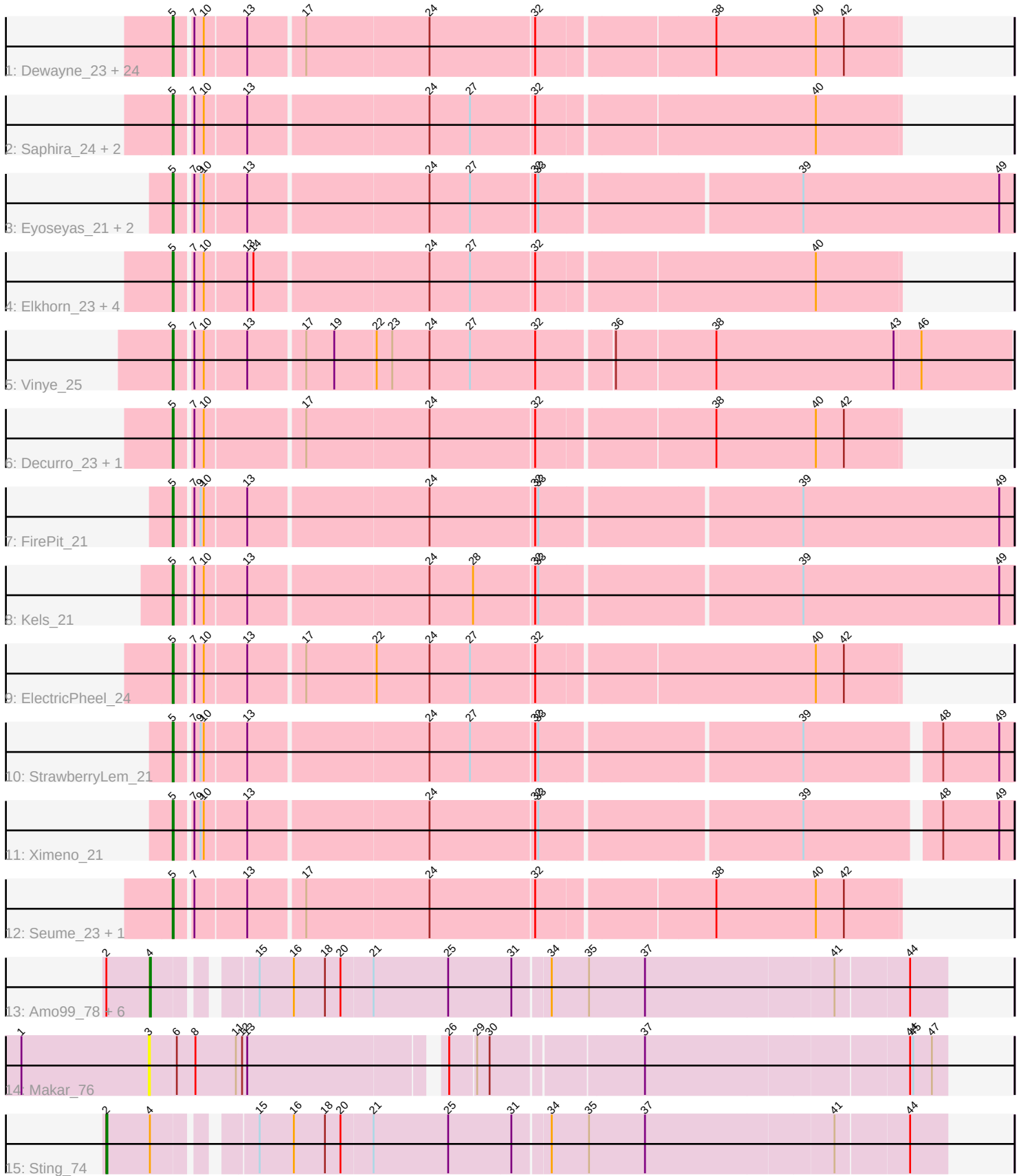


Pham 329104



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 329104 Report

This analysis was run 09/05/26 on database version 662.

Pham number 329104 has 55 members, 6 are drafts.

Phages represented in each track:

- Track 1 : Dewayne_23, Sandman_23, Chestnut_23, Ronnie_23, LouisXIV_23, Inspire2_23, Prospero_23, Azathoth_23, Courtney3_23, Muttlie_23, Hunnie_23, Arby_23, TinoCrisci_23, Moloch_23, Stratus_23, TymAbreu_23, Massimo_23, Jessica_24, Sourignavong_24, Mariposa_23, Guntur_23, Maggie_23, Copper_23, Link_23, CGermain_23
- Track 2 : Saphira_24, Taj14_23, Swenson_23
- Track 3 : Eyoseyas_21, SerialPhiller_21, Arielagos_21
- Track 4 : Elkhorn_23, Blair_23, StewieGriff_23, Lore_23, KylieMac_24
- Track 5 : Vinye_25
- Track 6 : Decurro_23, Yank_23
- Track 7 : FirePit_21
- Track 8 : Kels_21
- Track 9 : ElectricPheel_24
- Track 10 : StrawberryLem_21
- Track 11 : Ximeno_21
- Track 12 : Seume_23, Toulouse_22
- Track 13 : Amo99_78, Jollymon_75, Purplicious_75, Stillion_74, Grumio_76, Soos_71, ColdSoup_78
- Track 14 : Makar_76
- Track 15 : Sting_74

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

The start number called the most often in the published annotations is 5, it was called in 45 of the 49 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Arby_23, Arielagos_21, Azathoth_23, Blair_23, CGermain_23, Chestnut_23, Copper_23, Courtney3_23, Decurro_23, Dewayne_23, ElectricPheel_24, Elkhorn_23, Eyoseyas_21, FirePit_21, Guntur_23, Hunnie_23, Inspire2_23, Jessica_24, Kels_21, KylieMac_24, Link_23, Lore_23, LouisXIV_23, Maggie_23, Mariposa_23, Massimo_23, Moloch_23, Muttie_23, Prospero_23, Ronnie_23, Sandman_23, Saphira_24, SerialPhiller_21, Seume_23, Sourignavong_24, StewieGriff_23, Stratus_23, StrawberryLem_21, Swenson_23, Taj14_23, TinoCrisci_23,

Toulouse_22, TymAbreu_23, Vinye_25, Ximeno_21, Yank_23,

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

-

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

- Amo99_78, ColdSoup_78, Grumio_76, Jollymon_75, Makar_76, Purplicious_75, Soos_71, Stillion_74, Sting_74,

Summary by start number:

Start 2:

- Found in 8 of 55 (14.5%) of genes in pham
- Manual Annotations of this start: 1 of 49
- Called 12.5% of time when present
- Phage (with cluster) where this start called: Sting_74 (CP),

Start 3:

- Found in 1 of 55 (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: Makar_76 (CP),

Start 4:

- Found in 8 of 55 (14.5%) of genes in pham
- Manual Annotations of this start: 3 of 49
- Called 87.5% of time when present
- Phage (with cluster) where this start called: Amo99_78 (CP), ColdSoup_78 (CP), Grumio_76 (CP), Jollymon_75 (CP), Purplicious_75 (CP), Soos_71 (CP), Stillion_74 (CP),

Start 5:

- Found in 46 of 55 (83.6%) of genes in pham
- Manual Annotations of this start: 45 of 49
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Arby_23 (AN), Arielagos_21 (AN), Azathoth_23 (AN), Blair_23 (AN), CGermain_23 (AN), Chestnut_23 (AN), Copper_23 (AN), Courtney3_23 (AN), Decurro_23 (AN), Dewayne_23 (AN), ElectricPheel_24 (AN), Elkhorn_23 (AN), Eyoseyas_21 (AN), FirePit_21 (AN), Guntur_23 (AN), Hunnie_23 (AN), Inspire2_23 (AN), Jessica_24 (AN), Kels_21 (AN), KylieMac_24 (AN), Link_23 (AN), Lore_23 (AN), LouisXIV_23 (AN), Maggie_23 (AN), Mariposa_23 (AN), Massimo_23 (AN), Moloch_23 (AN), Muttlie_23 (AN), Prospero_23 (AN), Ronnie_23 (AN), Sandman_23 (AN), Saphira_24 (AN), SerialPhiller_21 (AN), Seume_23 (AN), Sourignavong_24 (AN), StewieGriff_23 (AN), Stratus_23 (AN), StrawberryLem_21 (AN), Swenson_23 (AN), Taj14_23 (AN), TinoCrisci_23 (AN), Toulouse_22 (AN), TymAbreu_23 (AN), Vinye_25 (AN), Ximeno_21 (AN), Yank_23 (AN),

Summary by clusters:

There are 2 clusters represented in this pham: CP, AN,

Info for manual annotations of cluster AN:

- Start number 5 was manually annotated 45 times for cluster AN.

Info for manual annotations of cluster CP:

- Start number 2 was manually annotated 1 time for cluster CP.
- Start number 4 was manually annotated 3 times for cluster CP.

Gene Information:

Gene: Amo99_78 Start: 50058, Stop: 50777, Start Num: 4

Candidate Starts for Amo99_78:

(Start: 2 @50016 has 1 MA's), (Start: 4 @50058 has 3 MA's), (15, 50136), (16, 50169), (18, 50199), (20, 50214), (21, 50244), (25, 50316), (31, 50376), (34, 50409), (35, 50445), (37, 50499), (41, 50676), (44, 50742),

Gene: Arby_23 Start: 14116, Stop: 14784, Start Num: 5

Candidate Starts for Arby_23:

(Start: 5 @14116 has 45 MA's), (7, 14131), (10, 14140), (13, 14179), (17, 14230), (24, 14347), (32, 14446), (38, 14608), (40, 14704), (42, 14731),

Gene: Arielagos_21 Start: 13877, Stop: 14653, Start Num: 5

Candidate Starts for Arielagos_21:

(Start: 5 @13877 has 45 MA's), (7, 13892), (9, 13898), (10, 13901), (13, 13940), (24, 14108), (27, 14147), (32, 14207), (33, 14210), (39, 14450), (49, 14639),

Gene: Azathoth_23 Start: 14116, Stop: 14784, Start Num: 5

Candidate Starts for Azathoth_23:

(Start: 5 @14116 has 45 MA's), (7, 14131), (10, 14140), (13, 14179), (17, 14230), (24, 14347), (32, 14446), (38, 14608), (40, 14704), (42, 14731),

Gene: Blair_23 Start: 14113, Stop: 14781, Start Num: 5

Candidate Starts for Blair_23:

(Start: 5 @14113 has 45 MA's), (7, 14128), (10, 14137), (13, 14176), (14, 14182), (24, 14344), (27, 14383), (32, 14443), (40, 14701),

Gene: CGermain_23 Start: 14116, Stop: 14784, Start Num: 5

Candidate Starts for CGermain_23:

(Start: 5 @14116 has 45 MA's), (7, 14131), (10, 14140), (13, 14179), (17, 14230), (24, 14347), (32, 14446), (38, 14608), (40, 14704), (42, 14731),

Gene: Chestnut_23 Start: 14116, Stop: 14784, Start Num: 5

Candidate Starts for Chestnut_23:

(Start: 5 @14116 has 45 MA's), (7, 14131), (10, 14140), (13, 14179), (17, 14230), (24, 14347), (32, 14446), (38, 14608), (40, 14704), (42, 14731),

Gene: ColdSoup_78 Start: 50139, Stop: 50858, Start Num: 4

Candidate Starts for ColdSoup_78:

(Start: 2 @50097 has 1 MA's), (Start: 4 @50139 has 3 MA's), (15, 50217), (16, 50250), (18, 50280), (20, 50295), (21, 50325), (25, 50397), (31, 50457), (34, 50490), (35, 50526), (37, 50580), (41, 50757), (44, 50823),

Gene: Copper_23 Start: 14116, Stop: 14784, Start Num: 5

Candidate Starts for Copper_23:

(Start: 5 @14116 has 45 MA's), (7, 14131), (10, 14140), (13, 14179), (17, 14230), (24, 14347), (32, 14446), (38, 14608), (40, 14704), (42, 14731),

Gene: Courtney3_23 Start: 14116, Stop: 14784, Start Num: 5

Candidate Starts for Courtney3_23:

(Start: 5 @14116 has 45 MA's), (7, 14131), (10, 14140), (13, 14179), (17, 14230), (24, 14347), (32, 14446), (38, 14608), (40, 14704), (42, 14731),

Gene: Decurro_23 Start: 14084, Stop: 14752, Start Num: 5

Candidate Starts for Decurro_23:

(Start: 5 @14084 has 45 MA's), (7, 14099), (10, 14108), (17, 14198), (24, 14315), (32, 14414), (38, 14576), (40, 14672), (42, 14699),

Gene: Dewayne_23 Start: 14116, Stop: 14784, Start Num: 5

Candidate Starts for Dewayne_23:

(Start: 5 @14116 has 45 MA's), (7, 14131), (10, 14140), (13, 14179), (17, 14230), (24, 14347), (32, 14446), (38, 14608), (40, 14704), (42, 14731),

Gene: ElectricPheel_24 Start: 14157, Stop: 14825, Start Num: 5

Candidate Starts for ElectricPheel_24:

(Start: 5 @14157 has 45 MA's), (7, 14172), (10, 14181), (13, 14220), (17, 14271), (22, 14337), (24, 14388), (27, 14427), (32, 14487), (40, 14745), (42, 14772),

Gene: Elkhorn_23 Start: 14113, Stop: 14781, Start Num: 5

Candidate Starts for Elkhorn_23:

(Start: 5 @14113 has 45 MA's), (7, 14128), (10, 14137), (13, 14176), (14, 14182), (24, 14344), (27, 14383), (32, 14443), (40, 14701),

Gene: Eyoseyas_21 Start: 13877, Stop: 14653, Start Num: 5

Candidate Starts for Eyoseyas_21:

(Start: 5 @13877 has 45 MA's), (7, 13892), (9, 13898), (10, 13901), (13, 13940), (24, 14108), (27, 14147), (32, 14207), (33, 14210), (39, 14450), (49, 14639),

Gene: FirePit_21 Start: 13890, Stop: 14666, Start Num: 5

Candidate Starts for FirePit_21:

(Start: 5 @13890 has 45 MA's), (7, 13905), (9, 13911), (10, 13914), (13, 13953), (24, 14121), (32, 14220), (33, 14223), (39, 14463), (49, 14652),

Gene: Grumio_76 Start: 49617, Stop: 50336, Start Num: 4

Candidate Starts for Grumio_76:

(Start: 2 @49575 has 1 MA's), (Start: 4 @49617 has 3 MA's), (15, 49695), (16, 49728), (18, 49758), (20, 49773), (21, 49803), (25, 49875), (31, 49935), (34, 49968), (35, 50004), (37, 50058), (41, 50235), (44, 50301),

Gene: Guntur_23 Start: 14116, Stop: 14784, Start Num: 5

Candidate Starts for Guntur_23:

(Start: 5 @14116 has 45 MA's), (7, 14131), (10, 14140), (13, 14179), (17, 14230), (24, 14347), (32, 14446), (38, 14608), (40, 14704), (42, 14731),

Gene: Hunnie_23 Start: 14116, Stop: 14784, Start Num: 5

Candidate Starts for Hunnie_23:

(Start: 5 @14116 has 45 MA's), (7, 14131), (10, 14140), (13, 14179), (17, 14230), (24, 14347), (32, 14446), (38, 14608), (40, 14704), (42, 14731),

Gene: Inspire2_23 Start: 14116, Stop: 14784, Start Num: 5

Candidate Starts for Inspire2_23:

(Start: 5 @14116 has 45 MA's), (7, 14131), (10, 14140), (13, 14179), (17, 14230), (24, 14347), (32, 14446), (38, 14608), (40, 14704), (42, 14731),

Gene: Jessica_24 Start: 14116, Stop: 14784, Start Num: 5

Candidate Starts for Jessica_24:

(Start: 5 @14116 has 45 MA's), (7, 14131), (10, 14140), (13, 14179), (17, 14230), (24, 14347), (32, 14446), (38, 14608), (40, 14704), (42, 14731),

Gene: Jollymon_75 Start: 50139, Stop: 50858, Start Num: 4

Candidate Starts for Jollymon_75:

(Start: 2 @50097 has 1 MA's), (Start: 4 @50139 has 3 MA's), (15, 50217), (16, 50250), (18, 50280), (20, 50295), (21, 50325), (25, 50397), (31, 50457), (34, 50490), (35, 50526), (37, 50580), (41, 50757), (44, 50823),

Gene: Kels_21 Start: 13437, Stop: 14213, Start Num: 5

Candidate Starts for Kels_21:

(Start: 5 @13437 has 45 MA's), (7, 13452), (10, 13461), (13, 13500), (24, 13668), (28, 13710), (32, 13767), (33, 13770), (39, 14010), (49, 14199),

Gene: KylieMac_24 Start: 14100, Stop: 14768, Start Num: 5

Candidate Starts for KylieMac_24:

(Start: 5 @14100 has 45 MA's), (7, 14115), (10, 14124), (13, 14163), (14, 14169), (24, 14331), (27, 14370), (32, 14430), (40, 14688),

Gene: Link_23 Start: 14081, Stop: 14749, Start Num: 5

Candidate Starts for Link_23:

(Start: 5 @14081 has 45 MA's), (7, 14096), (10, 14105), (13, 14144), (17, 14195), (24, 14312), (32, 14411), (38, 14573), (40, 14669), (42, 14696),

Gene: Lore_23 Start: 14113, Stop: 14781, Start Num: 5

Candidate Starts for Lore_23:

(Start: 5 @14113 has 45 MA's), (7, 14128), (10, 14137), (13, 14176), (14, 14182), (24, 14344), (27, 14383), (32, 14443), (40, 14701),

Gene: LouisXIV_23 Start: 14116, Stop: 14784, Start Num: 5

Candidate Starts for LouisXIV_23:

(Start: 5 @14116 has 45 MA's), (7, 14131), (10, 14140), (13, 14179), (17, 14230), (24, 14347), (32, 14446), (38, 14608), (40, 14704), (42, 14731),

Gene: Maggie_23 Start: 14116, Stop: 14784, Start Num: 5

Candidate Starts for Maggie_23:

(Start: 5 @14116 has 45 MA's), (7, 14131), (10, 14140), (13, 14179), (17, 14230), (24, 14347), (32, 14446), (38, 14608), (40, 14704), (42, 14731),

Gene: Makar_76 Start: 49777, Stop: 50493, Start Num: 3

Candidate Starts for Makar_76:

(1, 49654), (3, 49777), (6, 49801), (8, 49819), (11, 49858), (12, 49864), (13, 49867), (26, 50041), (29, 50065), (30, 50077), (37, 50215), (44, 50458), (45, 50461), (47, 50479),

Gene: Mariposa_23 Start: 14116, Stop: 14784, Start Num: 5

Candidate Starts for Mariposa_23:

(Start: 5 @14116 has 45 MA's), (7, 14131), (10, 14140), (13, 14179), (17, 14230), (24, 14347), (32, 14446), (38, 14608), (40, 14704), (42, 14731),

Gene: Massimo_23 Start: 14116, Stop: 14784, Start Num: 5

Candidate Starts for Massimo_23:

(Start: 5 @14116 has 45 MA's), (7, 14131), (10, 14140), (13, 14179), (17, 14230), (24, 14347), (32, 14446), (38, 14608), (40, 14704), (42, 14731),

Gene: Moloch_23 Start: 14190, Stop: 14858, Start Num: 5

Candidate Starts for Moloch_23:

(Start: 5 @14190 has 45 MA's), (7, 14205), (10, 14214), (13, 14253), (17, 14304), (24, 14421), (32, 14520), (38, 14682), (40, 14778), (42, 14805),

Gene: Muttie_23 Start: 14084, Stop: 14752, Start Num: 5

Candidate Starts for Muttie_23:

(Start: 5 @14084 has 45 MA's), (7, 14099), (10, 14108), (13, 14147), (17, 14198), (24, 14315), (32, 14414), (38, 14576), (40, 14672), (42, 14699),

Gene: Prospero_23 Start: 14116, Stop: 14784, Start Num: 5

Candidate Starts for Prospero_23:

(Start: 5 @14116 has 45 MA's), (7, 14131), (10, 14140), (13, 14179), (17, 14230), (24, 14347), (32, 14446), (38, 14608), (40, 14704), (42, 14731),

Gene: Purplicious_75 Start: 49382, Stop: 50101, Start Num: 4

Candidate Starts for Purplicious_75:

(Start: 2 @49340 has 1 MA's), (Start: 4 @49382 has 3 MA's), (15, 49460), (16, 49493), (18, 49523), (20, 49538), (21, 49568), (25, 49640), (31, 49700), (34, 49733), (35, 49769), (37, 49823), (41, 50000), (44, 50066),

Gene: Ronnie_23 Start: 14116, Stop: 14784, Start Num: 5

Candidate Starts for Ronnie_23:

(Start: 5 @14116 has 45 MA's), (7, 14131), (10, 14140), (13, 14179), (17, 14230), (24, 14347), (32, 14446), (38, 14608), (40, 14704), (42, 14731),

Gene: Sandman_23 Start: 14190, Stop: 14858, Start Num: 5

Candidate Starts for Sandman_23:

(Start: 5 @14190 has 45 MA's), (7, 14205), (10, 14214), (13, 14253), (17, 14304), (24, 14421), (32, 14520), (38, 14682), (40, 14778), (42, 14805),

Gene: Saphira_24 Start: 14115, Stop: 14783, Start Num: 5

Candidate Starts for Saphira_24:

(Start: 5 @14115 has 45 MA's), (7, 14130), (10, 14139), (13, 14178), (24, 14346), (27, 14385), (32, 14445), (40, 14703),

Gene: SerialPhiller_21 Start: 13877, Stop: 14653, Start Num: 5

Candidate Starts for SerialPhiller_21:

(Start: 5 @13877 has 45 MA's), (7, 13892), (9, 13898), (10, 13901), (13, 13940), (24, 14108), (27, 14147), (32, 14207), (33, 14210), (39, 14450), (49, 14639),

Gene: Seume_23 Start: 13879, Stop: 14547, Start Num: 5

Candidate Starts for Seume_23:

(Start: 5 @13879 has 45 MA's), (7, 13894), (13, 13942), (17, 13993), (24, 14110), (32, 14209), (38, 14371), (40, 14467), (42, 14494),

Gene: Soos_71 Start: 49343, Stop: 50062, Start Num: 4

Candidate Starts for Soos_71:

(Start: 2 @49301 has 1 MA's), (Start: 4 @49343 has 3 MA's), (15, 49421), (16, 49454), (18, 49484), (20, 49499), (21, 49529), (25, 49601), (31, 49661), (34, 49694), (35, 49730), (37, 49784), (41, 49961), (44, 50027),

Gene: Sourignavong_24 Start: 14185, Stop: 14853, Start Num: 5

Candidate Starts for Sourignavong_24:

(Start: 5 @14185 has 45 MA's), (7, 14200), (10, 14209), (13, 14248), (17, 14299), (24, 14416), (32, 14515), (38, 14677), (40, 14773), (42, 14800),

Gene: StewieGriff_23 Start: 14113, Stop: 14781, Start Num: 5

Candidate Starts for StewieGriff_23:

(Start: 5 @14113 has 45 MA's), (7, 14128), (10, 14137), (13, 14176), (14, 14182), (24, 14344), (27, 14383), (32, 14443), (40, 14701),

Gene: Stillion_74 Start: 49940, Stop: 50659, Start Num: 4

Candidate Starts for Stillion_74:

(Start: 2 @49898 has 1 MA's), (Start: 4 @49940 has 3 MA's), (15, 50018), (16, 50051), (18, 50081), (20, 50096), (21, 50126), (25, 50198), (31, 50258), (34, 50291), (35, 50327), (37, 50381), (41, 50558), (44, 50624),

Gene: Sting_74 Start: 49740, Stop: 50501, Start Num: 2

Candidate Starts for Sting_74:

(Start: 2 @49740 has 1 MA's), (Start: 4 @49782 has 3 MA's), (15, 49860), (16, 49893), (18, 49923), (20, 49938), (21, 49968), (25, 50040), (31, 50100), (34, 50133), (35, 50169), (37, 50223), (41, 50400), (44, 50466),

Gene: Stratus_23 Start: 14190, Stop: 14858, Start Num: 5

Candidate Starts for Stratus_23:

(Start: 5 @14190 has 45 MA's), (7, 14205), (10, 14214), (13, 14253), (17, 14304), (24, 14421), (32, 14520), (38, 14682), (40, 14778), (42, 14805),

Gene: StrawberryLem_21 Start: 13802, Stop: 14563, Start Num: 5

Candidate Starts for StrawberryLem_21:

(Start: 5 @13802 has 45 MA's), (7, 13817), (9, 13823), (10, 13826), (13, 13865), (24, 14033), (27, 14072), (32, 14132), (33, 14135), (39, 14375), (48, 14495), (49, 14549),

Gene: Swenson_23 Start: 14237, Stop: 14905, Start Num: 5

Candidate Starts for Swenson_23:

(Start: 5 @14237 has 45 MA's), (7, 14252), (10, 14261), (13, 14300), (24, 14468), (27, 14507), (32, 14567), (40, 14825),

Gene: Taj14_23 Start: 14112, Stop: 14780, Start Num: 5

Candidate Starts for Taj14_23:

(Start: 5 @14112 has 45 MA's), (7, 14127), (10, 14136), (13, 14175), (24, 14343), (27, 14382), (32, 14442), (40, 14700),

Gene: TinoCrisci_23 Start: 14116, Stop: 14784, Start Num: 5

Candidate Starts for TinoCrisci_23:

(Start: 5 @14116 has 45 MA's), (7, 14131), (10, 14140), (13, 14179), (17, 14230), (24, 14347), (32, 14446), (38, 14608), (40, 14704), (42, 14731),

Gene: Toulouse_22 Start: 13879, Stop: 14547, Start Num: 5

Candidate Starts for Toulouse_22:

(Start: 5 @13879 has 45 MA's), (7, 13894), (13, 13942), (17, 13993), (24, 14110), (32, 14209), (38, 14371), (40, 14467), (42, 14494),

Gene: TymAbreu_23 Start: 14116, Stop: 14784, Start Num: 5

Candidate Starts for TymAbreu_23:

(Start: 5 @14116 has 45 MA's), (7, 14131), (10, 14140), (13, 14179), (17, 14230), (24, 14347), (32, 14446), (38, 14608), (40, 14704), (42, 14731),

Gene: Vinye_25 Start: 14594, Stop: 15367, Start Num: 5

Candidate Starts for Vinye_25:

(Start: 5 @14594 has 45 MA's), (7, 14609), (10, 14618), (13, 14657), (17, 14708), (19, 14735), (22, 14774), (23, 14789), (24, 14825), (27, 14864), (32, 14927), (36, 14993), (38, 15086), (43, 15257), (46, 15281),

Gene: Ximeno_21 Start: 13890, Stop: 14651, Start Num: 5

Candidate Starts for Ximeno_21:

(Start: 5 @13890 has 45 MA's), (7, 13905), (9, 13911), (10, 13914), (13, 13953), (24, 14121), (32, 14220), (33, 14223), (39, 14463), (48, 14583), (49, 14637),

Gene: Yank_23 Start: 14084, Stop: 14752, Start Num: 5

Candidate Starts for Yank_23:

(Start: 5 @14084 has 45 MA's), (7, 14099), (10, 14108), (17, 14198), (24, 14315), (32, 14414), (38, 14576), (40, 14672), (42, 14699),