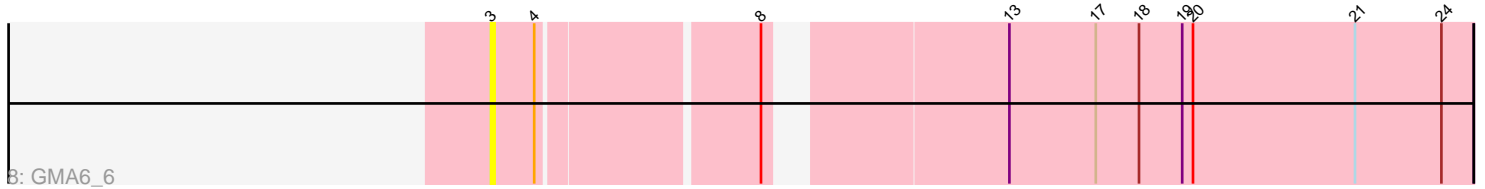
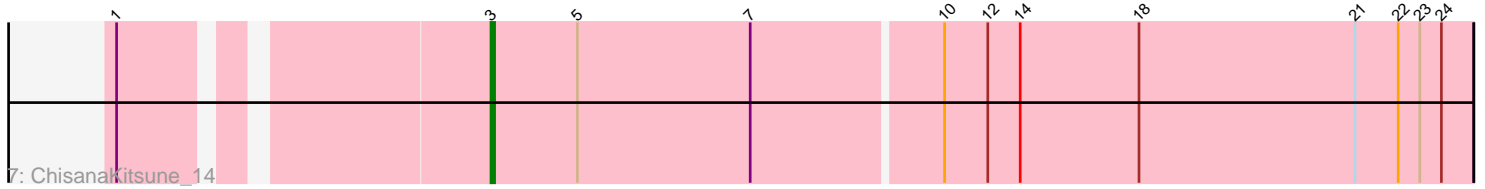
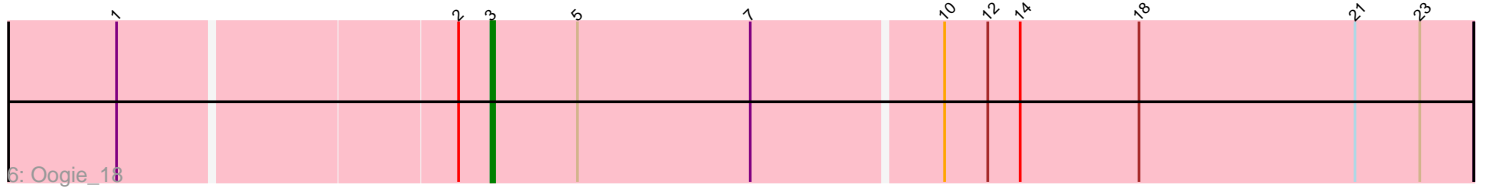
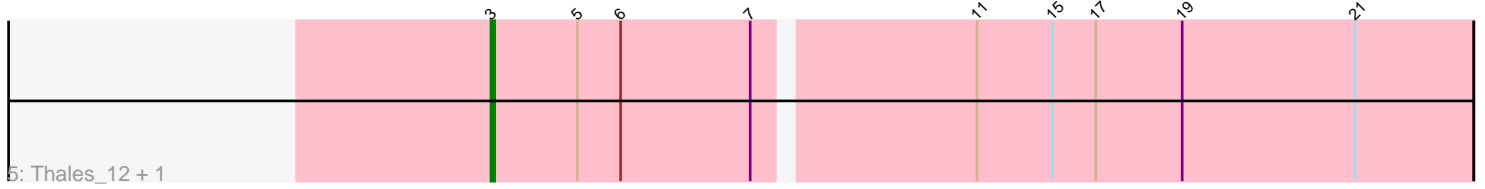
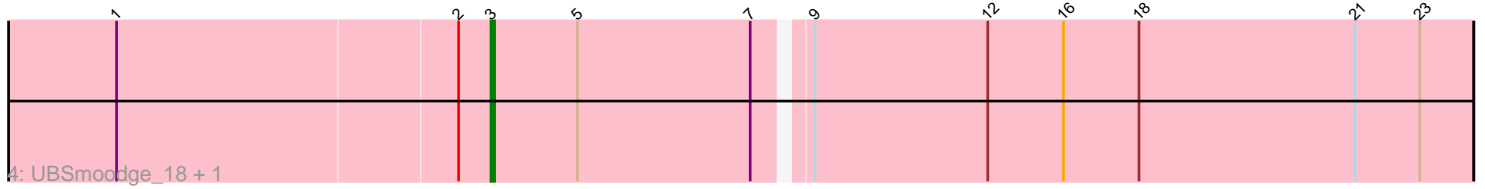
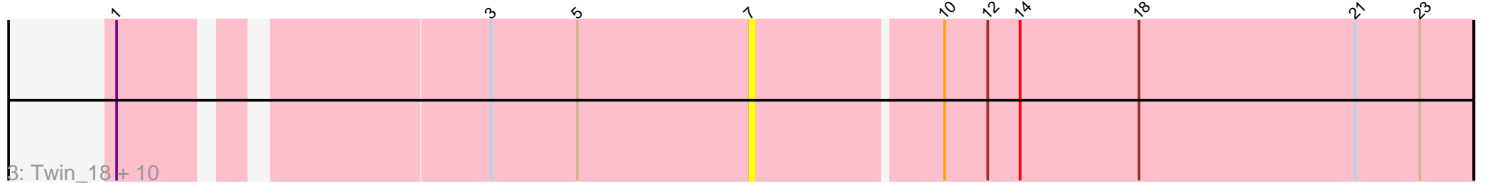
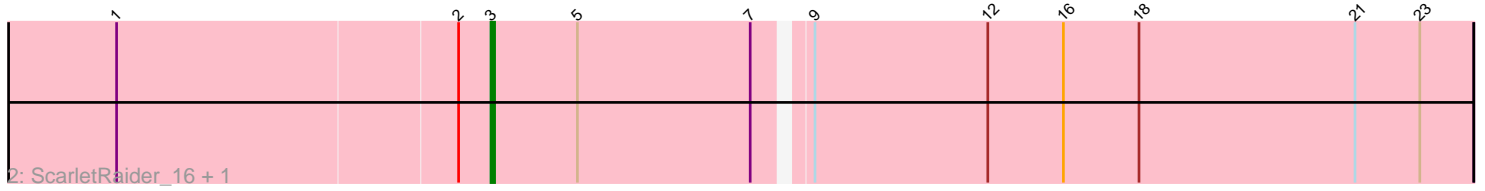
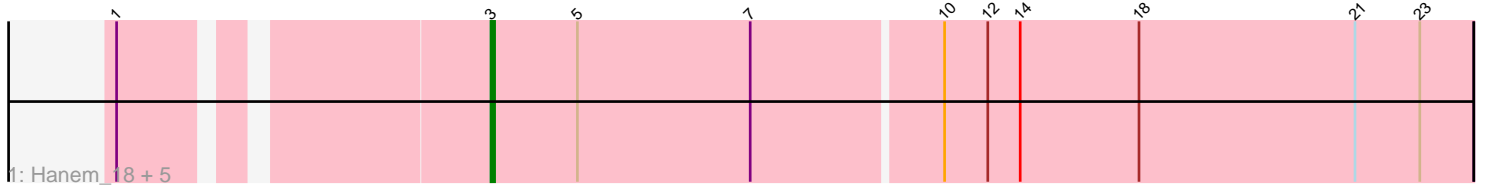


# Pham 311941



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 311941 Report

This analysis was run 06/27/26 on database version 652.

Pham number 311941 has 26 members, 14 are drafts.

Phages represented in each track:

- Track 1 : Hanem\_18, Kabocha\_19, Alok\_18, Chidiebere\_18, Gray\_18, Schomber\_17
- Track 2 : ScarletRaider\_16, FlyingTortilla\_16
- Track 3 : Twin\_18, Pakusa\_18, Lenoshki\_18, MintFritos\_18, Amoonguss\_18, Mikronejon\_18, Farrylious\_17, Toneprano\_18, Beted\_18, Argena\_18, EmoNemo\_18
- Track 4 : UBSmoodge\_18, FruityLoops\_15
- Track 5 : Thales\_12, DalanDe\_12
- Track 6 : Oogie\_18
- Track 7 : ChisanaKitsune\_14
- Track 8 : GMA6\_6

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

The start number called the most often in the published annotations is 3, it was called in 12 of the 12 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Alok\_18, Chidiebere\_18, ChisanaKitsune\_14, DalanDe\_12, FlyingTortilla\_16, FruityLoops\_15, GMA6\_6, Gray\_18, Hanem\_18, Kabocha\_19, Oogie\_18, ScarletRaider\_16, Schomber\_17, Thales\_12, UBSmoodge\_18,

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

- Amoonguss\_18, Argena\_18, Beted\_18, EmoNemo\_18, Farrylious\_17, Lenoshki\_18, Mikronejon\_18, MintFritos\_18, Pakusa\_18, Toneprano\_18, Twin\_18,

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

- 

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

Start 3:

- Found in 26 of 26 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 12 of 12
- Called 57.7% of time when present

- Phage (with cluster) where this start called: Alok\_i\_18 (DQ), Chidiebere\_18 (DQ), ChisanaKitsune\_14 (DQ), DalanDe\_12 (DQ), FlyingTortilla\_16 (DQ), FruityLoops\_15 (DQ), GMA6\_6 (DQ), Gray\_18 (DQ), Hanem\_18 (DQ), Kabocha\_19 (DQ), Oogie\_18 (DQ), ScarletRaider\_16 (DQ), Schomber\_17 (DQ), Thales\_12 (DQ), UBSmoodge\_18 (DQ),

Start 7:

- Found in 25 of 26 ( 96.2% ) of genes in pham
- No Manual Annotations of this start.
- Called 44.0% of time when present
- Phage (with cluster) where this start called: Amoonguss\_18 (DQ), Argena\_18 (DQ), Beted\_18 (DQ), EmoNemo\_18 (DQ), Farrylous\_17 (DQ), Lenoshki\_18 (DQ), Mikronejon\_18 (DQ), MintFritos\_18 (DQ), Pakusa\_18 (DQ), Toneprano\_18 (DQ), Twin\_18 (DQ),

### Summary by clusters:

There is one cluster represented in this pham: DQ

Info for manual annotations of cluster DQ:

- Start number 3 was manually annotated 12 times for cluster DQ.

### Gene Information:

Gene: Alok\_i\_18 Start: 7813, Stop: 8082, Start Num: 3

Candidate Starts for Alok\_i\_18:

(1, 7723), (Start: 3 @7813 has 12 MA's), (5, 7837), (7, 7885), (10, 7936), (12, 7948), (14, 7957), (18, 7990), (21, 8050), (23, 8068),

Gene: Amoonguss\_18 Start: 7888, Stop: 8085, Start Num: 7

Candidate Starts for Amoonguss\_18:

(1, 7726), (Start: 3 @7816 has 12 MA's), (5, 7840), (7, 7888), (10, 7939), (12, 7951), (14, 7960), (18, 7993), (21, 8053), (23, 8071),

Gene: Argena\_18 Start: 7885, Stop: 8082, Start Num: 7

Candidate Starts for Argena\_18:

(1, 7723), (Start: 3 @7813 has 12 MA's), (5, 7837), (7, 7885), (10, 7936), (12, 7948), (14, 7957), (18, 7990), (21, 8050), (23, 8068),

Gene: Beted\_18 Start: 7511, Stop: 7708, Start Num: 7

Candidate Starts for Beted\_18:

(1, 7349), (Start: 3 @7439 has 12 MA's), (5, 7463), (7, 7511), (10, 7562), (12, 7574), (14, 7583), (18, 7616), (21, 7676), (23, 7694),

Gene: Chidiebere\_18 Start: 7813, Stop: 8082, Start Num: 3

Candidate Starts for Chidiebere\_18:

(1, 7723), (Start: 3 @7813 has 12 MA's), (5, 7837), (7, 7885), (10, 7936), (12, 7948), (14, 7957), (18, 7990), (21, 8050), (23, 8068),

Gene: ChisanaKitsune\_14 Start: 6514, Stop: 6783, Start Num: 3

Candidate Starts for ChisanaKitsune\_14:

(1, 6424), (Start: 3 @6514 has 12 MA's), (5, 6538), (7, 6586), (10, 6637), (12, 6649), (14, 6658), (18, 6691), (21, 6751), (22, 6763), (23, 6769), (24, 6775),

Gene: DalanDe\_12 Start: 6925, Stop: 7191, Start Num: 3

Candidate Starts for DalanDe\_12:

(Start: 3 @6925 has 12 MA's), (5, 6949), (6, 6961), (7, 6997), (11, 7054), (15, 7075), (17, 7087), (19, 7111), (21, 7159),

Gene: EmoNemo\_18 Start: 7885, Stop: 8082, Start Num: 7

Candidate Starts for EmoNemo\_18:

(1, 7723), (Start: 3 @7813 has 12 MA's), (5, 7837), (7, 7885), (10, 7936), (12, 7948), (14, 7957), (18, 7990), (21, 8050), (23, 8068),

Gene: Farrylious\_17 Start: 7638, Stop: 7835, Start Num: 7

Candidate Starts for Farrylious\_17:

(1, 7476), (Start: 3 @7566 has 12 MA's), (5, 7590), (7, 7638), (10, 7689), (12, 7701), (14, 7710), (18, 7743), (21, 7803), (23, 7821),

Gene: FlyingTortilla\_16 Start: 8715, Stop: 8981, Start Num: 3

Candidate Starts for FlyingTortilla\_16:

(1, 8613), (2, 8706), (Start: 3 @8715 has 12 MA's), (5, 8739), (7, 8787), (9, 8799), (12, 8847), (16, 8868), (18, 8889), (21, 8949), (23, 8967),

Gene: FruityLoops\_15 Start: 8723, Stop: 8986, Start Num: 3

Candidate Starts for FruityLoops\_15:

(1, 8621), (2, 8714), (Start: 3 @8723 has 12 MA's), (5, 8747), (7, 8795), (9, 8807), (12, 8852), (16, 8873), (18, 8894), (21, 8954), (23, 8972),

Gene: GMA6\_6 Start: 3457, Stop: 3711, Start Num: 3

Candidate Starts for GMA6\_6:

(Start: 3 @3457 has 12 MA's), (4, 3469), (8, 3526), (13, 3583), (17, 3607), (18, 3619), (19, 3631), (20, 3634), (21, 3679), (24, 3703),

Gene: Gray\_18 Start: 7813, Stop: 8082, Start Num: 3

Candidate Starts for Gray\_18:

(1, 7723), (Start: 3 @7813 has 12 MA's), (5, 7837), (7, 7885), (10, 7936), (12, 7948), (14, 7957), (18, 7990), (21, 8050), (23, 8068),

Gene: Hanem\_18 Start: 7813, Stop: 8082, Start Num: 3

Candidate Starts for Hanem\_18:

(1, 7723), (Start: 3 @7813 has 12 MA's), (5, 7837), (7, 7885), (10, 7936), (12, 7948), (14, 7957), (18, 7990), (21, 8050), (23, 8068),

Gene: Kabocha\_19 Start: 8626, Stop: 8895, Start Num: 3

Candidate Starts for Kabocha\_19:

(1, 8536), (Start: 3 @8626 has 12 MA's), (5, 8650), (7, 8698), (10, 8749), (12, 8761), (14, 8770), (18, 8803), (21, 8863), (23, 8881),

Gene: Lenoshki\_18 Start: 7511, Stop: 7708, Start Num: 7

Candidate Starts for Lenoshki\_18:

(1, 7349), (Start: 3 @7439 has 12 MA's), (5, 7463), (7, 7511), (10, 7562), (12, 7574), (14, 7583), (18, 7616), (21, 7676), (23, 7694),

Gene: Mikronejon\_18 Start: 7885, Stop: 8082, Start Num: 7  
Candidate Starts for Mikronejon\_18:  
(1, 7723), (Start: 3 @7813 has 12 MA's), (5, 7837), (7, 7885), (10, 7936), (12, 7948), (14, 7957), (18, 7990), (21, 8050), (23, 8068),

Gene: MintFritos\_18 Start: 7885, Stop: 8082, Start Num: 7  
Candidate Starts for MintFritos\_18:  
(1, 7723), (Start: 3 @7813 has 12 MA's), (5, 7837), (7, 7885), (10, 7936), (12, 7948), (14, 7957), (18, 7990), (21, 8050), (23, 8068),

Gene: Oogie\_18 Start: 7465, Stop: 7734, Start Num: 3  
Candidate Starts for Oogie\_18:  
(1, 7366), (2, 7456), (Start: 3 @7465 has 12 MA's), (5, 7489), (7, 7537), (10, 7588), (12, 7600), (14, 7609), (18, 7642), (21, 7702), (23, 7720),

Gene: Pakusa\_18 Start: 7627, Stop: 7824, Start Num: 7  
Candidate Starts for Pakusa\_18:  
(1, 7465), (Start: 3 @7555 has 12 MA's), (5, 7579), (7, 7627), (10, 7678), (12, 7690), (14, 7699), (18, 7732), (21, 7792), (23, 7810),

Gene: ScarletRaider\_16 Start: 8742, Stop: 9008, Start Num: 3  
Candidate Starts for ScarletRaider\_16:  
(1, 8640), (2, 8733), (Start: 3 @8742 has 12 MA's), (5, 8766), (7, 8814), (9, 8826), (12, 8874), (16, 8895), (18, 8916), (21, 8976), (23, 8994),

Gene: Schomber\_17 Start: 7542, Stop: 7811, Start Num: 3  
Candidate Starts for Schomber\_17:  
(1, 7452), (Start: 3 @7542 has 12 MA's), (5, 7566), (7, 7614), (10, 7665), (12, 7677), (14, 7686), (18, 7719), (21, 7779), (23, 7797),

Gene: Thales\_12 Start: 6242, Stop: 6508, Start Num: 3  
Candidate Starts for Thales\_12:  
(Start: 3 @6242 has 12 MA's), (5, 6266), (6, 6278), (7, 6314), (11, 6371), (15, 6392), (17, 6404), (19, 6428), (21, 6476),

Gene: Toneprano\_18 Start: 7885, Stop: 8082, Start Num: 7  
Candidate Starts for Toneprano\_18:  
(1, 7723), (Start: 3 @7813 has 12 MA's), (5, 7837), (7, 7885), (10, 7936), (12, 7948), (14, 7957), (18, 7990), (21, 8050), (23, 8068),

Gene: Twin\_18 Start: 7885, Stop: 8082, Start Num: 7  
Candidate Starts for Twin\_18:  
(1, 7723), (Start: 3 @7813 has 12 MA's), (5, 7837), (7, 7885), (10, 7936), (12, 7948), (14, 7957), (18, 7990), (21, 8050), (23, 8068),

Gene: UBSmoodge\_18 Start: 9211, Stop: 9477, Start Num: 3  
Candidate Starts for UBSmoodge\_18:  
(1, 9109), (2, 9202), (Start: 3 @9211 has 12 MA's), (5, 9235), (7, 9283), (9, 9295), (12, 9343), (16, 9364), (18, 9385), (21, 9445), (23, 9463),