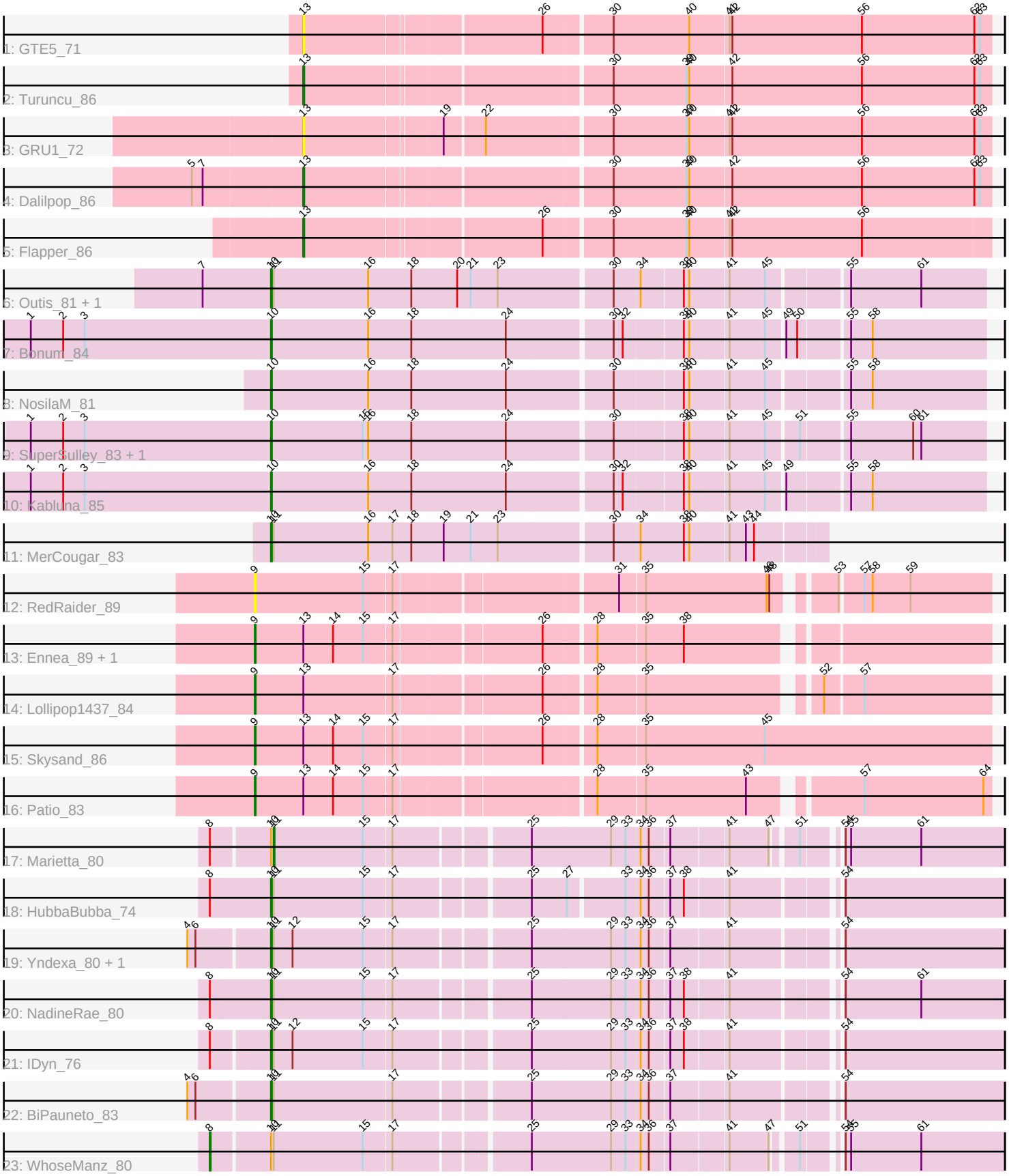
Pham 214553


1: GTE5_71
2: Turuncu_86
3: GRU1_72
4: Dalilpop_86
5: Flapper_86
6: Outis_81 + 1
7: Bonum_84
8: NosilaM_81
9: SuperSulley_83 + 1
10: Kabluna_85
11: MerCougar_83
12: RedRaider_89
13: Ennea_89 + 1
14: Lollipop1437_84
15: Skysand_86
16: Patio_83
17: Marietta_80
18: HubbaBubba_74
19: Yndexa_80 + 1
20: NadineRae_80
21: IDyn_76
22: BiPauneto_83
23: WhoseManz_80

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 214553 Report

This analysis was run 02/22/25 on database version 588.

Pham number 214553 has 27 members, 3 are drafts.

Phages represented in each track:
- Track 1 : GTE5_71
- Track 2 : Turuncu_86
- Track 3 : GRU1_72
- Track 4 : Dalilpop_86
- Track 5 : Flapper_86
- Track 6 : Outis_81, StarStruck_81
- Track 7 : Bonum_84
- Track 8 : NosilaM_81
- Track 9 : SuperSulley_83, Buggaboo_83
- Track 10 : Kabluna_85
- Track 11 : MerCougar_83
- Track 12 : RedRaider_89
- Track 13 : Ennea_89, Float294_83
- Track 14 : Lollipop1437_84
- Track 15 : Skysand_86
- Track 16 : Patio_83
- Track 17 : Marietta_80
- Track 18 : HubbaBubba_74
- Track 19 : Yndexa_80, Sukkupi_80
- Track 20 : NadineRae_80
- Track 21 : IDyn_76
- Track 22 : BiPauneto_83
- Track 23 : WhoseManz_80

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

The start number called the most often in the published annotations is 10, it was called in 14 of the 24 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
- BiPauneto_83, Bonum_84, Buggaboo_83, HubbaBubba_74, IDyn_76, Kabluna_85, MerCougar_83, NadineRae_80, NosilaM_81, Outis_81, StarStruck_81, Sukkupi_80, SuperSulley_83, Yndexa_80,

Genes that have the "Most Annotated" start but do not call it:
• Marietta_80, WhoseManz_80,

Genes that do not have the "Most Annotated" start:
• Dalilpop_86, Ennea_89, Flapper_86, Float294_83, GRU1_72, GTE5_71, Lollipop1437_84, Patio_83, RedRaider_89, Skysand_86, Turuncu_86,

Summary by start number:

Start 8:
• Found in 5 of 27 (18.5%) of genes in pham
• Manual Annotations of this start: 1 of 24
• Called 20.0% of time when present
• Phage (with cluster) where this start called: WhoseManz_80 (CR4),

Start 9:
• Found in 6 of 27 (22.2%) of genes in pham
• Manual Annotations of this start: 5 of 24
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Ennea_89 (CR3), Float294_83 (CR3), Lollipop1437_84 (CR3), Patio_83 (CR3), RedRaider_89 (CR3), Skysand_86 (CR3),

Start 10:
• Found in 16 of 27 (59.3%) of genes in pham
• Manual Annotations of this start: 14 of 24
• Called 87.5% of time when present
• Phage (with cluster) where this start called: BiPauneto_83 (CR4), Bonum_84 (CR2), Buggaboo_83 (CR2), HubbaBubba_74 (CR4), IDyn_76 (CR4), Kabluna_85 (CR2), MerCougar_83 (CR2), NadineRae_80 (CR4), NosilaM_81 (CR2), Outis_81 (CR2), StarStruck_81 (CR2), Sukkupi_80 (CR4), SuperSulley_83 (CR2), Yndexa_80 (CR4),

Start 11:
• Found in 11 of 27 (40.7%) of genes in pham
• Manual Annotations of this start: 1 of 24
• Called 9.1% of time when present
• Phage (with cluster) where this start called: Marietta_80 (CR4),

Start 13:
• Found in 10 of 27 (37.0%) of genes in pham
• Manual Annotations of this start: 3 of 24
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Dalilpop_86 (CR1), Flapper_86 (CR1), GRU1_72 (CR1), GTE5_71 (CR1), Turuncu_86 (CR1),

Summary by clusters:

There are 4 clusters represented in this pham: CR2, CR3, CR1, CR4,

Info for manual annotations of cluster CR1:
•Start number 13 was manually annotated 3 times for cluster CR1.

Info for manual annotations of cluster CR2:
•Start number 10 was manually annotated 8 times for cluster CR2.

Info for manual annotations of cluster CR3:
•Start number 9 was manually annotated 5 times for cluster CR3.

Info for manual annotations of cluster CR4:
•Start number 8 was manually annotated 1 time for cluster CR4.
•Start number 10 was manually annotated 6 times for cluster CR4.
•Start number 11 was manually annotated 1 time for cluster CR4.

Gene Information:

Gene: BiPauneto_83 Start: 59069, Stop: 59824, Start Num: 10
Candidate Starts for BiPauneto_83:
(4, 58985), (6, 58994), (Start: 10 @59069 has 14 MA's), (Start: 11 @59072 has 1 MA's), (17, 59201), (25, 59336), (29, 59423), (33, 59438), (34, 59453), (36, 59462), (37, 59483), (41, 59543), (54, 59648),

Gene: Bonum_84 Start: 60988, Stop: 61746, Start Num: 10
Candidate Starts for Bonum_84:
(1, 60724), (2, 60760), (3, 60784), (Start: 10 @60988 has 14 MA's), (16, 61096), (18, 61144), (24, 61249), (30, 61360), (32, 61369), (38, 61432), (40, 61438), (41, 61477), (45, 61516), (49, 61534), (50, 61546), (55, 61597), (58, 61621),

Gene: Buggaboo_83 Start: 61523, Stop: 62281, Start Num: 10
Candidate Starts for Buggaboo_83:
(1, 61259), (2, 61295), (3, 61319), (Start: 10 @61523 has 14 MA's), (15, 61625), (16, 61631), (18, 61679), (24, 61784), (30, 61895), (38, 61967), (40, 61973), (41, 62012), (45, 62051), (51, 62084), (55, 62132), (60, 62201), (61, 62210),

Gene: Dalilpop_86 Start: 61784, Stop: 62515, Start Num: 13
Candidate Starts for Dalilpop_86:
(5, 61664), (7, 61676), (Start: 13 @61784 has 3 MA's), (30, 62102), (39, 62183), (40, 62186), (42, 62231), (56, 62375), (62, 62498), (63, 62504),

Gene: Ennea_89 Start: 61940, Stop: 62692, Start Num: 9
Candidate Starts for Ennea_89:
(Start: 9 @61940 has 5 MA's), (Start: 13 @61994 has 3 MA's), (14, 62027), (15, 62060), (17, 62090), (26, 62243), (28, 62294), (35, 62345), (38, 62387),

Gene: Flapper_86 Start: 61618, Stop: 62349, Start Num: 13
Candidate Starts for Flapper_86:
(Start: 13 @61618 has 3 MA's), (26, 61867), (30, 61936), (39, 62017), (40, 62020), (41, 62062), (42, 62065), (56, 62209),

Gene: Float294_83 Start: 61844, Stop: 62596, Start Num: 9
Candidate Starts for Float294_83:
(Start: 9 @61844 has 5 MA's), (Start: 13 @61898 has 3 MA's), (14, 61931), (15, 61964), (17, 61994), (26, 62147), (28, 62198), (35, 62249), (38, 62291),

Gene: GRU1_72 Start: 53237, Stop: 53968, Start Num: 13
Candidate Starts for GRU1_72:

(Start: 13 @53237 has 3 MA's), (19, 53381), (22, 53423), (30, 53555), (39, 53636), (40, 53639), (41, 53681), (42, 53684), (56, 53828), (62, 53951), (63, 53957),

Gene: GTE5_71 Start: 54128, Stop: 54859, Start Num: 13
Candidate Starts for GTE5_71:
(Start: 13 @54128 has 3 MA's), (26, 54377), (30, 54446), (40, 54530), (41, 54572), (42, 54575), (56, 54719), (62, 54842), (63, 54848),

Gene: HubbaBubba_74 Start: 55694, Stop: 56443, Start Num: 10
Candidate Starts for HubbaBubba_74:
(Start: 8 @55628 has 1 MA's), (Start: 10 @55694 has 14 MA's), (Start: 11 @55697 has 1 MA's), (15, 55796), (17, 55826), (25, 55961), (27, 56000), (33, 56057), (34, 56072), (36, 56081), (37, 56102), (38, 56117), (41, 56162), (54, 56267),

Gene: IDyn_76 Start: 56063, Stop: 56818, Start Num: 10
Candidate Starts for IDyn_76:
(Start: 8 @56006 has 1 MA's), (Start: 10 @56063 has 14 MA's), (Start: 11 @56066 has 1 MA's), (12, 56087), (15, 56165), (17, 56195), (25, 56330), (29, 56417), (33, 56432), (34, 56447), (36, 56456), (37, 56477), (38, 56492), (41, 56537), (54, 56642),

Gene: Kabluna_85 Start: 60338, Stop: 61096, Start Num: 10
Candidate Starts for Kabluna_85:
(1, 60074), (2, 60110), (3, 60134), (Start: 10 @60338 has 14 MA's), (16, 60446), (18, 60494), (24, 60599), (30, 60710), (32, 60719), (38, 60782), (40, 60788), (41, 60827), (45, 60866), (49, 60884), (55, 60947), (58, 60971),

Gene: Lollipop1437_84 Start: 61636, Stop: 62388, Start Num: 9
Candidate Starts for Lollipop1437_84:
(Start: 9 @61636 has 5 MA's), (Start: 13 @61690 has 3 MA's), (17, 61786), (26, 61939), (28, 61990), (35, 62041), (52, 62212), (57, 62248),

Gene: Marietta_80 Start: 56972, Stop: 57715, Start Num: 11
Candidate Starts for Marietta_80:
(Start: 8 @56909 has 1 MA's), (Start: 10 @56969 has 14 MA's), (Start: 11 @56972 has 1 MA's), (15, 57071), (17, 57101), (25, 57236), (29, 57323), (33, 57338), (34, 57353), (36, 57362), (37, 57383), (41, 57443), (47, 57485), (51, 57506), (54, 57539), (55, 57545), (61, 57623),

Gene: MerCougar_83 Start: 61964, Stop: 62554, Start Num: 10
Candidate Starts for MerCougar_83:
(Start: 10 @61964 has 14 MA's), (Start: 11 @61967 has 1 MA's), (16, 62072), (17, 62099), (18, 62120), (19, 62156), (21, 62186), (23, 62216), (30, 62336), (34, 62363), (38, 62411), (40, 62417), (41, 62456), (43, 62474), (44, 62483),

Gene: NadineRae_80 Start: 56569, Stop: 57324, Start Num: 10
Candidate Starts for NadineRae_80:
(Start: 8 @56503 has 1 MA's), (Start: 10 @56569 has 14 MA's), (Start: 11 @56572 has 1 MA's), (15, 56671), (17, 56701), (25, 56836), (29, 56923), (33, 56938), (34, 56953), (36, 56962), (37, 56983), (38, 56998), (41, 57043), (54, 57148), (61, 57232),

Gene: NosilaM_81 Start: 60594, Stop: 61352, Start Num: 10
Candidate Starts for NosilaM_81:
(Start: 10 @60594 has 14 MA's), (16, 60702), (18, 60750), (24, 60855), (30, 60966), (38, 61038), (40, 61044), (41, 61083), (45, 61122), (55, 61203), (58, 61227),

Gene: Outis_81 Start: 61065, Stop: 61823, Start Num: 10
Candidate Starts for Outis_81:
(7, 60990), (Start: 10 @61065 has 14 MA's), (Start: 11 @61068 has 1 MA's), (16, 61173), (18, 61221), (20, 61272), (21, 61287), (23, 61317), (30, 61437), (34, 61464), (38, 61509), (40, 61515), (41, 61554), (45, 61593), (55, 61674), (61, 61752),

Gene: Patio_83 Start: 60834, Stop: 61592, Start Num: 9
Candidate Starts for Patio_83:
(Start: 9 @60834 has 5 MA's), (Start: 13 @60888 has 3 MA's), (14, 60921), (15, 60954), (17, 60984), (28, 61188), (35, 61239), (43, 61350), (57, 61452), (64, 61584),

Gene: RedRaider_89 Start: 63045, Stop: 63797, Start Num: 9
Candidate Starts for RedRaider_89:
(Start: 9 @63045 has 5 MA's), (15, 63165), (17, 63195), (31, 63423), (35, 63450), (46, 63582), (48, 63585), (53, 63636), (57, 63657), (58, 63666), (59, 63708),

Gene: Skysand_86 Start: 61757, Stop: 62545, Start Num: 9
Candidate Starts for Skysand_86:
(Start: 9 @61757 has 5 MA's), (Start: 13 @61811 has 3 MA's), (14, 61844), (15, 61877), (17, 61907), (26, 62060), (28, 62111), (35, 62162), (45, 62294),

Gene: StarStruck_81 Start: 61065, Stop: 61823, Start Num: 10
Candidate Starts for StarStruck_81:
(7, 60990), (Start: 10 @61065 has 14 MA's), (Start: 11 @61068 has 1 MA's), (16, 61173), (18, 61221), (20, 61272), (21, 61287), (23, 61317), (30, 61437), (34, 61464), (38, 61509), (40, 61515), (41, 61554), (45, 61593), (55, 61674), (61, 61752),

Gene: Sukkupi_80 Start: 58610, Stop: 59365, Start Num: 10
Candidate Starts for Sukkupi_80:
(4, 58526), (6, 58535), (Start: 10 @58610 has 14 MA's), (Start: 11 @58613 has 1 MA's), (12, 58634), (15, 58712), (17, 58742), (25, 58877), (29, 58964), (33, 58979), (34, 58994), (36, 59003), (37, 59024), (41, 59084), (54, 59189),

Gene: SuperSulley_83 Start: 61523, Stop: 62281, Start Num: 10
Candidate Starts for SuperSulley_83:
(1, 61259), (2, 61295), (3, 61319), (Start: 10 @61523 has 14 MA's), (15, 61625), (16, 61631), (18, 61679), (24, 61784), (30, 61895), (38, 61967), (40, 61973), (41, 62012), (45, 62051), (51, 62084), (55, 62132), (60, 62201), (61, 62210),

Gene: Turuncu_86 Start: 61237, Stop: 61968, Start Num: 13
Candidate Starts for Turuncu_86:
(Start: 13 @61237 has 3 MA's), (30, 61555), (39, 61636), (40, 61639), (42, 61684), (56, 61828), (62, 61951), (63, 61957),

Gene: WhoseManz_80 Start: 56569, Stop: 57375, Start Num: 8
Candidate Starts for WhoseManz_80:
(Start: 8 @56569 has 1 MA's), (Start: 10 @56629 has 14 MA's), (Start: 11 @56632 has 1 MA's), (15, 56731), (17, 56761), (25, 56896), (29, 56983), (33, 56998), (34, 57013), (36, 57022), (37, 57043), (41, 57103), (47, 57145), (51, 57166), (54, 57199), (55, 57205), (61, 57283),

Gene: Yndexa_80 Start: 58610, Stop: 59365, Start Num: 10
Candidate Starts for Yndexa_80:

(4, 58526), (6, 58535), (Start: 10 @58610 has 14 MA's), (Start: 11 @58613 has 1 MA's), (12, 58634), (15, 58712), (17, 58742), (25, 58877), (29, 58964), (33, 58979), (34, 58994), (36, 59003), (37, 59024), (41, 59084), (54, 59189),