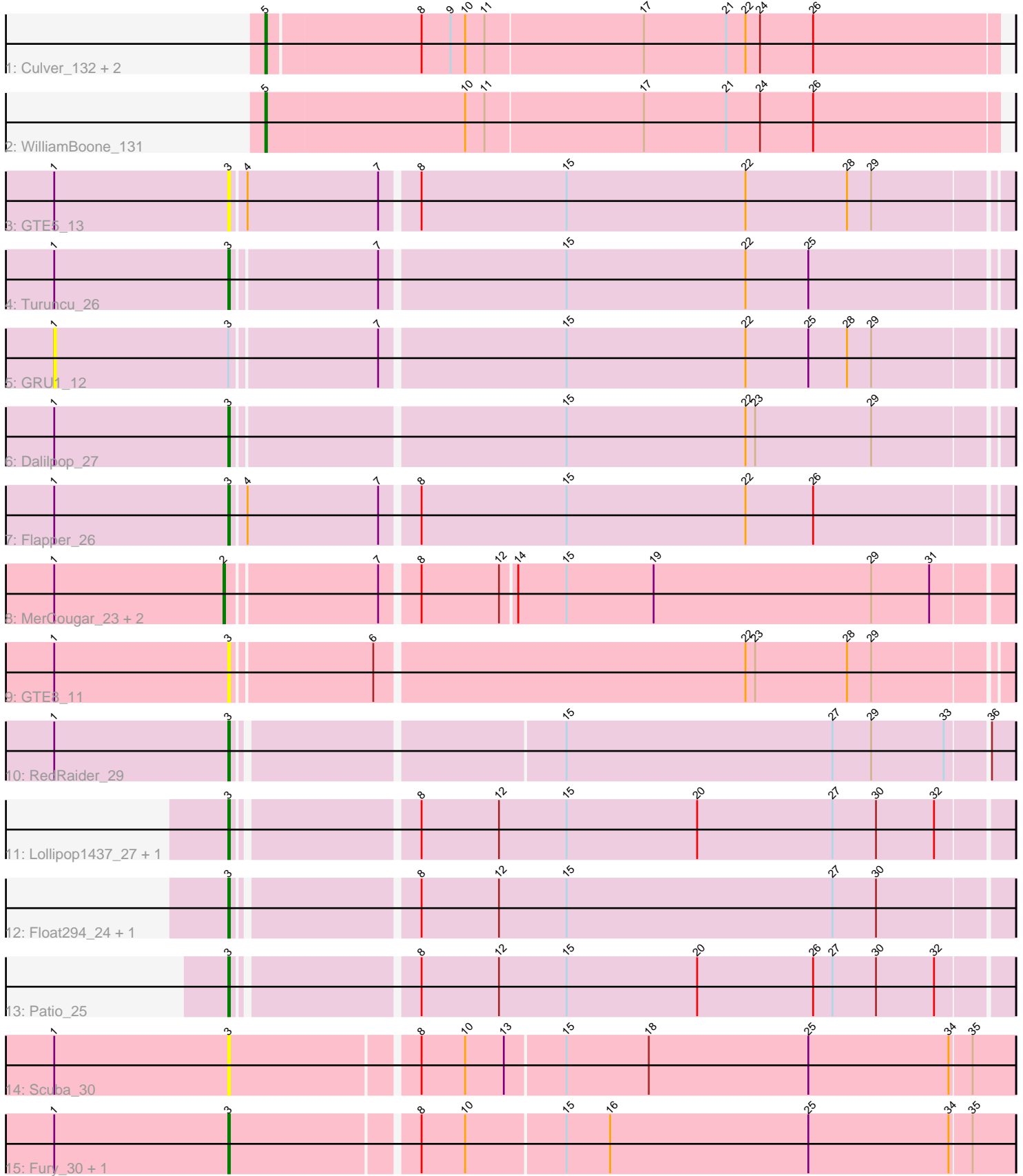


# Pham 312010



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 312010 Report

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

Pham number 312010 has 22 members, 4 are drafts.

Phages represented in each track:

- Track 1 : Culver\_132, PhinkBoden\_132, Norvs\_131
- Track 2 : WilliamBoone\_131
- Track 3 : GTE5\_13
- Track 4 : Turuncu\_26
- Track 5 : GRU1\_12
- Track 6 : Dalilpop\_27
- Track 7 : Flapper\_26
- Track 8 : MerCougar\_23, StarStruck\_23, Outis\_23
- Track 9 : GTE8\_11
- Track 10 : RedRaider\_29
- Track 11 : Lollipop1437\_27, Ennea\_28
- Track 12 : Float294\_24, Skysand\_24
- Track 13 : Patio\_25
- Track 14 : Scuba\_30
- Track 15 : Fury\_30, Pleakley\_30

### ***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 11 of the 18 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Dalilpop\_27, Ennea\_28, Flapper\_26, Float294\_24, Fury\_30, GTE5\_13, GTE8\_11, Lollipop1437\_27, Patio\_25, Pleakley\_30, RedRaider\_29, Scuba\_30, Skysand\_24, Turuncu\_26,

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

- GRU1\_12,

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

- Culver\_132, MerCougar\_23, Norvs\_131, Outis\_23, PhinkBoden\_132, StarStruck\_23, WilliamBoone\_131,

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

Start 1:

- Found in 13 of 22 ( 59.1% ) of genes in pham
- No Manual Annotations of this start.
- Called 7.7% of time when present
- Phage (with cluster) where this start called: GRU1\_12 (CR1),

Start 2:

- Found in 3 of 22 ( 13.6% ) 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: MerCougar\_23 (CR2), Outis\_23 (CR2), StarStruck\_23 (CR2),

Start 3:

- Found in 15 of 22 ( 68.2% ) of genes in pham
- Manual Annotations of this start: 11 of 18
- Called 93.3% of time when present
- Phage (with cluster) where this start called: Dalilpop\_27 (CR1), Ennea\_28 (CR3), Flapper\_26 (CR1), Float294\_24 (CR3), Fury\_30 (CR5), GTE5\_13 (CR1), GTE8\_11 (CR2), Lollipop1437\_27 (CR3), Patio\_25 (CR3), Pleakley\_30 (CR5), RedRaider\_29 (CR3), Scuba\_30 (CR5), Skysand\_24 (CR3), Turuncu\_26 (CR1),

Start 5:

- Found in 4 of 22 ( 18.2% ) of genes in pham
- Manual Annotations of this start: 4 of 18
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Culver\_132 (CQ1), Norvs\_131 (CQ1), PhinkBoden\_132 (CQ1), WilliamBoone\_131 (CQ1),

**Summary by clusters:**

There are 5 clusters represented in this pham: CR2, CR3, CQ1, CR1, CR5,

Info for manual annotations of cluster CQ1:

- Start number 5 was manually annotated 4 times for cluster CQ1.

Info for manual annotations of cluster CR1:

- Start number 3 was manually annotated 3 times for cluster CR1.

Info for manual annotations of cluster CR2:

- Start number 2 was manually annotated 3 times for cluster CR2.

Info for manual annotations of cluster CR3:

- Start number 3 was manually annotated 6 times for cluster CR3.

Info for manual annotations of cluster CR5:

- Start number 3 was manually annotated 2 times for cluster CR5.

**Gene Information:**

Gene: Culver\_132 Start: 72567, Stop: 73013, Start Num: 5

Candidate Starts for Culver\_132:

(Start: 5 @72567 has 4 MA's), (8, 72660), (9, 72678), (10, 72687), (11, 72699), (17, 72795), (21, 72846), (22, 72858), (24, 72867), (26, 72900),

Gene: Dalilpop\_27 Start: 13666, Stop: 14133, Start Num: 3

Candidate Starts for Dalilpop\_27:

(1, 13558), (Start: 3 @13666 has 11 MA's), (15, 13864), (22, 13975), (23, 13981), (29, 14053),

Gene: Ennea\_28 Start: 12848, Stop: 13315, Start Num: 3

Candidate Starts for Ennea\_28:

(Start: 3 @12848 has 11 MA's), (8, 12953), (12, 13001), (15, 13043), (20, 13124), (27, 13208), (30, 13235), (32, 13271),

Gene: Flapper\_26 Start: 12739, Stop: 13209, Start Num: 3

Candidate Starts for Flapper\_26:

(1, 12631), (Start: 3 @12739 has 11 MA's), (4, 12748), (7, 12829), (8, 12850), (15, 12940), (22, 13051), (26, 13093),

Gene: Float294\_24 Start: 12290, Stop: 12757, Start Num: 3

Candidate Starts for Float294\_24:

(Start: 3 @12290 has 11 MA's), (8, 12395), (12, 12443), (15, 12485), (27, 12650), (30, 12677),

Gene: Fury\_30 Start: 11734, Stop: 12207, Start Num: 3

Candidate Starts for Fury\_30:

(1, 11626), (Start: 3 @11734 has 11 MA's), (8, 11845), (10, 11872), (15, 11932), (16, 11959), (25, 12082), (34, 12169), (35, 12181),

Gene: GRU1\_12 Start: 4519, Stop: 5094, Start Num: 1

Candidate Starts for GRU1\_12:

(1, 4519), (Start: 3 @4627 has 11 MA's), (7, 4714), (15, 4825), (22, 4936), (25, 4975), (28, 4999), (29, 5014),

Gene: GTE5\_13 Start: 5633, Stop: 6103, Start Num: 3

Candidate Starts for GTE5\_13:

(1, 5525), (Start: 3 @5633 has 11 MA's), (4, 5642), (7, 5723), (8, 5744), (15, 5834), (22, 5945), (28, 6008), (29, 6023),

Gene: GTE8\_11 Start: 5527, Stop: 5994, Start Num: 3

Candidate Starts for GTE8\_11:

(1, 5419), (Start: 3 @5527 has 11 MA's), (6, 5611), (22, 5836), (23, 5842), (28, 5899), (29, 5914),

Gene: Lollipop1437\_27 Start: 12836, Stop: 13303, Start Num: 3

Candidate Starts for Lollipop1437\_27:

(Start: 3 @12836 has 11 MA's), (8, 12941), (12, 12989), (15, 13031), (20, 13112), (27, 13196), (30, 13223), (32, 13259),

Gene: MerCougar\_23 Start: 12188, Stop: 12658, Start Num: 2

Candidate Starts for MerCougar\_23:

(1, 12083), (Start: 2 @12188 has 3 MA's), (7, 12278), (8, 12299), (12, 12347), (14, 12356), (15, 12386), (19, 12440), (29, 12575), (31, 12611),

Gene: Norvs\_131 Start: 73289, Stop: 73735, Start Num: 5

Candidate Starts for Norvs\_131:

(Start: 5 @73289 has 4 MA's), (8, 73382), (9, 73400), (10, 73409), (11, 73421), (17, 73517), (21, 73568), (22, 73580), (24, 73589), (26, 73622),

Gene: Outis\_23 Start: 11882, Stop: 12352, Start Num: 2

Candidate Starts for Outis\_23:

(1, 11777), (Start: 2 @11882 has 3 MA's), (7, 11972), (8, 11993), (12, 12041), (14, 12050), (15, 12080), (19, 12134), (29, 12269), (31, 12305),

Gene: Patio\_25 Start: 12072, Stop: 12539, Start Num: 3

Candidate Starts for Patio\_25:

(Start: 3 @12072 has 11 MA's), (8, 12177), (12, 12225), (15, 12267), (20, 12348), (26, 12420), (27, 12432), (30, 12459), (32, 12495),

Gene: PhinkBoden\_132 Start: 74154, Stop: 74600, Start Num: 5

Candidate Starts for PhinkBoden\_132:

(Start: 5 @74154 has 4 MA's), (8, 74247), (9, 74265), (10, 74274), (11, 74286), (17, 74382), (21, 74433), (22, 74445), (24, 74454), (26, 74487),

Gene: Pleakley\_30 Start: 11735, Stop: 12208, Start Num: 3

Candidate Starts for Pleakley\_30:

(1, 11627), (Start: 3 @11735 has 11 MA's), (8, 11846), (10, 11873), (15, 11933), (16, 11960), (25, 12083), (34, 12170), (35, 12182),

Gene: RedRaider\_29 Start: 14146, Stop: 14610, Start Num: 3

Candidate Starts for RedRaider\_29:

(1, 14038), (Start: 3 @14146 has 11 MA's), (15, 14338), (27, 14503), (29, 14527), (33, 14572), (36, 14596),

Gene: Scuba\_30 Start: 11822, Stop: 12295, Start Num: 3

Candidate Starts for Scuba\_30:

(1, 11714), (Start: 3 @11822 has 11 MA's), (8, 11933), (10, 11960), (13, 11984), (15, 12020), (18, 12071), (25, 12170), (34, 12257), (35, 12269),

Gene: Skysand\_24 Start: 12292, Stop: 12759, Start Num: 3

Candidate Starts for Skysand\_24:

(Start: 3 @12292 has 11 MA's), (8, 12397), (12, 12445), (15, 12487), (27, 12652), (30, 12679),

Gene: StarStruck\_23 Start: 11882, Stop: 12352, Start Num: 2

Candidate Starts for StarStruck\_23:

(1, 11777), (Start: 2 @11882 has 3 MA's), (7, 11972), (8, 11993), (12, 12041), (14, 12050), (15, 12080), (19, 12134), (29, 12269), (31, 12305),

Gene: Turuncu\_26 Start: 12436, Stop: 12903, Start Num: 3

Candidate Starts for Turuncu\_26:

(1, 12328), (Start: 3 @12436 has 11 MA's), (7, 12523), (15, 12634), (22, 12745), (25, 12784),

Gene: WilliamBoone\_131 Start: 71084, Stop: 71533, Start Num: 5

Candidate Starts for WilliamBoone\_131:

(Start: 5 @71084 has 4 MA's), (10, 71207), (11, 71219), (17, 71315), (21, 71366), (24, 71387), (26, 71420),