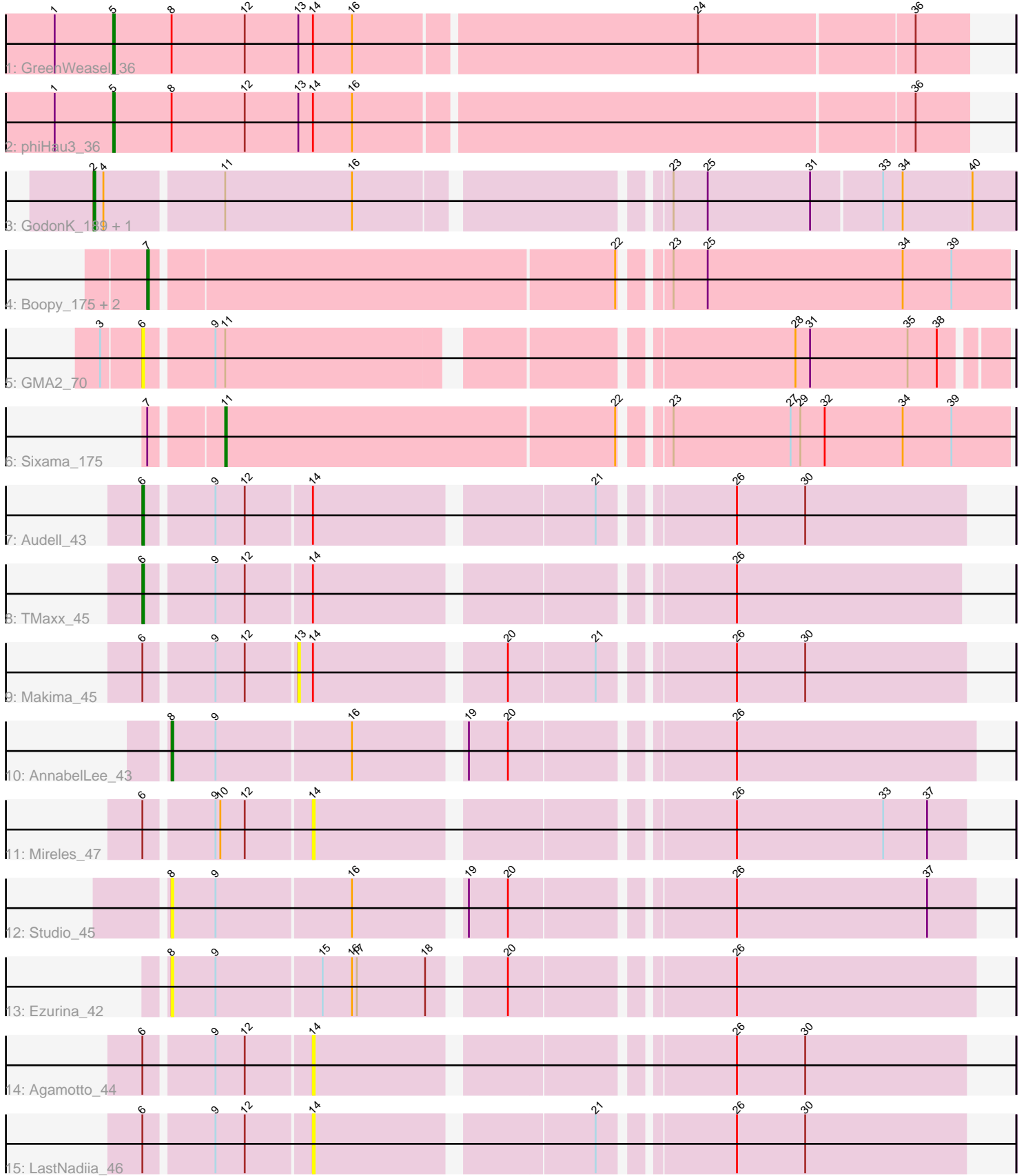


Pham 297019



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 297019 Report

This analysis was run 04/25/26 on database version 644.

Pham number 297019 has 18 members, 7 are drafts.

Phages represented in each track:

- Track 1 : GreenWeasel\_36
- Track 2 : phiHau3\_36
- Track 3 : GodonK\_189, Phendrix\_177
- Track 4 : Boopy\_175, BlueNGold\_172, Mareelih\_173
- Track 5 : GMA2\_70
- Track 6 : Sixama\_175
- Track 7 : Audell\_43
- Track 8 : TMaxx\_45
- Track 9 : Makima\_45
- Track 10 : AnnabelLee\_43
- Track 11 : Mireles\_47
- Track 12 : Studio\_45
- Track 13 : Ezurina\_42
- Track 14 : Agamoto\_44
- Track 15 : LastNadiia\_46

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

The start number called the most often in the published annotations is 7, it was called in 3 of the 11 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- BlueNGold\_172, Boopy\_175, Mareelih\_173,

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

- Sixama\_175,

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

- Agamoto\_44, AnnabelLee\_43, Audell\_43, Ezurina\_42, GMA2\_70, GodonK\_189, GreenWeasel\_36, LastNadiia\_46, Makima\_45, Mireles\_47, Phendrix\_177, Studio\_45, TMaxx\_45, phiHau3\_36,

### **Summary by start number:**

Start 2:

- Found in 2 of 18 ( 11.1% ) of genes in pham
- Manual Annotations of this start: 2 of 11
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GodonK\_189 (DK), Phendrix\_177 (DK),

Start 5:

- Found in 2 of 18 ( 11.1% ) of genes in pham
- Manual Annotations of this start: 2 of 11
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GreenWeasel\_36 (BD4), phiHau3\_36 (BD4),

Start 6:

- Found in 7 of 18 ( 38.9% ) of genes in pham
- Manual Annotations of this start: 2 of 11
- Called 42.9% of time when present
- Phage (with cluster) where this start called: Audell\_43 (FR), GMA2\_70 (DS), TMaxx\_45 (FR),

Start 7:

- Found in 4 of 18 ( 22.2% ) of genes in pham
- Manual Annotations of this start: 3 of 11
- Called 75.0% of time when present
- Phage (with cluster) where this start called: BlueNGold\_172 (DS), Boopy\_175 (DS), Mareelih\_173 (DS),

Start 8:

- Found in 5 of 18 ( 27.8% ) of genes in pham
- Manual Annotations of this start: 1 of 11
- Called 60.0% of time when present
- Phage (with cluster) where this start called: AnnabelLee\_43 (FR), Ezurina\_42 (FR), Studio\_45 (FR),

Start 11:

- Found in 4 of 18 ( 22.2% ) of genes in pham
- Manual Annotations of this start: 1 of 11
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Sixama\_175 (DS),

Start 13:

- Found in 3 of 18 ( 16.7% ) of genes in pham
- No Manual Annotations of this start.
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Makima\_45 (FR),

Start 14:

- Found in 8 of 18 ( 44.4% ) of genes in pham
- No Manual Annotations of this start.
- Called 37.5% of time when present
- Phage (with cluster) where this start called: Agamoto\_44 (FR), LastNadiia\_46 (FR), Mireles\_47 (FR),

## Summary by clusters:

There are 4 clusters represented in this pham: BD4, FR, DS, DK,

Info for manual annotations of cluster BD4:

- Start number 5 was manually annotated 2 times for cluster BD4.

Info for manual annotations of cluster DK:

- Start number 2 was manually annotated 2 times for cluster DK.

Info for manual annotations of cluster DS:

- Start number 7 was manually annotated 3 times for cluster DS.
- Start number 11 was manually annotated 1 time for cluster DS.

Info for manual annotations of cluster FR:

- Start number 6 was manually annotated 2 times for cluster FR.
- Start number 8 was manually annotated 1 time for cluster FR.

## Gene Information:

Gene: Agamoto\_44 Start: 32914, Stop: 32543, Start Num: 14

Candidate Starts for Agamoto\_44:

(Start: 6 @33010 has 2 MA's), (9, 32971), (12, 32953), (14, 32914), (26, 32683), (30, 32641),

Gene: AnnabelLee\_43 Start: 29937, Stop: 29476, Start Num: 8

Candidate Starts for AnnabelLee\_43:

(Start: 8 @29937 has 1 MA's), (9, 29910), (16, 29829), (19, 29769), (20, 29745), (26, 29622),

Gene: Audell\_43 Start: 32606, Stop: 32139, Start Num: 6

Candidate Starts for Audell\_43:

(Start: 6 @32606 has 2 MA's), (9, 32567), (12, 32549), (14, 32510), (21, 32351), (26, 32279), (30, 32237),

Gene: BlueNGold\_172 Start: 101916, Stop: 101413, Start Num: 7

Candidate Starts for BlueNGold\_172:

(Start: 7 @101916 has 3 MA's), (22, 101640), (23, 101619), (25, 101598), (34, 101478), (39, 101448),

Gene: Boopy\_175 Start: 101927, Stop: 101424, Start Num: 7

Candidate Starts for Boopy\_175:

(Start: 7 @101927 has 3 MA's), (22, 101651), (23, 101630), (25, 101609), (34, 101489), (39, 101459),

Gene: Ezurina\_42 Start: 31024, Stop: 30563, Start Num: 8

Candidate Starts for Ezurina\_42:

(Start: 8 @31024 has 1 MA's), (9, 30997), (15, 30934), (16, 30916), (17, 30913), (18, 30871), (20, 30832), (26, 30709),

Gene: GMA2\_70 Start: 73346, Stop: 72861, Start Num: 6

Candidate Starts for GMA2\_70:

(3, 73370), (Start: 6 @73346 has 2 MA's), (9, 73307), (Start: 11 @73301 has 1 MA's), (28, 72983), (31, 72974), (35, 72914), (38, 72896),

Gene: GodonK\_189 Start: 98192, Stop: 97662, Start Num: 2

Candidate Starts for GodonK\_189:

(Start: 2 @98192 has 2 MA's), (4, 98186), (Start: 11 @98117 has 1 MA's), (16, 98039), (23, 97868), (25, 97847), (31, 97784), (33, 97742), (34, 97730), (40, 97688),

Gene: GreenWeasel\_36 Start: 26199, Stop: 26711, Start Num: 5

Candidate Starts for GreenWeasel\_36:

(1, 26163), (Start: 5 @26199 has 2 MA's), (Start: 8 @26235 has 1 MA's), (12, 26280), (13, 26313), (14, 26322), (16, 26346), (24, 26550), (36, 26679),

Gene: LastNadiia\_46 Start: 32476, Stop: 32105, Start Num: 14

Candidate Starts for LastNadiia\_46:

(Start: 6 @32572 has 2 MA's), (9, 32533), (12, 32515), (14, 32476), (21, 32317), (26, 32245), (30, 32203),

Gene: Makima\_45 Start: 31587, Stop: 31207, Start Num: 13

Candidate Starts for Makima\_45:

(Start: 6 @31674 has 2 MA's), (9, 31635), (12, 31617), (13, 31587), (14, 31578), (20, 31470), (21, 31419), (26, 31347), (30, 31305),

Gene: Mareelih\_173 Start: 101362, Stop: 100859, Start Num: 7

Candidate Starts for Mareelih\_173:

(Start: 7 @101362 has 3 MA's), (22, 101086), (23, 101065), (25, 101044), (34, 100924), (39, 100894),

Gene: Mireles\_47 Start: 31119, Stop: 30748, Start Num: 14

Candidate Starts for Mireles\_47:

(Start: 6 @31215 has 2 MA's), (9, 31176), (10, 31173), (12, 31158), (14, 31119), (26, 30888), (33, 30798), (37, 30771),

Gene: Phendrix\_177 Start: 96622, Stop: 96095, Start Num: 2

Candidate Starts for Phendrix\_177:

(Start: 2 @96622 has 2 MA's), (4, 96616), (Start: 11 @96547 has 1 MA's), (16, 96469), (23, 96298), (25, 96277), (31, 96214), (33, 96172), (34, 96160), (40, 96118),

Gene: Sixama\_175 Start: 101856, Stop: 101392, Start Num: 11

Candidate Starts for Sixama\_175:

(Start: 7 @101895 has 3 MA's), (Start: 11 @101856 has 1 MA's), (22, 101619), (23, 101598), (27, 101526), (29, 101520), (32, 101505), (34, 101457), (39, 101427),

Gene: Studio\_45 Start: 31294, Stop: 30833, Start Num: 8

Candidate Starts for Studio\_45:

(Start: 8 @31294 has 1 MA's), (9, 31267), (16, 31186), (19, 31126), (20, 31102), (26, 30979), (37, 30862),

Gene: TMaxx\_45 Start: 30861, Stop: 30397, Start Num: 6

Candidate Starts for TMaxx\_45:

(Start: 6 @30861 has 2 MA's), (9, 30822), (12, 30804), (14, 30765), (26, 30534),

Gene: phiHau3\_36 Start: 26164, Stop: 26676, Start Num: 5

Candidate Starts for phiHau3\_36:

(1, 26128), (Start: 5 @26164 has 2 MA's), (Start: 8 @26200 has 1 MA's), (12, 26245), (13, 26278), (14, 26287), (16, 26311), (36, 26644),