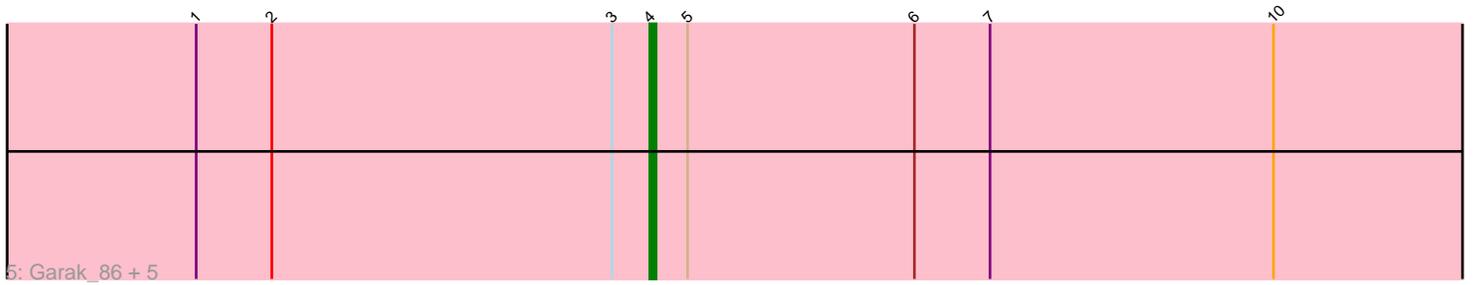
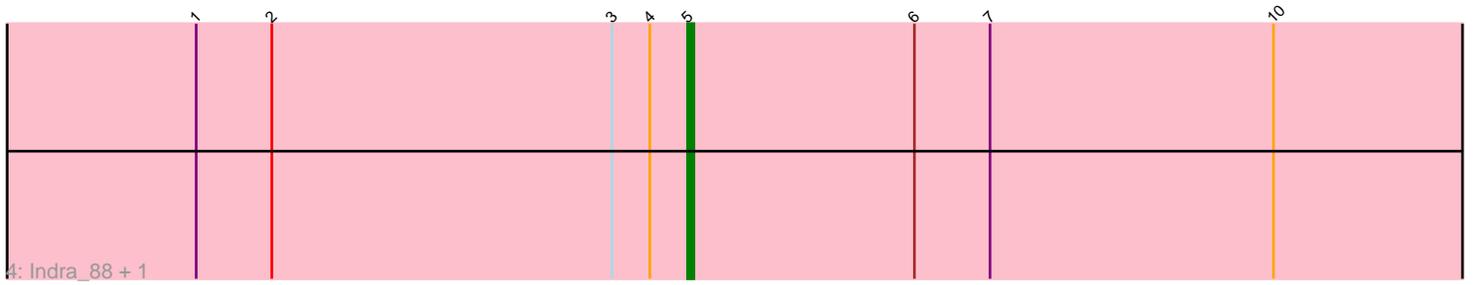
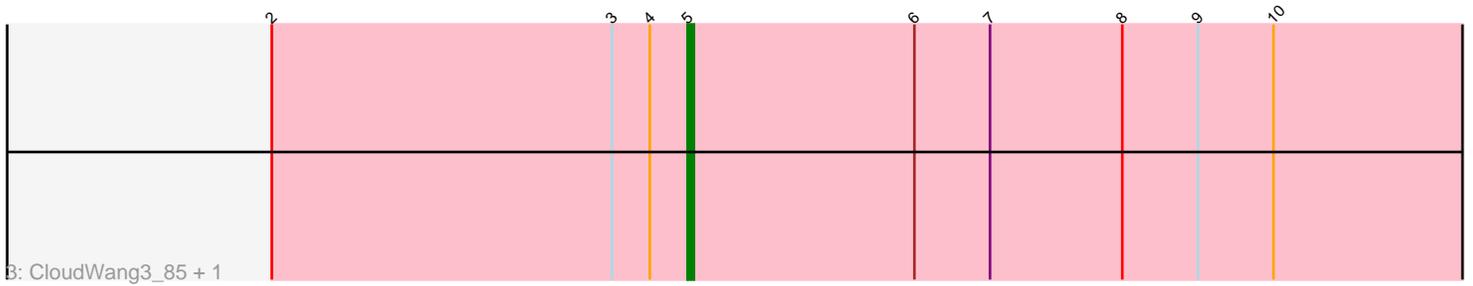
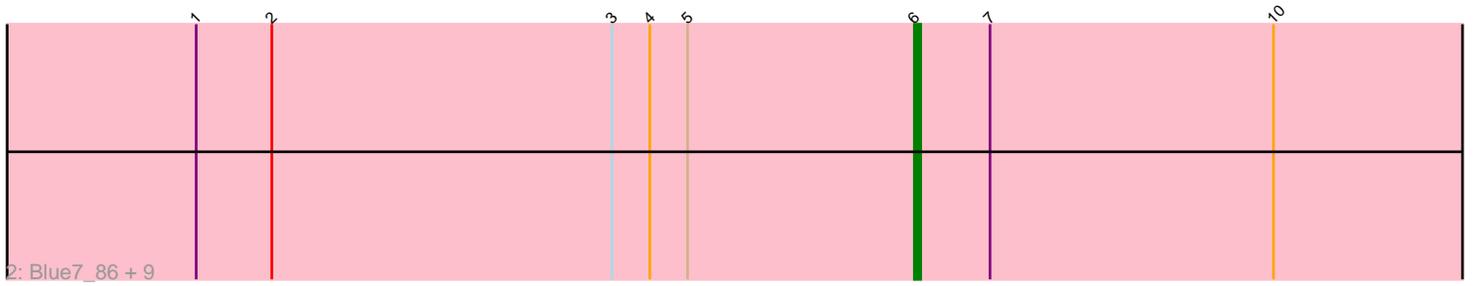
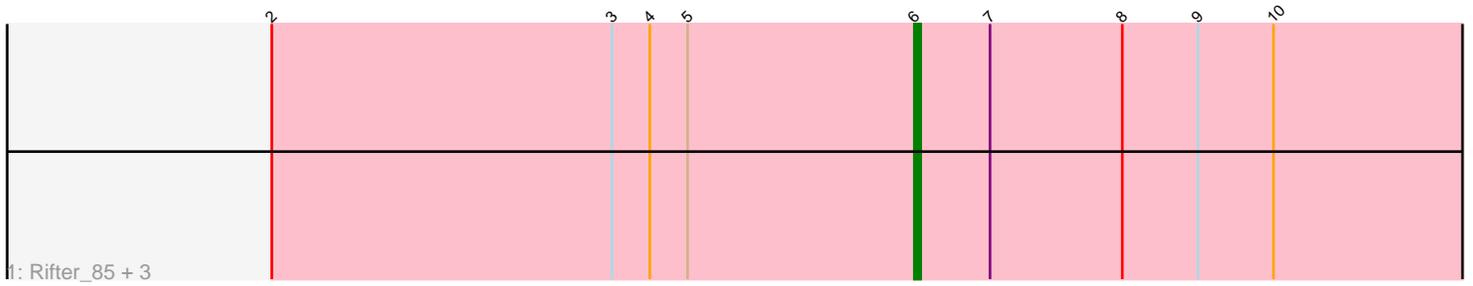


# Pham 284144



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 284144 Report

This analysis was run 02/23/26 on database version 636.

Pham number 284144 has 24 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Rifter\_85, Hexamo\_84, Gladiator\_81, Gruunaga\_84
- Track 2 : Blue7\_86, Koko\_86, Wiks\_84, Temprado\_86, BlessJoy\_85, Yokurt\_84, Roksolana\_85, WunderPhul\_85, Lilbunny\_84, Zulu\_86
- Track 3 : CloudWang3\_85, Hammer\_85
- Track 4 : Indra\_88, Tucker\_85
- Track 5 : Garak\_86, Helmet\_87, Artemis2UCLA\_84, ToneTone\_82, Zaka\_85, BennyP\_84

### ***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 14 of the 22 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- BlessJoy\_85, Blue7\_86, Gladiator\_81, Gruunaga\_84, Hexamo\_84, Koko\_86, Lilbunny\_84, Rifter\_85, Roksolana\_85, Temprado\_86, Wiks\_84, WunderPhul\_85, Yokurt\_84, Zulu\_86,

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

- Artemis2UCLA\_84, BennyP\_84, CloudWang3\_85, Garak\_86, Hammer\_85, Helmet\_87, Indra\_88, ToneTone\_82, Tucker\_85, Zaka\_85,

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

- 

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

Start 4:

- Found in 24 of 24 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 4 of 22
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Artemis2UCLA\_84 (A6), BennyP\_84 (A6), Garak\_86 (A6), Helmet\_87 (A6), ToneTone\_82 (A6), Zaka\_85 (A6),

Start 5:

- Found in 24 of 24 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 4 of 22
- Called 16.7% of time when present
- Phage (with cluster) where this start called: CloudWang3\_85 (A6), Hammer\_85 (A6), Indra\_88 (A6), Tucker\_85 (A6),

Start 6:

- Found in 24 of 24 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 14 of 22
- Called 58.3% of time when present
- Phage (with cluster) where this start called: BlessJoy\_85 (A6), Blue7\_86 (A6), Gladiator\_81 (A6), Gruunaga\_84 (A6), Hexamo\_84 (A6), Koko\_86 (A6), Lilbunny\_84 (A6), Rifter\_85 (A6), Roksolana\_85 (A6), Temprado\_86 (A6), Wiks\_84 (A6), WunderPhul\_85 (A6), Yokurt\_84 (A6), Zulu\_86 (A6),

**Summary by clusters:**

There is one cluster represented in this pham: A6

Info for manual annotations of cluster A6:

- Start number 4 was manually annotated 4 times for cluster A6.
- Start number 5 was manually annotated 4 times for cluster A6.
- Start number 6 was manually annotated 14 times for cluster A6.

**Gene Information:**

Gene: Artemis2UCLA\_84 Start: 45607, Stop: 45476, Start Num: 4

Candidate Starts for Artemis2UCLA\_84:

(1, 45679), (2, 45667), (3, 45613), (Start: 4 @45607 has 4 MA's), (Start: 5 @45601 has 4 MA's), (Start: 6 @45565 has 14 MA's), (7, 45553), (10, 45508),

Gene: BennyP\_84 Start: 45772, Stop: 45641, Start Num: 4

Candidate Starts for BennyP\_84:

(1, 45844), (2, 45832), (3, 45778), (Start: 4 @45772 has 4 MA's), (Start: 5 @45766 has 4 MA's), (Start: 6 @45730 has 14 MA's), (7, 45718), (10, 45673),

Gene: BlessJoy\_85 Start: 46086, Stop: 45997, Start Num: 6

Candidate Starts for BlessJoy\_85:

(1, 46200), (2, 46188), (3, 46134), (Start: 4 @46128 has 4 MA's), (Start: 5 @46122 has 4 MA's), (Start: 6 @46086 has 14 MA's), (7, 46074), (10, 46029),

Gene: Blue7\_86 Start: 45784, Stop: 45695, Start Num: 6

Candidate Starts for Blue7\_86:

(1, 45898), (2, 45886), (3, 45832), (Start: 4 @45826 has 4 MA's), (Start: 5 @45820 has 4 MA's), (Start: 6 @45784 has 14 MA's), (7, 45772), (10, 45727),

Gene: CloudWang3\_85 Start: 46130, Stop: 46005, Start Num: 5

Candidate Starts for CloudWang3\_85:

(2, 46196), (3, 46142), (Start: 4 @46136 has 4 MA's), (Start: 5 @46130 has 4 MA's), (Start: 6 @46094 has 14 MA's), (7, 46082), (8, 46061), (9, 46049), (10, 46037),

Gene: Garak\_86 Start: 46069, Stop: 45938, Start Num: 4

Candidate Starts for Garak\_86:

(1, 46141), (2, 46129), (3, 46075), (Start: 4 @46069 has 4 MA's), (Start: 5 @46063 has 4 MA's), (Start: 6 @46027 has 14 MA's), (7, 46015), (10, 45970),

Gene: Gladiator\_81 Start: 45750, Stop: 45661, Start Num: 6

Candidate Starts for Gladiator\_81:

(2, 45852), (3, 45798), (Start: 4 @45792 has 4 MA's), (Start: 5 @45786 has 4 MA's), (Start: 6 @45750 has 14 MA's), (7, 45738), (8, 45717), (9, 45705), (10, 45693),

Gene: Gruunaga\_84 Start: 45705, Stop: 45616, Start Num: 6

Candidate Starts for Gruunaga\_84:

(2, 45807), (3, 45753), (Start: 4 @45747 has 4 MA's), (Start: 5 @45741 has 4 MA's), (Start: 6 @45705 has 14 MA's), (7, 45693), (8, 45672), (9, 45660), (10, 45648),

Gene: Hammer\_85 Start: 45448, Stop: 45323, Start Num: 5

Candidate Starts for Hammer\_85:

(2, 45514), (3, 45460), (Start: 4 @45454 has 4 MA's), (Start: 5 @45448 has 4 MA's), (Start: 6 @45412 has 14 MA's), (7, 45400), (8, 45379), (9, 45367), (10, 45355),

Gene: Helmet\_87 Start: 46069, Stop: 45938, Start Num: 4

Candidate Starts for Helmet\_87:

(1, 46141), (2, 46129), (3, 46075), (Start: 4 @46069 has 4 MA's), (Start: 5 @46063 has 4 MA's), (Start: 6 @46027 has 14 MA's), (7, 46015), (10, 45970),

Gene: Hexamo\_84 Start: 45580, Stop: 45491, Start Num: 6

Candidate Starts for Hexamo\_84:

(2, 45682), (3, 45628), (Start: 4 @45622 has 4 MA's), (Start: 5 @45616 has 4 MA's), (Start: 6 @45580 has 14 MA's), (7, 45568), (8, 45547), (9, 45535), (10, 45523),

Gene: Indra\_88 Start: 46064, Stop: 45939, Start Num: 5

Candidate Starts for Indra\_88:

(1, 46142), (2, 46130), (3, 46076), (Start: 4 @46070 has 4 MA's), (Start: 5 @46064 has 4 MA's), (Start: 6 @46028 has 14 MA's), (7, 46016), (10, 45971),

Gene: Koko\_86 Start: 46417, Stop: 46328, Start Num: 6

Candidate Starts for Koko\_86:

(1, 46531), (2, 46519), (3, 46465), (Start: 4 @46459 has 4 MA's), (Start: 5 @46453 has 4 MA's), (Start: 6 @46417 has 14 MA's), (7, 46405), (10, 46360),

Gene: Lilbunny\_84 Start: 45659, Stop: 45570, Start Num: 6

Candidate Starts for Lilbunny\_84:

(1, 45773), (2, 45761), (3, 45707), (Start: 4 @45701 has 4 MA's), (Start: 5 @45695 has 4 MA's), (Start: 6 @45659 has 14 MA's), (7, 45647), (10, 45602),

Gene: Rifter\_85 Start: 45207, Stop: 45118, Start Num: 6

Candidate Starts for Rifter\_85:

(2, 45309), (3, 45255), (Start: 4 @45249 has 4 MA's), (Start: 5 @45243 has 4 MA's), (Start: 6 @45207 has 14 MA's), (7, 45195), (8, 45174), (9, 45162), (10, 45150),

Gene: Roksolana\_85 Start: 45923, Stop: 45834, Start Num: 6

Candidate Starts for Roksolana\_85:

(1, 46037), (2, 46025), (3, 45971), (Start: 4 @45965 has 4 MA's), (Start: 5 @45959 has 4 MA's), (Start: 6 @45923 has 14 MA's), (7, 45911), (10, 45866),

Gene: Temprado\_86 Start: 46027, Stop: 45938, Start Num: 6

Candidate Starts for Temprado\_86:

(1, 46141), (2, 46129), (3, 46075), (Start: 4 @46069 has 4 MA's), (Start: 5 @46063 has 4 MA's), (Start: 6 @46027 has 14 MA's), (7, 46015), (10, 45970),

Gene: ToneTone\_82 Start: 45629, Stop: 45498, Start Num: 4

Candidate Starts for ToneTone\_82:

(1, 45701), (2, 45689), (3, 45635), (Start: 4 @45629 has 4 MA's), (Start: 5 @45623 has 4 MA's), (Start: 6 @45587 has 14 MA's), (7, 45575), (10, 45530),

Gene: Tucker\_85 Start: 45826, Stop: 45701, Start Num: 5

Candidate Starts for Tucker\_85:

(1, 45904), (2, 45892), (3, 45838), (Start: 4 @45832 has 4 MA's), (Start: 5 @45826 has 4 MA's), (Start: 6 @45790 has 14 MA's), (7, 45778), (10, 45733),

Gene: Wiks\_84 Start: 45658, Stop: 45569, Start Num: 6

Candidate Starts for Wiks\_84:

(1, 45772), (2, 45760), (3, 45706), (Start: 4 @45700 has 4 MA's), (Start: 5 @45694 has 4 MA's), (Start: 6 @45658 has 14 MA's), (7, 45646), (10, 45601),

Gene: WunderPhul\_85 Start: 45656, Stop: 45567, Start Num: 6

Candidate Starts for WunderPhul\_85:

(1, 45770), (2, 45758), (3, 45704), (Start: 4 @45698 has 4 MA's), (Start: 5 @45692 has 4 MA's), (Start: 6 @45656 has 14 MA's), (7, 45644), (10, 45599),

Gene: Yokurt\_84 Start: 45658, Stop: 45569, Start Num: 6

Candidate Starts for Yokurt\_84:

(1, 45772), (2, 45760), (3, 45706), (Start: 4 @45700 has 4 MA's), (Start: 5 @45694 has 4 MA's), (Start: 6 @45658 has 14 MA's), (7, 45646), (10, 45601),

Gene: Zaka\_85 Start: 45700, Stop: 45569, Start Num: 4

Candidate Starts for Zaka\_85:

(1, 45772), (2, 45760), (3, 45706), (Start: 4 @45700 has 4 MA's), (Start: 5 @45694 has 4 MA's), (Start: 6 @45658 has 14 MA's), (7, 45646), (10, 45601),

Gene: Zulu\_86 Start: 46036, Stop: 45947, Start Num: 6

Candidate Starts for Zulu\_86:

(1, 46150), (2, 46138), (3, 46084), (Start: 4 @46078 has 4 MA's), (Start: 5 @46072 has 4 MA's), (Start: 6 @46036 has 14 MA's), (7, 46024), (10, 45979),