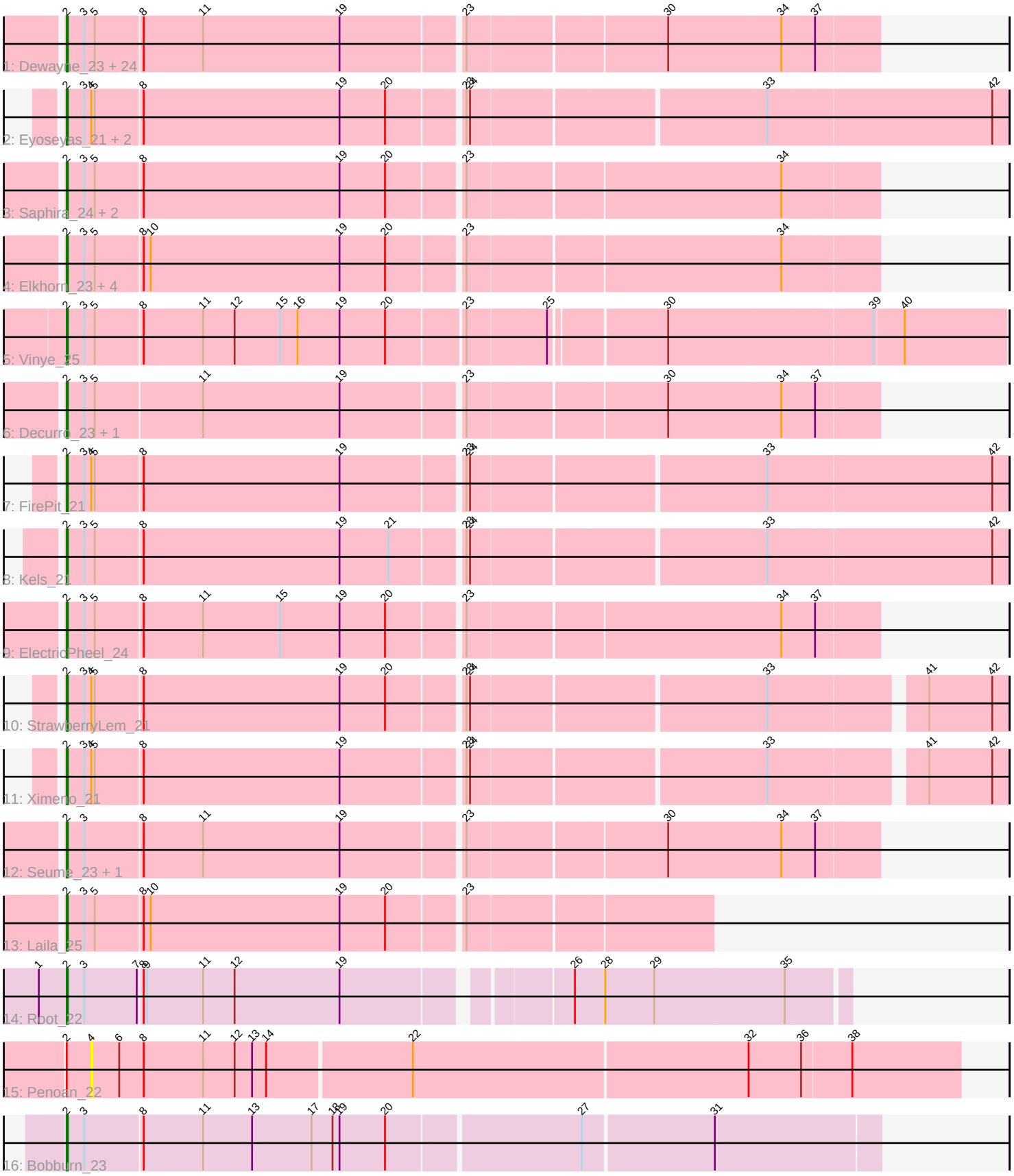
Pham 339773


1: Dewayne_23 + 24
2: Eyoseyas_21 + 2
3: Saphira_24 + 2
4: Elkhorn_23 + 4
5: Vinye_25
6: Decurro_23 + 1
7: FirePit_21
8: Kels_21
9: ElectricPheel_24
10: StrawberryLem_21
11: Ximeno_21
12: Seume_23 + 1
13: Laila_25
14: Root_22
15: Penoan_22
16: Bobburn_23

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 339773 Report

This analysis was run 11/14/26 on database version 672.

Pham number 339773 has 50 members, 2 are drafts.

Phages represented in each track:
• Track 1 : Dewayne_23, Sandman_23, Moloch_23, Hunnie_23, Ronnie_23, LouisXIV_23, Inspire2_23, CGermain_23, Azathoth_23, Courtney3_23, Muttlie_23, Arby_23, TinoCrisci_23, Prospero_23, Stratus_23, TymAbreu_23, Massimo_23, Jessica_24, Mariposa_23, Guntur_23, Maggie_23, Copper_23, Chestnut_23, Link_23, Sourignavong_24
• Track 2 : Eyoseyas_21, SerialPhiller_21, Arielagos_21
• Track 3 : Saphira_24, Taj14_23, Swenson_23
• Track 4 : Elkhorn_23, StewieGriff_23, Lore_23, Blair_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 : Laila_25
• Track 14 : Root_22
• Track 15 : Penoan_22
• Track 16 : Bobburn_23

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

The start number called the most often in the published annotations is 2, it was called in 48 of the 48 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Arby_23, Arielagos_21, Azathoth_23, Blair_23, Bobburn_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, Laila_25, Link_23, Lore_23, LouisXIV_23, Maggie_23, Mariposa_23, Massimo_23, Moloch_23, Muttlie_23, Prospero_23, Ronnie_23, Root_22, 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:
• Penoan_22,

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

Summary by start number:

Start 2:
• Found in 50 of 50 (100.0%) of genes in pham
• Manual Annotations of this start: 48 of 48
• Called 98.0% of time when present
• Phage (with cluster) where this start called: Arby_23 (AN), Arielagos_21 (AN), Azathoth_23 (AN), Blair_23 (AN), Bobburn_23 (singleton), 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), Laila_25 (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), Root_22 (JC), 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),

Start 4:
• Found in 7 of 50 (14.0%) of genes in pham
• No Manual Annotations of this start.
• Called 14.3% of time when present
• Phage (with cluster) where this start called: Penoan_22 (UNK),

Summary by clusters:

There are 4 clusters represented in this pham: JC, singleton, UNK, AN,

Info for manual annotations of cluster AN:
•Start number 2 was manually annotated 46 times for cluster AN.

Info for manual annotations of cluster JC:
•Start number 2 was manually annotated 1 time for cluster JC.

Gene Information:

Gene: Arby_23 Start: 14116, Stop: 14784, Start Num: 2
Candidate Starts for Arby_23:
(Start: 2 @14116 has 48 MA's), (3, 14131), (5, 14140), (8, 14179), (11, 14230), (19, 14347), (23, 14446), (30, 14608), (34, 14704), (37, 14731),

Gene: Arielagos_21 Start: 13877, Stop: 14653, Start Num: 2
Candidate Starts for Arielagos_21:
(Start: 2 @13877 has 48 MA's), (3, 13892), (4, 13898), (5, 13901), (8, 13940), (19, 14108), (20, 14147), (23, 14207), (24, 14210), (33, 14450), (42, 14639),

Gene: Azathoth_23 Start: 14116, Stop: 14784, Start Num: 2
Candidate Starts for Azathoth_23:
(Start: 2 @14116 has 48 MA's), (3, 14131), (5, 14140), (8, 14179), (11, 14230), (19, 14347), (23, 14446), (30, 14608), (34, 14704), (37, 14731),

Gene: Blair_23 Start: 14113, Stop: 14781, Start Num: 2
Candidate Starts for Blair_23:
(Start: 2 @14113 has 48 MA's), (3, 14128), (5, 14137), (8, 14176), (10, 14182), (19, 14344), (20, 14383), (23, 14443), (34, 14701),

Gene: Bobburn_23 Start: 15760, Stop: 16434, Start Num: 2
Candidate Starts for Bobburn_23:
(Start: 2 @15760 has 48 MA's), (3, 15775), (8, 15823), (11, 15874), (13, 15916), (17, 15967), (18, 15985), (19, 15991), (20, 16030), (27, 16189), (31, 16297),

Gene: CGermain_23 Start: 14116, Stop: 14784, Start Num: 2
Candidate Starts for CGermain_23:
(Start: 2 @14116 has 48 MA's), (3, 14131), (5, 14140), (8, 14179), (11, 14230), (19, 14347), (23, 14446), (30, 14608), (34, 14704), (37, 14731),

Gene: Chestnut_23 Start: 14116, Stop: 14784, Start Num: 2
Candidate Starts for Chestnut_23:
(Start: 2 @14116 has 48 MA's), (3, 14131), (5, 14140), (8, 14179), (11, 14230), (19, 14347), (23, 14446), (30, 14608), (34, 14704), (37, 14731),

Gene: Copper_23 Start: 14116, Stop: 14784, Start Num: 2
Candidate Starts for Copper_23:
(Start: 2 @14116 has 48 MA's), (3, 14131), (5, 14140), (8, 14179), (11, 14230), (19, 14347), (23, 14446), (30, 14608), (34, 14704), (37, 14731),

Gene: Courtney3_23 Start: 14116, Stop: 14784, Start Num: 2
Candidate Starts for Courtney3_23:
(Start: 2 @14116 has 48 MA's), (3, 14131), (5, 14140), (8, 14179), (11, 14230), (19, 14347), (23, 14446), (30, 14608), (34, 14704), (37, 14731),

Gene: Decurro_23 Start: 14084, Stop: 14752, Start Num: 2
Candidate Starts for Decurro_23:
(Start: 2 @14084 has 48 MA's), (3, 14099), (5, 14108), (11, 14198), (19, 14315), (23, 14414), (30, 14576), (34, 14672), (37, 14699),

Gene: Dewayne_23 Start: 14116, Stop: 14784, Start Num: 2
Candidate Starts for Dewayne_23:
(Start: 2 @14116 has 48 MA's), (3, 14131), (5, 14140), (8, 14179), (11, 14230), (19, 14347), (23, 14446), (30, 14608), (34, 14704), (37, 14731),

Gene: ElectricPheel_24 Start: 14157, Stop: 14825, Start Num: 2
Candidate Starts for ElectricPheel_24:

(Start: 2 @14157 has 48 MA's), (3, 14172), (5, 14181), (8, 14220), (11, 14271), (15, 14337), (19, 14388), (20, 14427), (23, 14487), (34, 14745), (37, 14772),

Gene: Elkhorn_23 Start: 14113, Stop: 14781, Start Num: 2
Candidate Starts for Elkhorn_23:
(Start: 2 @14113 has 48 MA's), (3, 14128), (5, 14137), (8, 14176), (10, 14182), (19, 14344), (20, 14383), (23, 14443), (34, 14701),

Gene: Eyoseyas_21 Start: 13877, Stop: 14653, Start Num: 2
Candidate Starts for Eyoseyas_21:
(Start: 2 @13877 has 48 MA's), (3, 13892), (4, 13898), (5, 13901), (8, 13940), (19, 14108), (20, 14147), (23, 14207), (24, 14210), (33, 14450), (42, 14639),

Gene: FirePit_21 Start: 13890, Stop: 14666, Start Num: 2
Candidate Starts for FirePit_21:
(Start: 2 @13890 has 48 MA's), (3, 13905), (4, 13911), (5, 13914), (8, 13953), (19, 14121), (23, 14220), (24, 14223), (33, 14463), (42, 14652),

Gene: Guntur_23 Start: 14116, Stop: 14784, Start Num: 2
Candidate Starts for Guntur_23:
(Start: 2 @14116 has 48 MA's), (3, 14131), (5, 14140), (8, 14179), (11, 14230), (19, 14347), (23, 14446), (30, 14608), (34, 14704), (37, 14731),

Gene: Hunnie_23 Start: 14116, Stop: 14784, Start Num: 2
Candidate Starts for Hunnie_23:
(Start: 2 @14116 has 48 MA's), (3, 14131), (5, 14140), (8, 14179), (11, 14230), (19, 14347), (23, 14446), (30, 14608), (34, 14704), (37, 14731),

Gene: Inspire2_23 Start: 14116, Stop: 14784, Start Num: 2
Candidate Starts for Inspire2_23:
(Start: 2 @14116 has 48 MA's), (3, 14131), (5, 14140), (8, 14179), (11, 14230), (19, 14347), (23, 14446), (30, 14608), (34, 14704), (37, 14731),

Gene: Jessica_24 Start: 14116, Stop: 14784, Start Num: 2
Candidate Starts for Jessica_24:
(Start: 2 @14116 has 48 MA's), (3, 14131), (5, 14140), (8, 14179), (11, 14230), (19, 14347), (23, 14446), (30, 14608), (34, 14704), (37, 14731),

Gene: Kels_21 Start: 13437, Stop: 14213, Start Num: 2
Candidate Starts for Kels_21:
(Start: 2 @13437 has 48 MA's), (3, 13452), (5, 13461), (8, 13500), (19, 13668), (21, 13710), (23, 13767), (24, 13770), (33, 14010), (42, 14199),

Gene: KylieMac_24 Start: 14100, Stop: 14768, Start Num: 2
Candidate Starts for KylieMac_24:
(Start: 2 @14100 has 48 MA's), (3, 14115), (5, 14124), (8, 14163), (10, 14169), (19, 14331), (20, 14370), (23, 14430), (34, 14688),

Gene: Laila_25 Start: 14113, Stop: 14643, Start Num: 2
Candidate Starts for Laila_25:
(Start: 2 @14113 has 48 MA's), (3, 14128), (5, 14137), (8, 14176), (10, 14182), (19, 14344), (20, 14383), (23, 14443),

Gene: Link_23 Start: 14081, Stop: 14749, Start Num: 2
Candidate Starts for Link_23:
(Start: 2 @14081 has 48 MA's), (3, 14096), (5, 14105), (8, 14144), (11, 14195), (19, 14312), (23, 14411), (30, 14573), (34, 14669), (37, 14696),

Gene: Lore_23 Start: 14113, Stop: 14781, Start Num: 2
Candidate Starts for Lore_23:
(Start: 2 @14113 has 48 MA's), (3, 14128), (5, 14137), (8, 14176), (10, 14182), (19, 14344), (20, 14383), (23, 14443), (34, 14701),

Gene: LouisXIV_23 Start: 14116, Stop: 14784, Start Num: 2
Candidate Starts for LouisXIV_23:
(Start: 2 @14116 has 48 MA's), (3, 14131), (5, 14140), (8, 14179), (11, 14230), (19, 14347), (23, 14446), (30, 14608), (34, 14704), (37, 14731),

Gene: Maggie_23 Start: 14116, Stop: 14784, Start Num: 2
Candidate Starts for Maggie_23:
(Start: 2 @14116 has 48 MA's), (3, 14131), (5, 14140), (8, 14179), (11, 14230), (19, 14347), (23, 14446), (30, 14608), (34, 14704), (37, 14731),

Gene: Mariposa_23 Start: 14116, Stop: 14784, Start Num: 2
Candidate Starts for Mariposa_23:
(Start: 2 @14116 has 48 MA's), (3, 14131), (5, 14140), (8, 14179), (11, 14230), (19, 14347), (23, 14446), (30, 14608), (34, 14704), (37, 14731),

Gene: Massimo_23 Start: 14116, Stop: 14784, Start Num: 2
Candidate Starts for Massimo_23:
(Start: 2 @14116 has 48 MA's), (3, 14131), (5, 14140), (8, 14179), (11, 14230), (19, 14347), (23, 14446), (30, 14608), (34, 14704), (37, 14731),

Gene: Moloch_23 Start: 14190, Stop: 14858, Start Num: 2
Candidate Starts for Moloch_23:
(Start: 2 @14190 has 48 MA's), (3, 14205), (5, 14214), (8, 14253), (11, 14304), (19, 14421), (23, 14520), (30, 14682), (34, 14778), (37, 14805),

Gene: Muttlie_23 Start: 14084, Stop: 14752, Start Num: 2
Candidate Starts for Muttlie_23:
(Start: 2 @14084 has 48 MA's), (3, 14099), (5, 14108), (8, 14147), (11, 14198), (19, 14315), (23, 14414), (30, 14576), (34, 14672), (37, 14699),

Gene: Penoan_22 Start: 14020, Stop: 14751, Start Num: 4
Candidate Starts for Penoan_22:
(Start: 2 @13999 has 48 MA's), (4, 14020), (6, 14044), (8, 14065), (11, 14116), (12, 14143), (13, 14158), (14, 14170), (22, 14290), (32, 14572), (36, 14617), (38, 14659),

Gene: Prospero_23 Start: 14116, Stop: 14784, Start Num: 2
Candidate Starts for Prospero_23:
(Start: 2 @14116 has 48 MA's), (3, 14131), (5, 14140), (8, 14179), (11, 14230), (19, 14347), (23, 14446), (30, 14608), (34, 14704), (37, 14731),

Gene: Ronnie_23 Start: 14116, Stop: 14784, Start Num: 2
Candidate Starts for Ronnie_23:

(Start: 2 @14116 has 48 MA's), (3, 14131), (5, 14140), (8, 14179), (11, 14230), (19, 14347), (23, 14446), (30, 14608), (34, 14704), (37, 14731),

Gene: Root_22 Start: 13926, Stop: 14558, Start Num: 2
Candidate Starts for Root_22:
(1, 13902), (Start: 2 @13926 has 48 MA's), (3, 13941), (7, 13986), (8, 13989), (9, 13992), (11, 14040), (12, 14067), (19, 14157), (26, 14331), (28, 14355), (29, 14397), (35, 14508),

Gene: Sandman_23 Start: 14190, Stop: 14858, Start Num: 2
Candidate Starts for Sandman_23:
(Start: 2 @14190 has 48 MA's), (3, 14205), (5, 14214), (8, 14253), (11, 14304), (19, 14421), (23, 14520), (30, 14682), (34, 14778), (37, 14805),

Gene: Saphira_24 Start: 14115, Stop: 14783, Start Num: 2
Candidate Starts for Saphira_24:
(Start: 2 @14115 has 48 MA's), (3, 14130), (5, 14139), (8, 14178), (19, 14346), (20, 14385), (23, 14445), (34, 14703),

Gene: SerialPhiller_21 Start: 13877, Stop: 14653, Start Num: 2
Candidate Starts for SerialPhiller_21:
(Start: 2 @13877 has 48 MA's), (3, 13892), (4, 13898), (5, 13901), (8, 13940), (19, 14108), (20, 14147), (23, 14207), (24, 14210), (33, 14450), (42, 14639),

Gene: Seume_23 Start: 13879, Stop: 14547, Start Num: 2
Candidate Starts for Seume_23:
(Start: 2 @13879 has 48 MA's), (3, 13894), (8, 13942), (11, 13993), (19, 14110), (23, 14209), (30, 14371), (34, 14467), (37, 14494),

Gene: Sourignavong_24 Start: 14185, Stop: 14853, Start Num: 2
Candidate Starts for Sourignavong_24:
(Start: 2 @14185 has 48 MA's), (3, 14200), (5, 14209), (8, 14248), (11, 14299), (19, 14416), (23, 14515), (30, 14677), (34, 14773), (37, 14800),

Gene: StewieGriff_23 Start: 14113, Stop: 14781, Start Num: 2
Candidate Starts for StewieGriff_23:
(Start: 2 @14113 has 48 MA's), (3, 14128), (5, 14137), (8, 14176), (10, 14182), (19, 14344), (20, 14383), (23, 14443), (34, 14701),

Gene: Stratus_23 Start: 14190, Stop: 14858, Start Num: 2
Candidate Starts for Stratus_23:
(Start: 2 @14190 has 48 MA's), (3, 14205), (5, 14214), (8, 14253), (11, 14304), (19, 14421), (23, 14520), (30, 14682), (34, 14778), (37, 14805),

Gene: StrawberryLem_21 Start: 13802, Stop: 14563, Start Num: 2
Candidate Starts for StrawberryLem_21:
(Start: 2 @13802 has 48 MA's), (3, 13817), (4, 13823), (5, 13826), (8, 13865), (19, 14033), (20, 14072), (23, 14132), (24, 14135), (33, 14375), (41, 14495), (42, 14549),

Gene: Swenson_23 Start: 14237, Stop: 14905, Start Num: 2
Candidate Starts for Swenson_23:
(Start: 2 @14237 has 48 MA's), (3, 14252), (5, 14261), (8, 14300), (19, 14468), (20, 14507), (23, 14567), (34, 14825),

Gene: Taj14_23 Start: 14112, Stop: 14780, Start Num: 2
Candidate Starts for Taj14_23:
(Start: 2 @14112 has 48 MA's), (3, 14127), (5, 14136), (8, 14175), (19, 14343), (20, 14382), (23, 14442), (34, 14700),

Gene: TinoCrisci_23 Start: 14116, Stop: 14784, Start Num: 2
Candidate Starts for TinoCrisci_23:
(Start: 2 @14116 has 48 MA's), (3, 14131), (5, 14140), (8, 14179), (11, 14230), (19, 14347), (23, 14446), (30, 14608), (34, 14704), (37, 14731),

Gene: Toulouse_22 Start: 13879, Stop: 14547, Start Num: 2
Candidate Starts for Toulouse_22:
(Start: 2 @13879 has 48 MA's), (3, 13894), (8, 13942), (11, 13993), (19, 14110), (23, 14209), (30, 14371), (34, 14467), (37, 14494),

Gene: TymAbreu_23 Start: 14116, Stop: 14784, Start Num: 2
Candidate Starts for TymAbreu_23:
(Start: 2 @14116 has 48 MA's), (3, 14131), (5, 14140), (8, 14179), (11, 14230), (19, 14347), (23, 14446), (30, 14608), (34, 14704), (37, 14731),

Gene: Vinye_25 Start: 14594, Stop: 15367, Start Num: 2
Candidate Starts for Vinye_25:
(Start: 2 @14594 has 48 MA's), (3, 14609), (5, 14618), (8, 14657), (11, 14708), (12, 14735), (15, 14774), (16, 14789), (19, 14825), (20, 14864), (23, 14927), (25, 14993), (30, 15086), (39, 15257), (40, 15281),

Gene: Ximeno_21 Start: 13890, Stop: 14651, Start Num: 2
Candidate Starts for Ximeno_21:
(Start: 2 @13890 has 48 MA's), (3, 13905), (4, 13911), (5, 13914), (8, 13953), (19, 14121), (23, 14220), (24, 14223), (33, 14463), (41, 14583), (42, 14637),

Gene: Yank_23 Start: 14084, Stop: 14752, Start Num: 2
Candidate Starts for Yank_23:
(Start: 2 @14084 has 48 MA's), (3, 14099), (5, 14108), (11, 14198), (19, 14315), (23, 14414), (30, 14576), (34, 14672), (37, 14699),