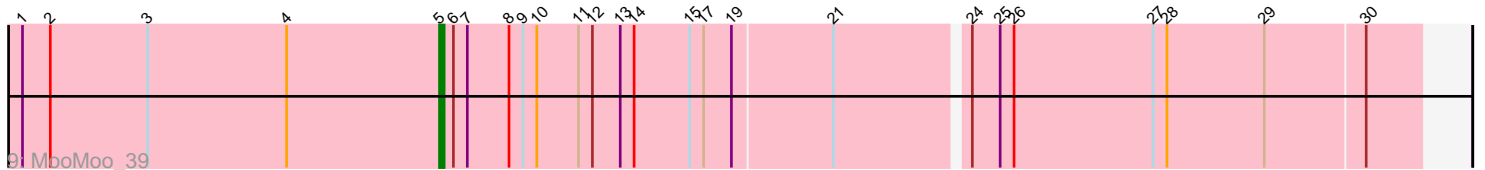
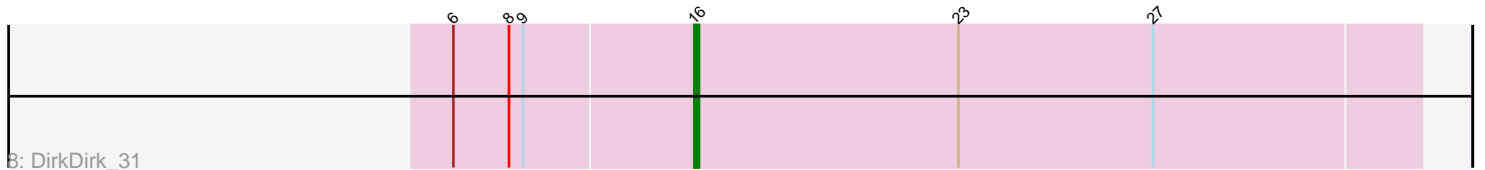
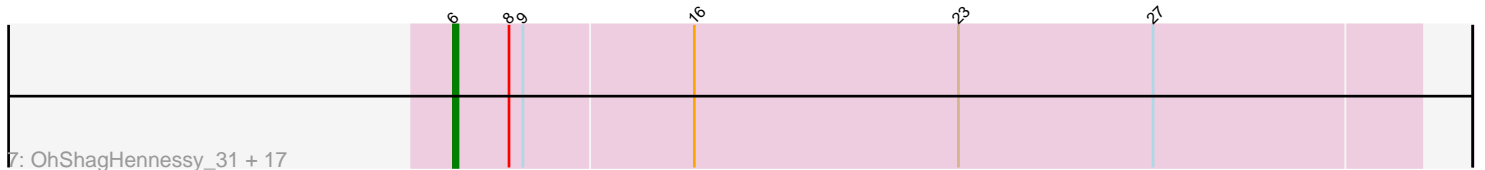
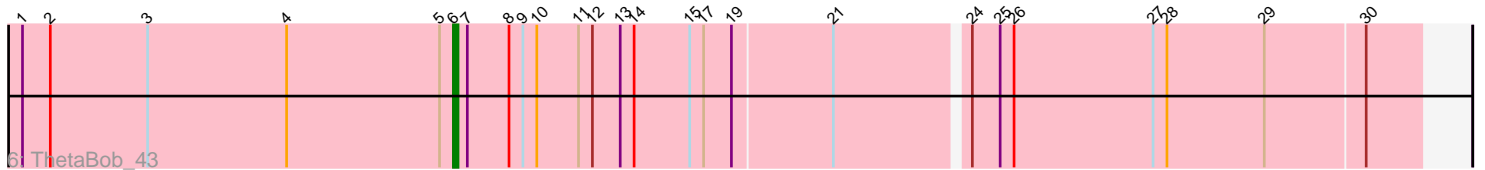
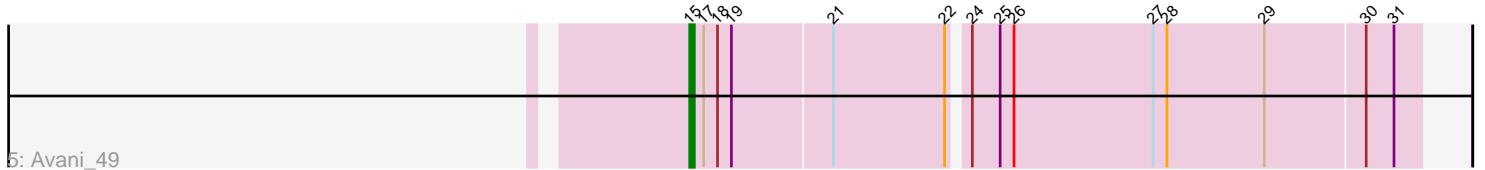
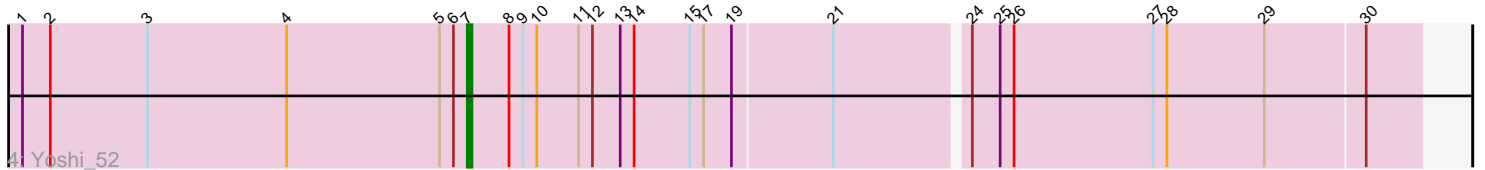
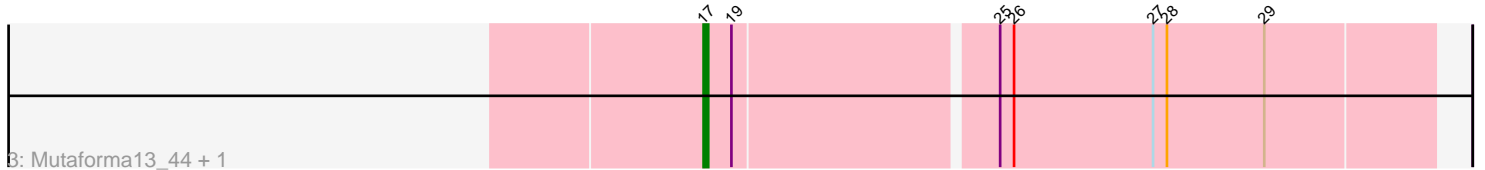
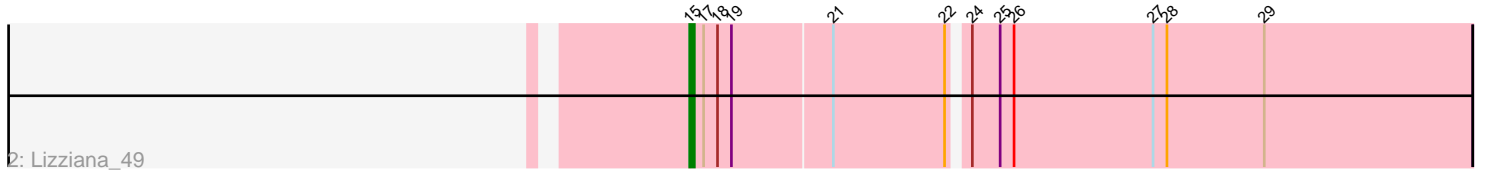
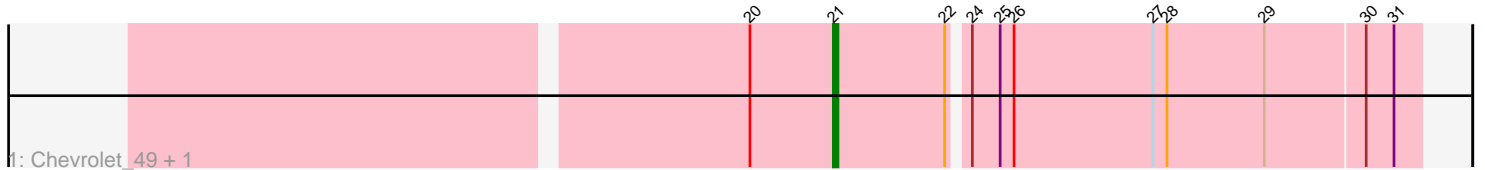


Pham 188364



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 188364 Report

This analysis was run 11/02/24 on database version 579.

Pham number 188364 has 28 members, 0 are drafts.

Phages represented in each track:

- Track 1 : Chevrolet\_49, ArcusAngelus\_46
- Track 2 : Lizziana\_49
- Track 3 : Mutaforma13\_44, PhesterPhotato\_43
- Track 4 : Yoshi\_52
- Track 5 : Avani\_49
- Track 6 : ThetaBob\_43
- Track 7 : OhShagHennessy\_31, Rose5\_31, Enceladus\_31, Calm\_31, Acquire49\_31, MAckerman\_31, JoeDirt\_31, Silverleaf\_31, Appletree2\_31, Tyson\_31, UPIE\_31, LeBron\_31, Wyatt2\_31, Wamburgrxpress\_31, Halena\_31, CicholasNage\_31, Zaria\_31, AvadaKedavra\_31
- Track 8 : DirkDirk\_31
- Track 9 : MooMoo\_39

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

The start number called the most often in the published annotations is 6, it was called in 19 of the 28 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Acquire49\_31, Appletree2\_31, AvadaKedavra\_31, Calm\_31, CicholasNage\_31, Enceladus\_31, Halena\_31, JoeDirt\_31, LeBron\_31, MAckerman\_31, OhShagHennessy\_31, Rose5\_31, Silverleaf\_31, ThetaBob\_43, Tyson\_31, UPIE\_31, Wamburgrxpress\_31, Wyatt2\_31, Zaria\_31,

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

- DirkDirk\_31, MooMoo\_39, Yoshi\_52,

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

- ArcusAngelus\_46, Avani\_49, Chevrolet\_49, Lizziana\_49, Mutaforma13\_44, PhesterPhotato\_43,

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

Start 5:

- Found in 3 of 28 ( 10.7% ) of genes in pham
- Manual Annotations of this start: 1 of 28
- Called 33.3% of time when present
- Phage (with cluster) where this start called: MooMoo\_39 (singleton),

#### Start 6:

- Found in 22 of 28 ( 78.6% ) of genes in pham
- Manual Annotations of this start: 19 of 28
- Called 86.4% of time when present
- Phage (with cluster) where this start called: Acquire49\_31 (L1), Appletree2\_31 (L1), AvadaKedavra\_31 (L1), Calm\_31 (L1), CicholasNage\_31 (L1), Enceladus\_31 (L1), Halena\_31 (L1), JoeDirt\_31 (L1), LeBron\_31 (L1), MAckerman\_31 (L1), OhShagHennessy\_31 (L1), Rose5\_31 (L1), Silverleaf\_31 (L1), ThetaBob\_43 (F4), Tyson\_31 (L1), UPIE\_31 (L1), Wamburgxpress\_31 (L1), Wyatt2\_31 (L1), Zaria\_31 (L1),

#### Start 7:

- Found in 3 of 28 ( 10.7% ) of genes in pham
- Manual Annotations of this start: 1 of 28
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Yoshi\_52 (F2),

#### Start 15:

- Found in 5 of 28 ( 17.9% ) of genes in pham
- Manual Annotations of this start: 2 of 28
- Called 40.0% of time when present
- Phage (with cluster) where this start called: Avani\_49 (F2), Lizziana\_49 (F1),

#### Start 16:

- Found in 19 of 28 ( 67.9% ) of genes in pham
- Manual Annotations of this start: 1 of 28
- Called 5.3% of time when present
- Phage (with cluster) where this start called: DirkDirk\_31 (L1),

#### Start 17:

- Found in 7 of 28 ( 25.0% ) of genes in pham
- Manual Annotations of this start: 2 of 28
- Called 28.6% of time when present
- Phage (with cluster) where this start called: Mutaforma13\_44 (F1), PhesterPhotato\_43 (F1),

#### Start 21:

- Found in 7 of 28 ( 25.0% ) of genes in pham
- Manual Annotations of this start: 2 of 28
- Called 28.6% of time when present
- Phage (with cluster) where this start called: ArcusAngelus\_46 (F1), Chevrolet\_49 (F1),

### Summary by clusters:

There are 5 clusters represented in this pham: F1, singleton, F4, F2, L1,

Info for manual annotations of cluster F1:

- Start number 15 was manually annotated 1 time for cluster F1.
- Start number 17 was manually annotated 2 times for cluster F1.
- Start number 21 was manually annotated 2 times for cluster F1.

Info for manual annotations of cluster F2:

- Start number 7 was manually annotated 1 time for cluster F2.
- Start number 15 was manually annotated 1 time for cluster F2.

Info for manual annotations of cluster F4:

- Start number 6 was manually annotated 1 time for cluster F4.

Info for manual annotations of cluster L1:

- Start number 6 was manually annotated 18 times for cluster L1.
- Start number 16 was manually annotated 1 time for cluster L1.

### **Gene Information:**

Gene: Acquire49\_31 Start: 28234, Stop: 28028, Start Num: 6

Candidate Starts for Acquire49\_31:

(Start: 6 @28234 has 19 MA's), (8, 28222), (9, 28219), (Start: 16 @28183 has 1 MA's), (23, 28126), (27, 28084),

Gene: Appletree2\_31 Start: 28177, Stop: 27971, Start Num: 6

Candidate Starts for Appletree2\_31:

(Start: 6 @28177 has 19 MA's), (8, 28165), (9, 28162), (Start: 16 @28126 has 1 MA's), (23, 28069), (27, 28027),

Gene: ArcusAngelus\_46 Start: 33985, Stop: 33863, Start Num: 21

Candidate Starts for ArcusAngelus\_46:

(20, 34003), (Start: 21 @33985 has 2 MA's), (22, 33961), (24, 33958), (25, 33952), (26, 33949), (27, 33919), (28, 33916), (29, 33895), (30, 33874), (31, 33868),

Gene: AvadaKedavra\_31 Start: 28244, Stop: 28038, Start Num: 6

Candidate Starts for AvadaKedavra\_31:

(Start: 6 @28244 has 19 MA's), (8, 28232), (9, 28229), (Start: 16 @28193 has 1 MA's), (23, 28136), (27, 28094),

Gene: Avani\_49 Start: 31816, Stop: 31664, Start Num: 15

Candidate Starts for Avani\_49:

(Start: 15 @31816 has 2 MA's), (Start: 17 @31813 has 2 MA's), (18, 31810), (19, 31807), (Start: 21 @31786 has 2 MA's), (22, 31762), (24, 31759), (25, 31753), (26, 31750), (27, 31720), (28, 31717), (29, 31696), (30, 31675), (31, 31669),

Gene: Calm\_31 Start: 28249, Stop: 28043, Start Num: 6

Candidate Starts for Calm\_31:

(Start: 6 @28249 has 19 MA's), (8, 28237), (9, 28234), (Start: 16 @28198 has 1 MA's), (23, 28141), (27, 28099),

Gene: Chevrolet\_49 Start: 33986, Stop: 33864, Start Num: 21

Candidate Starts for Chevrolet\_49:

(20, 34004), (Start: 21 @33986 has 2 MA's), (22, 33962), (24, 33959), (25, 33953), (26, 33950), (27, 33920), (28, 33917), (29, 33896), (30, 33875), (31, 33869),

Gene: CicholasNage\_31 Start: 28236, Stop: 28030, Start Num: 6

Candidate Starts for CicholasNage\_31:

(Start: 6 @28236 has 19 MA's), (8, 28224), (9, 28221), (Start: 16 @28185 has 1 MA's), (23, 28128), (27, 28086),

Gene: DirkDirk\_31 Start: 28183, Stop: 28028, Start Num: 16

Candidate Starts for DirkDirk\_31:

(Start: 6 @28234 has 19 MA's), (8, 28222), (9, 28219), (Start: 16 @28183 has 1 MA's), (23, 28126), (27, 28084),

Gene: Enceladus\_31 Start: 28218, Stop: 28012, Start Num: 6

Candidate Starts for Enceladus\_31:

(Start: 6 @28218 has 19 MA's), (8, 28206), (9, 28203), (Start: 16 @28167 has 1 MA's), (23, 28110), (27, 28068),

Gene: Halena\_31 Start: 28245, Stop: 28039, Start Num: 6

Candidate Starts for Halena\_31:

(Start: 6 @28245 has 19 MA's), (8, 28233), (9, 28230), (Start: 16 @28194 has 1 MA's), (23, 28137), (27, 28095),

Gene: JoeDirt\_31 Start: 28216, Stop: 28010, Start Num: 6

Candidate Starts for JoeDirt\_31:

(Start: 6 @28216 has 19 MA's), (8, 28204), (9, 28201), (Start: 16 @28165 has 1 MA's), (23, 28108), (27, 28066),

Gene: LeBron\_31 Start: 28260, Stop: 28054, Start Num: 6

Candidate Starts for LeBron\_31:

(Start: 6 @28260 has 19 MA's), (8, 28248), (9, 28245), (Start: 16 @28209 has 1 MA's), (23, 28152), (27, 28110),

Gene: Lizziana\_49 Start: 34010, Stop: 33846, Start Num: 15

Candidate Starts for Lizziana\_49:

(Start: 15 @34010 has 2 MA's), (Start: 17 @34007 has 2 MA's), (18, 34004), (19, 34001), (Start: 21 @33980 has 2 MA's), (22, 33956), (24, 33953), (25, 33947), (26, 33944), (27, 33914), (28, 33911), (29, 33890),

Gene: MAckerman\_31 Start: 28234, Stop: 28028, Start Num: 6

Candidate Starts for MAckerman\_31:

(Start: 6 @28234 has 19 MA's), (8, 28222), (9, 28219), (Start: 16 @28183 has 1 MA's), (23, 28126), (27, 28084),

Gene: MooMoo\_39 Start: 31044, Stop: 30838, Start Num: 5

Candidate Starts for MooMoo\_39:

(1, 31134), (2, 31128), (3, 31107), (4, 31077), (Start: 5 @31044 has 1 MA's), (Start: 6 @31041 has 19 MA's), (Start: 7 @31038 has 1 MA's), (8, 31029), (9, 31026), (10, 31023), (11, 31014), (12, 31011), (13, 31005), (14, 31002), (Start: 15 @30990 has 2 MA's), (Start: 17 @30987 has 2 MA's), (19, 30981), (Start: 21 @30960 has 2 MA's), (24, 30933), (25, 30927), (26, 30924), (27, 30894), (28, 30891), (29, 30870), (30, 30849),

Gene: Mutaforma13\_44 Start: 32959, Stop: 32807, Start Num: 17

Candidate Starts for Mutaforma13\_44:

(Start: 17 @32959 has 2 MA's), (19, 32953), (25, 32899), (26, 32896), (27, 32866), (28, 32863), (29, 32842),

Gene: OhShagHennessy\_31 Start: 28199, Stop: 27993, Start Num: 6

Candidate Starts for OhShagHennessy\_31:

(Start: 6 @28199 has 19 MA's), (8, 28187), (9, 28184), (Start: 16 @28148 has 1 MA's), (23, 28091), (27, 28049),

Gene: PhesterPhotato\_43 Start: 32683, Stop: 32531, Start Num: 17

Candidate Starts for PhesterPhotato\_43:

(Start: 17 @32683 has 2 MA's), (19, 32677), (25, 32623), (26, 32620), (27, 32590), (28, 32587), (29, 32566),

Gene: Rose5\_31 Start: 28234, Stop: 28028, Start Num: 6

Candidate Starts for Rose5\_31:

(Start: 6 @28234 has 19 MA's), (8, 28222), (9, 28219), (Start: 16 @28183 has 1 MA's), (23, 28126), (27, 28084),

Gene: Silverleaf\_31 Start: 28234, Stop: 28028, Start Num: 6

Candidate Starts for Silverleaf\_31:

(Start: 6 @28234 has 19 MA's), (8, 28222), (9, 28219), (Start: 16 @28183 has 1 MA's), (23, 28126), (27, 28084),

Gene: ThetaBob\_43 Start: 31404, Stop: 31201, Start Num: 6

Candidate Starts for ThetaBob\_43:

(1, 31497), (2, 31491), (3, 31470), (4, 31440), (Start: 5 @31407 has 1 MA's), (Start: 6 @31404 has 19 MA's), (Start: 7 @31401 has 1 MA's), (8, 31392), (9, 31389), (10, 31386), (11, 31377), (12, 31374), (13, 31368), (14, 31365), (Start: 15 @31353 has 2 MA's), (Start: 17 @31350 has 2 MA's), (19, 31344), (Start: 21 @31323 has 2 MA's), (24, 31296), (25, 31290), (26, 31287), (27, 31257), (28, 31254), (29, 31233), (30, 31212),

Gene: Tyson\_31 Start: 28234, Stop: 28028, Start Num: 6

Candidate Starts for Tyson\_31:

(Start: 6 @28234 has 19 MA's), (8, 28222), (9, 28219), (Start: 16 @28183 has 1 MA's), (23, 28126), (27, 28084),

Gene: UPIE\_31 Start: 28232, Stop: 28026, Start Num: 6

Candidate Starts for UPIE\_31:

(Start: 6 @28232 has 19 MA's), (8, 28220), (9, 28217), (Start: 16 @28181 has 1 MA's), (23, 28124), (27, 28082),

Gene: Wamburgrxpress\_31 Start: 28247, Stop: 28041, Start Num: 6

Candidate Starts for Wamburgrxpress\_31:

(Start: 6 @28247 has 19 MA's), (8, 28235), (9, 28232), (Start: 16 @28196 has 1 MA's), (23, 28139), (27, 28097),

Gene: Wyatt2\_31 Start: 28234, Stop: 28028, Start Num: 6

Candidate Starts for Wyatt2\_31:

(Start: 6 @28234 has 19 MA's), (8, 28222), (9, 28219), (Start: 16 @28183 has 1 MA's), (23, 28126), (27, 28084),

Gene: Yoshi\_52 Start: 32293, Stop: 32093, Start Num: 7

Candidate Starts for Yoshi\_52:

(1, 32389), (2, 32383), (3, 32362), (4, 32332), (Start: 5 @32299 has 1 MA's), (Start: 6 @32296 has 19 MA's), (Start: 7 @32293 has 1 MA's), (8, 32284), (9, 32281), (10, 32278), (11, 32269), (12, 32266), (13, 32260), (14, 32257), (Start: 15 @32245 has 2 MA's), (Start: 17 @32242 has 2 MA's), (19, 32236), (Start: 21 @32215 has 2 MA's), (24, 32188), (25, 32182), (26, 32179), (27, 32149), (28, 32146), (29, 32125), (30, 32104),

Gene: Zaria\_31 Start: 28249, Stop: 28043, Start Num: 6

Candidate Starts for Zaria\_31:

(Start: 6 @28249 has 19 MA's), (8, 28237), (9, 28234), (Start: 16 @28198 has 1 MA's), (23, 28141), (27, 28099),