Pham 115328


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 115328 Report

This analysis was run 04/05/24 on database version 557.
Pham number 115328 has 20 members, 2 are drafts.
Phages represented in each track:

- Track 1 : Dori_59, Mask_59
- Track 2 : Piper2020_56, ChickenDinner_57, DocMcStuffins_54
- Track 3 : Frankie_61
- Track 4 : Sbash_52
- Track 5 : Raymōnd7_40, Redi_46, PhancyPhin_46, Nenae_46, Rebel_38, ShrimpFriedEgg_46, BabeRuth_47
- Track 6 : Purgamenstris_46
- Track 7 : SkinnyPete_40, Sejanus_56
- Track 8 : Shweta 41
- Track 9 : Xavia_48, Tortellini_48


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

The start number called the most often in the published annotations is 9 , it was called in 13 of the 18 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- BabeRuth_47, ChickenDinner_57, DocMcStuffins_54, Frankie_61, Nenae_46, PhancyPhin_46, Piper2020_56, Raymond7_40, Rebel_38, Redi_46, Sejanus_56, ShrimpFriedEgg_46, SkinnyPete_40, Tortellini_48, Xavia_48,

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

- Purgamenstris_46,

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

- Dori_59, Mask_59, Sbash_52, Shweta_41,


## Summary by start number:

Start 7:

- Found in 12 of 20 ( $60.0 \%$ ) of genes in pham
- Manual Annotations of this start: 1 of 18
- Called $8.3 \%$ of time when present
- Phage (with cluster) where this start called: Purgamenstris_46 (N),

Start 8:

- Found in 3 of 20 ( $15.0 \%$ ) of genes in pham
- Manual Annotations of this start: 3 of 18
- Called $100.0 \%$ of time when present
- Phage (with cluster) where this start called: Dori_59 (AD), Mask_59 (AD), Sbash_52 (I2),

Start 9:

- Found in 16 of 20 ( $80.0 \%$ ) of genes in pham
- Manual Annotations of this start: 13 of 18
- Called $93.8 \%$ of time when present
- Phage (with cluster) where this start called: BabeRuth 47 (N), ChickenDinner_ 57
(F1), DocMcStuffins 54 (F1), Frankie_61 (F1), Nenae_46 (N), PhancyPhin_46 (N),
Piper2020_56 (F1), Raymond7_40 (N), Rebel_38 (N), Redi 46 (N), Sejanus 56 (AD), ShrimpFriedEgg_46 (N), SkinnyPete_40 (N), Tortellini_48 (P2), Xavia_48 (P3),

Start 10:

- Found in 4 of 20 ( $20.0 \%$ ) of genes in pham
- Manual Annotations of this start: 1 of 18
- Called $25.0 \%$ of time when present
- Phage (with cluster) where this start called: Shweta_41 (N),


## Summary by clusters:

There are 6 clusters represented in this pham: P2, F1, AD, P3, I2, N,
Info for manual annotations of cluster AD:
-Start number 8 was manually annotated 2 times for cluster AD.
-Start number 9 was manually annotated 1 time for cluster AD.
Info for manual annotations of cluster F1:
-Start number 9 was manually annotated 2 times for cluster F1.
Info for manual annotations of cluster I2:
-Start number 8 was manually annotated 1 time for cluster l 2.
Info for manual annotations of cluster N :
-Start number 7 was manually annotated 1 time for cluster N .
-Start number 9 was manually annotated 8 times for cluster N .

- Start number 10 was manually annotated 1 time for cluster N .

Info for manual annotations of cluster P2:
-Start number 9 was manually annotated 1 time for cluster P2.
Info for manual annotations of cluster P3:
-Start number 9 was manually annotated 1 time for cluster P3.

## Gene Information:

Gene: BabeRuth_47 Start: 32063, Stop: 32236, Start Num: 9

Candidate Starts for BabeRuth_47:
( 6,32030 ), (Start: 7 @32036 has 1 MA's), (Start: 9 @32063 has 13 MA's), (11, 32078), ( 13,32144 ), $(14,32153),(15,32165),(16,32180),(17,32189),(18,32225)$,

Gene: ChickenDinner_57 Start: 38348, Stop: 38545, Start Num: 9 Candidate Starts for ChickenDinner_57:
(1, 38195), (Start: 9 @38348 has 13 MA's), (13, 38429), (16, 38465), (17, 38474), (19, 38528), (20, 38534),

Gene: DocMcStuffins_54 Start: 38348, Stop: 38545, Start Num: 9
Candidate Starts for DocMcStuffins_54:
(1, 38195), (Start: 9 @38348 has 13 MA's), (13, 38429), (16, 38465), (17, 38474), (19, 38528), (20, 38534),

Gene: Dori_59 Start: 48092, Stop: 48304, Start Num: 8
Candidate Starts for Dori_59:
( 5,48047 ), (Start: 8 @48092 has 3 MA's), (Start: $10 @ 48098$ has 1 MA's), (11, 48110), (13, 48176), (14, 48185), (16, 48212), (17, 48221),

Gene: Frankie_61 Start: 40829, Stop: 41050, Start Num: 9
Candidate Starts for Frankie_61:
(1, 40676), (Start: 9 @40829 has 13 MA's), (11, 40844), (13, 40910), (16, 40946), (17, 40955), (21, 41021), (23, 41030),

Gene: Mask_59 Start: 48835, Stop: 49047, Start Num: 8
Candidate Starts for Mask_59:
( 5,48790 ), (Start: 8 @48835 has 3 MA's), (Start: 10 @48841 has 1 MA's), (11, 48853), (13, 48919), (14, 48928), (16, 48955), (17, 48964),

Gene: Nenae_46 Start: 32065, Stop: 32238, Start Num: 9
Candidate Starts for Nenae_46:
(6, 32032), (Start: 7 @32038 has 1 MA's), (Start: 9 @32065 has 13 MA's), (11, 32080), (13, 32146), $(14,32155),(15,32167),(16,32182),(17,32191),(18,32227)$,

Gene: PhancyPhin_46 Start: 32059, Stop: 32232, Start Num: 9
Candidate Starts for PhancyPhin_46:
(6, 32026), (Start: 7 @32032 has 1 MA's), (Start: 9 @32059 has 13 MA's), (11, 32074), (13, 32140), (14, 32149), (15, 32161), (16, 32176), (17, 32185), (18, 32221),

Gene: Piper2020_56 Start: 38331, Stop: 38528, Start Num: 9
Candidate Starts for Piper2020_56:
(1, 38178), (Start: 9 @38331 has 13 MA's), (13, 38412), (16, 38448), (17, 38457), (19, 38511), (20, 38517),

Gene: Purgamenstris_46 Start: 32036, Stop: 32236, Start Num: 7
Candidate Starts for Purgamenstris_46:
(6, 32030), (Start: 7 @32036 has 1 MA's), (Start: 9 @32063 has 13 MA's), (11, 32078), (13, 32144), (14, 32153), (15, 32165), (16, 32180), (17, 32189), (18, 32225),

Gene: Raymond7_40 Start: 31851, Stop: 32024, Start Num: 9
Candidate Starts for Raymond7_40:
(6, 31818), (Start: 7 @31824 has 1 MA's), (Start: 9 @31851 has 13 MA's), (11, 31866), (13, 31932),
(14, 31941), (15, 31953), (16, 31968), (17, 31977), (18, 32013),

Gene: Rebel_38 Start: 28193, Stop: 28366, Start Num: 9
Candidate Starts for Rebel_38:
(6, 28160), (Start: 7 @28166 has 1 MA's), (Start: 9 @28193 has 13 MA's), (11, 28208), (13, 28274), (14, 28283), (15, 28295), (16, 28310), (17, 28319), (18, 28355),

Gene: Redi_46 Start: 32062, Stop: 32235, Start Num: 9
Candidate Starts for Redi_46:
(6, 32029), (Start: 7 @32035 has 1 MA's), (Start: 9 @32062 has 13 MA's), (11, 32077), (13, 32143), (14, 32152), (15, 32164), (16, 32179), (17, 32188), (18, 32224),

Gene: Sbash_52 Start: 39507, Stop: 39710, Start Num: 8
Candidate Starts for Sbash_52:
(Start: 8 @39507 has 3 MA's), (Start: 10 @39513 has 1 MA's), (11, 39525), (13, 39591), (16, 39627), (17, 39636),

Gene: Sejanus_56 Start: 47338, Stop: 47547, Start Num: 9 Candidate Starts for Sejanus_56:
(Start: 7 @ 47311 has 1 MA's), (Start: 9 @47338 has 13 MA's), (11, 47353), (12, 47377), (13, 47419), (14, 47428), (16, 47455), (17, 47464), (21, 47530), (22, 47536),

Gene: ShrimpFriedEgg_46 Start: 32062, Stop: 32235, Start Num: 9
Candidate Starts for ShrimpFriedEgg_46:
(6, 32029), (Start: 7 @32035 has 1 MA's), (Start: 9 @32062 has 13 MA's), (11, 32077), (13, 32143),
(14, 32152), (15, 32164), (16, 32179), (17, 32188), (18, 32224),
Gene: Shweta_41 Start: 30432, Stop: 30629, Start Num: 10
Candidate Starts for Shweta_41:
(3, 30342), (4, 30372), (5, 30381), (Start: 10 @30432 has 1 MA's), (11, 30444), (13, 30510), (14, 30519), (16, 30546), (17, 30555),

Gene: SkinnyPete_40 Start: 29521, Stop: 29730, Start Num: 9
Candidate Starts for SkinnyPete_40:
(Start: 7 @29494 has 1 MA's), (Start: 9 @29521 has 13 MA's), (11, 29536), (12, 29560), (13, 29602), (14, 29611), (16, 29638), (17, 29647), (21, 29713), (22, 29719),

Gene: Tortellini_48 Start: 37529, Stop: 37738, Start Num: 9
Candidate Starts for Tortellini_48:
(1, 37379), (2, 37406), (Start: 7 @37502 has 1 MA's), (Start: 9 @37529 has 13 MA's), (11, 37544), $(13,37610),(14,37619),(16,37646),(17,37655)$,

Gene: Xavia_48 Start: 37365, Stop: 37574, Start Num: 9
Candidate Starts for Xavia_48:
(1, 37215), (2, 37242), (Start: 7 @37338 has 1 MA's), (Start: 9 @37365 has 13 MA's), (11, 37380), $(13,37446),(14,37455),(16,37482),(17,37491)$,

