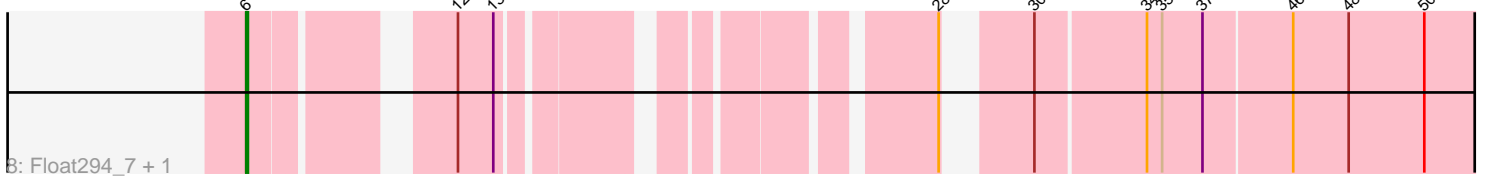
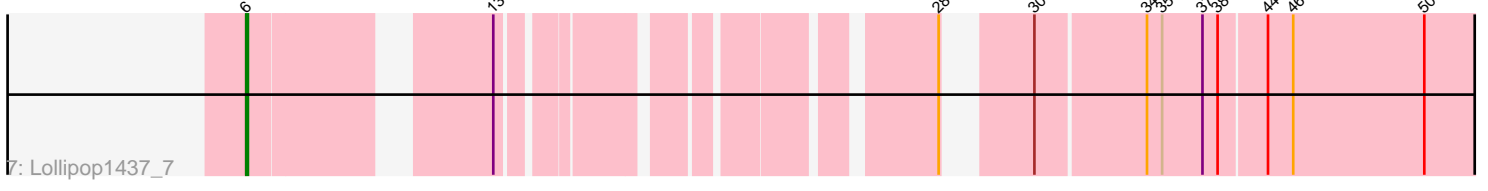
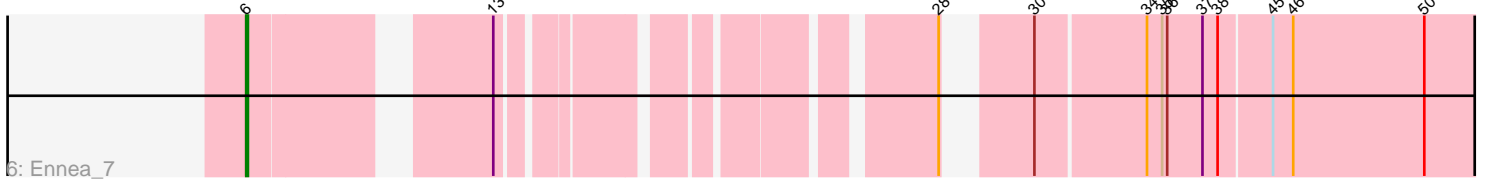
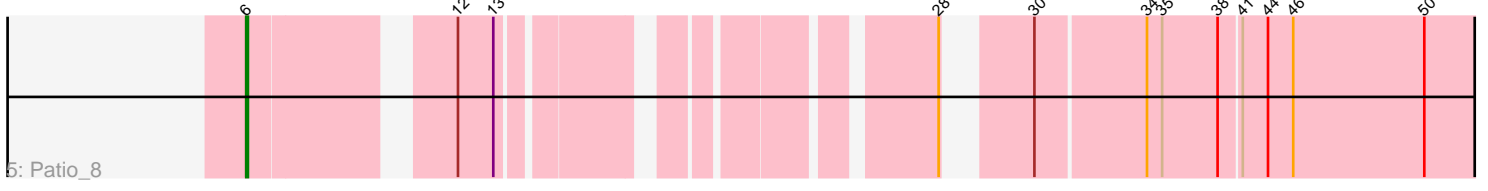
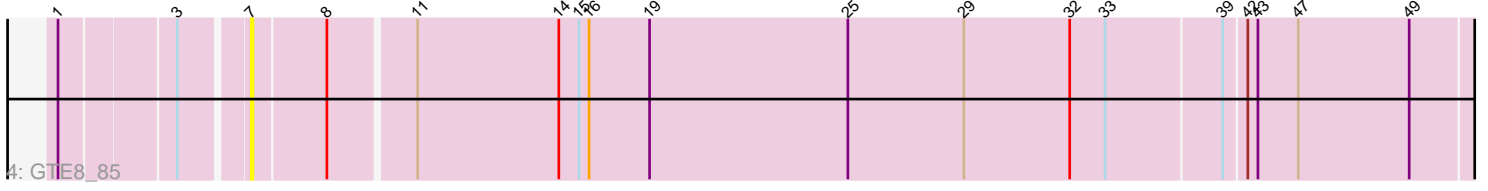
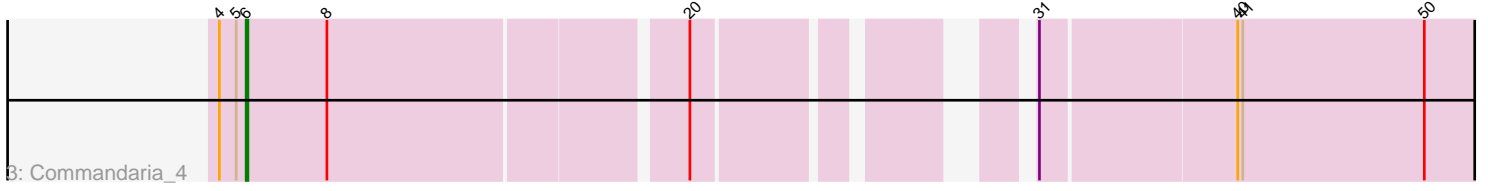
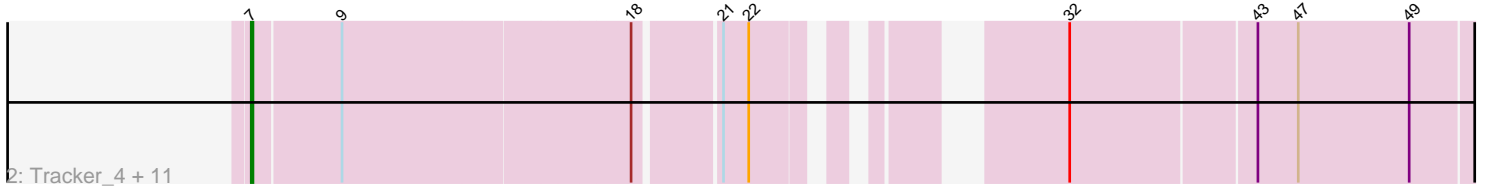
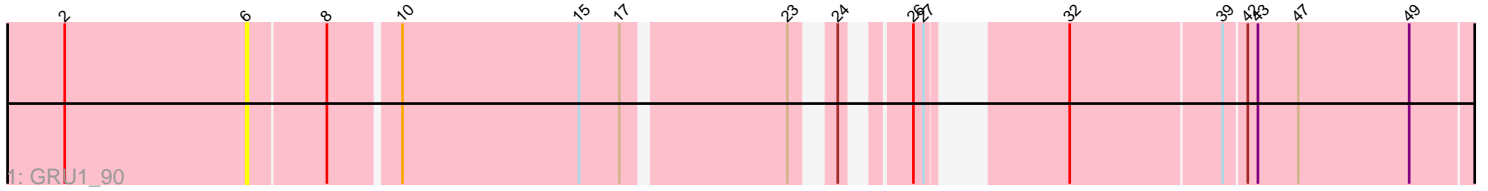


# Pham 192908



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 192908 Report

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

Pham number 192908 has 20 members, 3 are drafts.

Phages represented in each track:

- Track 1 : GRU1\_90
- Track 2 : Tracker\_4, GrootJr\_6, Emianna\_4, Kurt\_4, Foxboro\_4, Jifall16\_4, Phomeo\_4, NatB6\_5, Wheezy\_4, KidneyBean\_4, NovumRegina\_5, Arti\_4
- Track 3 : Commandaria\_4
- Track 4 : GTE8\_85
- Track 5 : Patio\_8
- Track 6 : Ennea\_7
- Track 7 : Lollipop1437\_7
- Track 8 : Float294\_7, Skysand\_7

### ***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 11 of the 17 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Arti\_4, Emianna\_4, Foxboro\_4, GTE8\_85, GrootJr\_6, Jifall16\_4, KidneyBean\_4, Kurt\_4, NatB6\_5, NovumRegina\_5, Phomeo\_4, Tracker\_4, Wheezy\_4,

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

- 

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

- Commandaria\_4, Ennea\_7, Float294\_7, GRU1\_90, Lollipop1437\_7, Patio\_8, Skysand\_7,

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

Start 6:

- Found in 7 of 20 ( 35.0% ) of genes in pham
- Manual Annotations of this start: 6 of 17
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Commandaria\_4 (CR2), Ennea\_7 (CR3), Float294\_7 (CR3), GRU1\_90 (CR1), Lollipop1437\_7 (CR3), Patio\_8 (CR3),

Skysand\_7 (CR3),

Start 7:

- Found in 13 of 20 ( 65.0% ) of genes in pham
- Manual Annotations of this start: 11 of 17
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Arti\_4 (CR2), Emianna\_4 (CR2), Foxboro\_4 (CR2), GTE8\_85 (CR2), GrootJr\_6 (CR2), Jifall16\_4 (CR2), KidneyBean\_4 (CR2), Kurt\_4 (CR2), NatB6\_5 (CR2), NovumRegina\_5 (CR2), Phomeo\_4 (CR2), Tracker\_4 (CR2), Wheezy\_4 (CR2),

### **Summary by clusters:**

There are 3 clusters represented in this pham: CR2, CR3, CR1,

Info for manual annotations of cluster CR2:

- Start number 6 was manually annotated 1 time for cluster CR2.
- Start number 7 was manually annotated 11 times for cluster CR2.

Info for manual annotations of cluster CR3:

- Start number 6 was manually annotated 5 times for cluster CR3.

### **Gene Information:**

Gene: Arti\_4 Start: 3769, Stop: 4416, Start Num: 7

Candidate Starts for Arti\_4:

(Start: 7 @3769 has 11 MA's), (9, 3820), (18, 3985), (21, 4030), (22, 4045), (32, 4177), (43, 4282), (47, 4306), (49, 4372),

Gene: Commandaria\_4 Start: 2892, Stop: 3551, Start Num: 6

Candidate Starts for Commandaria\_4:

(4, 2877), (5, 2886), (Start: 6 @2892 has 6 MA's), (8, 2940), (20, 3141), (31, 3291), (40, 3402), (41, 3405), (50, 3513),

Gene: Emianna\_4 Start: 3551, Stop: 4198, Start Num: 7

Candidate Starts for Emianna\_4:

(Start: 7 @3551 has 11 MA's), (9, 3602), (18, 3767), (21, 3812), (22, 3827), (32, 3959), (43, 4064), (47, 4088), (49, 4154),

Gene: Ennea\_7 Start: 4584, Stop: 5213, Start Num: 6

Candidate Starts for Ennea\_7:

(Start: 6 @4584 has 6 MA's), (13, 4704), (28, 4914), (30, 4947), (34, 5010), (35, 5019), (36, 5022), (37, 5043), (38, 5052), (45, 5082), (46, 5094), (50, 5172),

Gene: Float294\_7 Start: 4570, Stop: 5193, Start Num: 6

Candidate Starts for Float294\_7:

(Start: 6 @4570 has 6 MA's), (12, 4666), (13, 4687), (28, 4894), (30, 4927), (34, 4990), (35, 4999), (37, 5023), (46, 5074), (48, 5107), (50, 5152),

Gene: Foxboro\_4 Start: 3562, Stop: 4209, Start Num: 7

Candidate Starts for Foxboro\_4:

(Start: 7 @3562 has 11 MA's), (9, 3613), (18, 3778), (21, 3823), (22, 3838), (32, 3970), (43, 4075), (47, 4099), (49, 4165),

Gene: GRU1\_90 Start: 63100, Stop: 63744, Start Num: 6

Candidate Starts for GRU1\_90:

(2, 62992), (Start: 6 @63100 has 6 MA's), (8, 63145), (10, 63184), (15, 63289), (17, 63313), (23, 63403), (24, 63418), (26, 63445), (27, 63451), (32, 63505), (39, 63592), (42, 63604), (43, 63610), (47, 63634), (49, 63700),

Gene: GTE8\_85 Start: 63971, Stop: 64687, Start Num: 7

Candidate Starts for GTE8\_85:

(1, 63872), (3, 63935), (Start: 7 @63971 has 11 MA's), (8, 64013), (11, 64061), (14, 64145), (15, 64157), (16, 64163), (19, 64199), (25, 64316), (29, 64385), (32, 64448), (33, 64469), (39, 64535), (42, 64547), (43, 64553), (47, 64577), (49, 64643),

Gene: GrootJr\_6 Start: 4164, Stop: 4811, Start Num: 7

Candidate Starts for GrootJr\_6:

(Start: 7 @4164 has 11 MA's), (9, 4215), (18, 4380), (21, 4425), (22, 4440), (32, 4572), (43, 4677), (47, 4701), (49, 4767),

Gene: Jifall16\_4 Start: 3562, Stop: 4209, Start Num: 7

Candidate Starts for Jifall16\_4:

(Start: 7 @3562 has 11 MA's), (9, 3613), (18, 3778), (21, 3823), (22, 3838), (32, 3970), (43, 4075), (47, 4099), (49, 4165),

Gene: KidneyBean\_4 Start: 3560, Stop: 4207, Start Num: 7

Candidate Starts for KidneyBean\_4:

(Start: 7 @3560 has 11 MA's), (9, 3611), (18, 3776), (21, 3821), (22, 3836), (32, 3968), (43, 4073), (47, 4097), (49, 4163),

Gene: Kurt\_4 Start: 3551, Stop: 4198, Start Num: 7

Candidate Starts for Kurt\_4:

(Start: 7 @3551 has 11 MA's), (9, 3602), (18, 3767), (21, 3812), (22, 3827), (32, 3959), (43, 4064), (47, 4088), (49, 4154),

Gene: Lollipop1437\_7 Start: 4572, Stop: 5201, Start Num: 6

Candidate Starts for Lollipop1437\_7:

(Start: 6 @4572 has 6 MA's), (13, 4692), (28, 4902), (30, 4935), (34, 4998), (35, 5007), (37, 5031), (38, 5040), (44, 5067), (46, 5082), (50, 5160),

Gene: NatB6\_5 Start: 4169, Stop: 4816, Start Num: 7

Candidate Starts for NatB6\_5:

(Start: 7 @4169 has 11 MA's), (9, 4220), (18, 4385), (21, 4430), (22, 4445), (32, 4577), (43, 4682), (47, 4706), (49, 4772),

Gene: NovumRegina\_5 Start: 4164, Stop: 4811, Start Num: 7

Candidate Starts for NovumRegina\_5:

(Start: 7 @4164 has 11 MA's), (9, 4215), (18, 4380), (21, 4425), (22, 4440), (32, 4572), (43, 4677), (47, 4701), (49, 4767),

Gene: Patio\_8 Start: 5240, Stop: 5869, Start Num: 6

Candidate Starts for Patio\_8:

(Start: 6 @5240 has 6 MA's), (12, 5342), (13, 5363), (28, 5570), (30, 5603), (34, 5666), (35, 5675), (38, 5708), (41, 5720), (44, 5735), (46, 5750), (50, 5828),

Gene: Phomeo\_4 Start: 3551, Stop: 4198, Start Num: 7

Candidate Starts for Phomeo\_4:

(Start: 7 @3551 has 11 MA's), (9, 3602), (18, 3767), (21, 3812), (22, 3827), (32, 3959), (43, 4064), (47, 4088), (49, 4154),

Gene: Skysand\_7 Start: 4572, Stop: 5195, Start Num: 6

Candidate Starts for Skysand\_7:

(Start: 6 @4572 has 6 MA's), (12, 4668), (13, 4689), (28, 4896), (30, 4929), (34, 4992), (35, 5001), (37, 5025), (46, 5076), (48, 5109), (50, 5154),

Gene: Tracker\_4 Start: 3535, Stop: 4182, Start Num: 7

Candidate Starts for Tracker\_4:

(Start: 7 @3535 has 11 MA's), (9, 3586), (18, 3751), (21, 3796), (22, 3811), (32, 3943), (43, 4048), (47, 4072), (49, 4138),

Gene: Wheezy\_4 Start: 3781, Stop: 4428, Start Num: 7

Candidate Starts for Wheezy\_4:

(Start: 7 @3781 has 11 MA's), (9, 3832), (18, 3997), (21, 4042), (22, 4057), (32, 4189), (43, 4294), (47, 4318), (49, 4384),