, 8818), (76, 8854), (78, 8950), (81, 9001), (82, 9004), (88, 9184), (93, 9235), (94, 9253), (95, 9256),

Gene: Sandman\_13 Start: 7356, Stop: 9353, Start Num: 1

Candidate Starts for Sandman\_13:

(Start: 1 @7356 has 40 MA's), (3, 7374), (4, 7476), (5, 7503), (6, 7533), (7, 7575), (8, 7662), (9, 7671), (11, 7695), (12, 7701), (13, 7707), (15, 7758), (16, 7767), (18, 7812), (22, 7908), (23, 7950), (24, 7959), (27, 8091), (28, 8121), (29, 8151), (32, 8160), (33, 8184), (36, 8256), (37, 8262), (39, 8280), (40, 8304), (41, 8307), (42, 8328), (43, 8340), (44, 8358), (47, 8409), (48, 8412), (55, 8541), (59, 8661), (61, 8697), (66, 8748), (67, 8760), (69, 8802), (70, 8814), (71, 8823), (72, 8859), (75, 8892), (76, 8928), (78, 9024), (81, 9075), (82, 9078), (88, 9258), (93, 9309), (94, 9327), (95, 9330),

Gene: Saphira\_14 Start: 7280, Stop: 9277, Start Num: 1

Candidate Starts for Saphira\_14:

(Start: 1 @7280 has 40 MA's), (3, 7298), (4, 7400), (6, 7457), (7, 7499), (8, 7586), (9, 7595), (11, 7619), (12, 7625), (13, 7631), (15, 7682), (16, 7691), (17, 7718), (18, 7736), (22, 7832), (23, 7874), (24, 7883), (26, 8000), (27, 8015), (28, 8045), (30, 8078), (32, 8084), (33, 8108), (34, 8123), (36, 8180), (37, 8186), (39, 8204), (42, 8252), (43, 8264), (44, 8282), (47, 8333), (48, 8336), (49, 8345), (51, 8432), (55, 8465), (58, 8552), (59, 8585), (61, 8621), (62, 8630), (63, 8639), (67, 8684), (68, 8708), (70, 8738), (71, 8747), (72, 8783), (73, 8792), (75, 8816), (76, 8852), (78, 8948), (81, 8999), (93, 9233), (95, 9254),

Gene: SerialPhiller\_11 Start: 6936, Stop: 8759, Start Num: 1

Candidate Starts for SerialPhiller\_11:

(Start: 1 @6936 has 40 MA's), (4, 7056), (6, 7113), (7, 7155), (8, 7242), (9, 7251), (10, 7266), (11, 7275), (12, 7281), (13, 7287), (16, 7347), (19, 7395), (20, 7431), (21, 7473), (23, 7530), (24, 7539), (25, 7647), (27, 7671), (29, 7731), (33, 7764), (36, 7836), (37, 7842), (39, 7860), (42, 7908), (46, 7980), (48, 7992), (56, 8088), (57, 8103), (58, 8124), (59, 8145), (60, 8166), (61, 8178), (75, 8298), (79, 8439), (80, 8472), (84, 8523), (86, 8595), (90, 8673),

Gene: Seume\_13 Start: 7077, Stop: 9074, Start Num: 1

Candidate Starts for Seume\_13:

(Start: 1 @7077 has 40 MA's), (3, 7095), (4, 7197), (5, 7224), (6, 7254), (7, 7296), (8, 7383), (9, 7392), (11, 7416), (13, 7428), (16, 7488), (18, 7533), (22, 7629), (23, 7671), (24, 7680), (27, 7812), (28, 7842), (29, 7872), (32, 7881), (33, 7905), (36, 7977), (37, 7983), (38, 7986), (39, 8001), (40, 8025), (41, 8028), (42, 8049), (43, 8061), (44, 8079), (47, 8130), (48, 8133), (55, 8262), (59, 8382), (61, 8418), (66, 8469), (67, 8481), (69, 8523), (70, 8535), (71, 8544), (72, 8580), (75, 8613), (76, 8649), (78, 8745), (81, 8796), (82, 8799), (88, 8979), (93, 9030), (94, 9048), (95, 9051),

Gene: Sourignavong\_14 Start: 7383, Stop: 9380, Start Num: 2

Candidate Starts for Sourignavong\_14:

(Start: 2 @7383 has 1 MA's), (3, 7401), (4, 7503), (5, 7530), (6, 7560), (7, 7602), (8, 7689), (9, 7698), (11, 7722), (12, 7728), (13, 7734), (14, 7743), (15, 7785), (16, 7794), (18, 7839), (22, 7935), (23, 7977), (24, 7986), (27, 8118), (28, 8148), (29, 8178), (32, 8187), (36, 8283), (37, 8289), (39, 8307), (41, 8334), (42, 8355), (43, 8367), (44, 8385), (47, 8436), (48, 8439), (49, 8448), (55, 8568), (58, 8655), (59, 8688), (61, 8724), (66, 8775), (67, 8787), (69, 8829), (70, 8841), (71, 8850), (72, 8886), (75, 8919), (76, 8955), (78, 9051), (81, 9102), (82, 9105), (88, 9285), (93, 9336), (94, 9354), (95, 9357),

Gene: StewieGriff\_13 Start: 7279, Stop: 9276, Start Num: 1

Candidate Starts for StewieGriff\_13:

(Start: 1 @7279 has 40 MA's), (3, 7297), (4, 7399), (6, 7456), (7, 7498), (8, 7585), (9, 7594), (11, 7618), (12, 7624), (13, 7630), (15, 7681), (16, 7690), (17, 7717), (18, 7735), (22, 7831), (23, 7873), (24,

7882), (26, 7999), (27, 8014), (28, 8044), (30, 8077), (32, 8083), (33, 8107), (36, 8179), (37, 8185), (39, 8203), (42, 8251), (43, 8263), (47, 8332), (48, 8335), (49, 8344), (51, 8431), (55, 8464), (58, 8551), (59, 8584), (61, 8620), (62, 8629), (63, 8638), (67, 8683), (68, 8707), (70, 8737), (71, 8746), (72, 8782), (73, 8791), (75, 8815), (76, 8851), (78, 8947), (79, 8956), (81, 8998), (88, 9181), (92, 9223), (93, 9232), (95, 9253),

Gene: Stratus\_13 Start: 7356, Stop: 9353, Start Num: 1

Candidate Starts for Stratus\_13:

(Start: 1 @7356 has 40 MA's), (3, 7374), (4, 7476), (5, 7503), (6, 7533), (7, 7575), (8, 7662), (9, 7671), (11, 7695), (12, 7701), (13, 7707), (15, 7758), (16, 7767), (18, 7812), (22, 7908), (23, 7950), (24, 7959), (27, 8091), (28, 8121), (29, 8151), (32, 8160), (33, 8184), (36, 8256), (37, 8262), (39, 8280), (40, 8304), (41, 8307), (42, 8328), (43, 8340), (44, 8358), (47, 8409), (48, 8412), (55, 8541), (59, 8661), (61, 8697), (66, 8748), (67, 8760), (69, 8802), (70, 8814), (71, 8823), (72, 8859), (75, 8892), (76, 8928), (78, 9024), (81, 9075), (82, 9078), (88, 9258), (93, 9309), (94, 9327), (95, 9330),

Gene: StrawberryLem\_11 Start: 6861, Stop: 8684, Start Num: 1

Candidate Starts for StrawberryLem\_11:

(Start: 1 @6861 has 40 MA's), (4, 6981), (6, 7038), (7, 7080), (8, 7167), (9, 7176), (10, 7191), (11, 7200), (12, 7206), (13, 7212), (16, 7272), (19, 7320), (20, 7356), (21, 7398), (23, 7455), (24, 7464), (25, 7572), (27, 7596), (29, 7656), (33, 7689), (36, 7761), (37, 7767), (39, 7785), (42, 7833), (46, 7905), (48, 7917), (56, 8013), (57, 8028), (58, 8049), (59, 8070), (60, 8091), (61, 8103), (75, 8223), (79, 8364), (80, 8397), (84, 8448), (86, 8520), (90, 8598),

Gene: Swenson\_13 Start: 7403, Stop: 9400, Start Num: 1

Candidate Starts for Swenson\_13:

(Start: 1 @7403 has 40 MA's), (3, 7421), (4, 7523), (6, 7580), (7, 7622), (8, 7709), (9, 7718), (11, 7742), (13, 7754), (15, 7805), (16, 7814), (18, 7859), (22, 7955), (23, 7997), (27, 8138), (28, 8168), (29, 8198), (32, 8207), (33, 8231), (36, 8303), (37, 8309), (39, 8327), (42, 8375), (43, 8387), (44, 8405), (47, 8456), (48, 8459), (49, 8468), (51, 8555), (55, 8588), (58, 8675), (59, 8708), (61, 8744), (66, 8795), (67, 8807), (68, 8831), (70, 8861), (71, 8870), (72, 8906), (75, 8939), (76, 8975), (78, 9071), (81, 9122), (88, 9305), (91, 9344), (95, 9377),

Gene: Taj14\_13 Start: 7259, Stop: 9256, Start Num: 1

Candidate Starts for Taj14\_13:

(Start: 1 @7259 has 40 MA's), (3, 7277), (4, 7379), (6, 7436), (7, 7478), (8, 7565), (9, 7574), (11, 7598), (12, 7604), (13, 7610), (15, 7661), (16, 7670), (17, 7697), (18, 7715), (22, 7811), (23, 7853), (24, 7862), (26, 7979), (27, 7994), (28, 8024), (30, 8057), (32, 8063), (33, 8087), (34, 8102), (36, 8159), (37, 8165), (39, 8183), (42, 8231), (43, 8243), (44, 8261), (47, 8312), (48, 8315), (49, 8324), (51, 8411), (55, 8444), (58, 8531), (59, 8564), (61, 8600), (62, 8609), (63, 8618), (67, 8663), (68, 8687), (70, 8717), (71, 8726), (72, 8762), (73, 8771), (75, 8795), (76, 8831), (78, 8927), (81, 8978), (91, 9200), (93, 9212), (95, 9233),

Gene: TinoCrisci\_13 Start: 7282, Stop: 9279, Start Num: 1

Candidate Starts for TinoCrisci\_13:

(Start: 1 @7282 has 40 MA's), (3, 7300), (4, 7402), (5, 7429), (6, 7459), (7, 7501), (8, 7588), (9, 7597), (11, 7621), (12, 7627), (13, 7633), (15, 7684), (16, 7693), (18, 7738), (22, 7834), (23, 7876), (24, 7885), (27, 8017), (28, 8047), (29, 8077), (32, 8086), (33, 8110), (35, 8173), (36, 8182), (37, 8188), (39, 8206), (40, 8230), (41, 8233), (42, 8254), (43, 8266), (44, 8284), (47, 8335), (48, 8338), (55, 8467), (59, 8587), (61, 8623), (66, 8674), (67, 8686), (69, 8728), (70, 8740), (71, 8749), (72, 8785), (75, 8818), (76, 8854), (78, 8950), (81, 9001), (82, 9004), (88, 9184), (93, 9235), (94, 9253), (95, 9256),

Gene: Toulouse\_12 Start: 7077, Stop: 9074, Start Num: 1

Candidate Starts for Toulouse\_12:

(Start: 1 @7077 has 40 MA's), (3, 7095), (4, 7197), (5, 7224), (6, 7254), (7, 7296), (8, 7383), (9, 7392), (11, 7416), (13, 7428), (16, 7488), (18, 7533), (22, 7629), (23, 7671), (24, 7680), (27, 7812), (28, 7842), (29, 7872), (32, 7881), (33, 7905), (36, 7977), (37, 7983), (38, 7986), (39, 8001), (40, 8025), (41, 8028), (42, 8049), (43, 8061), (44, 8079), (47, 8130), (48, 8133), (55, 8262), (59, 8382), (61, 8418), (66, 8469), (67, 8481), (69, 8523), (70, 8535), (71, 8544), (72, 8580), (75, 8613), (76, 8649), (78, 8745), (81, 8796), (82, 8799), (88, 8979), (93, 9030), (94, 9048), (95, 9051),

Gene: TymAbreu\_13 Start: 7282, Stop: 9279, Start Num: 1

Candidate Starts for TymAbreu\_13:

(Start: 1 @7282 has 40 MA's), (3, 7300), (4, 7402), (5, 7429), (6, 7459), (7, 7501), (8, 7588), (9, 7597), (11, 7621), (12, 7627), (13, 7633), (15, 7684), (16, 7693), (18, 7738), (22, 7834), (23, 7876), (24, 7885), (27, 8017), (28, 8047), (29, 8077), (32, 8086), (33, 8110), (36, 8182), (37, 8188), (39, 8206), (40, 8230), (41, 8233), (42, 8254), (43, 8266), (44, 8284), (47, 8335), (48, 8338), (55, 8467), (59, 8587), (61, 8623), (66, 8674), (67, 8686), (69, 8728), (70, 8740), (71, 8749), (72, 8785), (75, 8818), (76, 8854), (78, 8950), (81, 9001), (82, 9004), (88, 9184), (93, 9235), (94, 9253), (95, 9256),

Gene: Vinye\_14 Start: 7588, Stop: 9417, Start Num: 2

Candidate Starts for Vinye\_14:

(Start: 2 @7588 has 1 MA's), (4, 7708), (5, 7735), (6, 7765), (7, 7807), (8, 7894), (11, 7927), (13, 7939), (16, 7999), (18, 8044), (23, 8182), (26, 8308), (27, 8323), (28, 8353), (29, 8383), (36, 8488), (37, 8494), (38, 8497), (39, 8512), (41, 8539), (42, 8560), (43, 8572), (45, 8611), (50, 8689), (52, 8710), (53, 8716), (54, 8722), (57, 8752), (62, 8818), (64, 8830), (65, 8854), (67, 8872), (74, 8938), (75, 8950), (77, 9013), (79, 9091), (85, 9235), (87, 9304), (89, 9331), (90, 9337), (95, 9394),

Gene: Ximeno\_11 Start: 6936, Stop: 8759, Start Num: 1

Candidate Starts for Ximeno\_11:

(Start: 1 @6936 has 40 MA's), (4, 7056), (6, 7113), (7, 7155), (8, 7242), (9, 7251), (10, 7266), (11, 7275), (12, 7281), (13, 7287), (16, 7347), (19, 7395), (20, 7431), (21, 7473), (23, 7530), (24, 7539), (25, 7647), (27, 7671), (29, 7731), (33, 7764), (36, 7836), (37, 7842), (39, 7860), (42, 7908), (46, 7980), (48, 7992), (56, 8088), (57, 8103), (58, 8124), (59, 8145), (60, 8166), (61, 8178), (75, 8298), (79, 8439), (80, 8472), (84, 8523), (86, 8595), (90, 8673),

Gene: Yank\_13 Start: 7282, Stop: 9279, Start Num: 1

Candidate Starts for Yank\_13:

(Start: 1 @7282 has 40 MA's), (3, 7300), (4, 7402), (5, 7429), (6, 7459), (7, 7501), (8, 7588), (9, 7597), (11, 7621), (13, 7633), (15, 7684), (16, 7693), (18, 7738), (22, 7834), (23, 7876), (27, 8017), (28, 8047), (29, 8077), (32, 8086), (33, 8110), (36, 8182), (37, 8188), (39, 8206), (40, 8230), (41, 8233), (42, 8254), (43, 8266), (44, 8284), (47, 8335), (48, 8338), (49, 8347), (55, 8467), (58, 8554), (59, 8587), (61, 8623), (66, 8674), (67, 8686), (69, 8728), (70, 8740), (71, 8749), (72, 8785), (75, 8818), (76, 8854), (78, 8950), (81, 9001), (82, 9004), (88, 9184), (93, 9235), (94, 9253), (95, 9256),