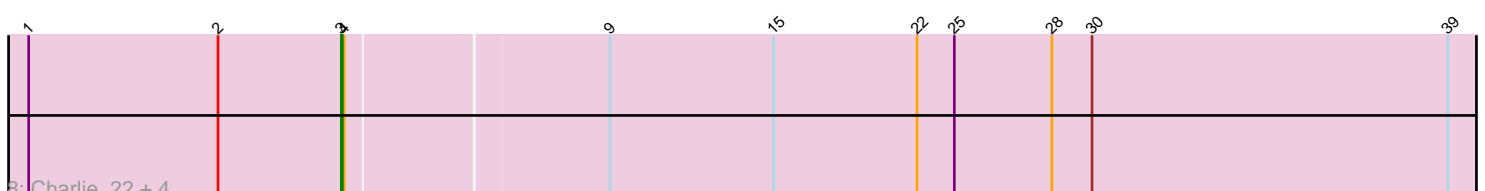
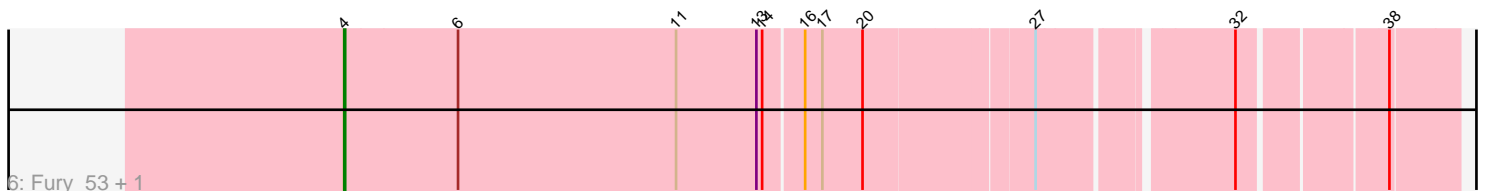
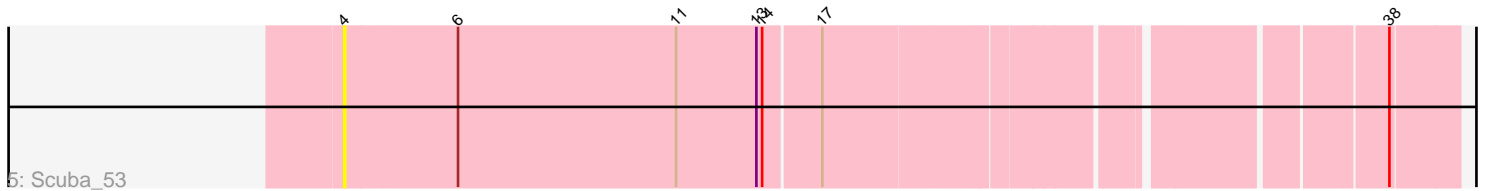
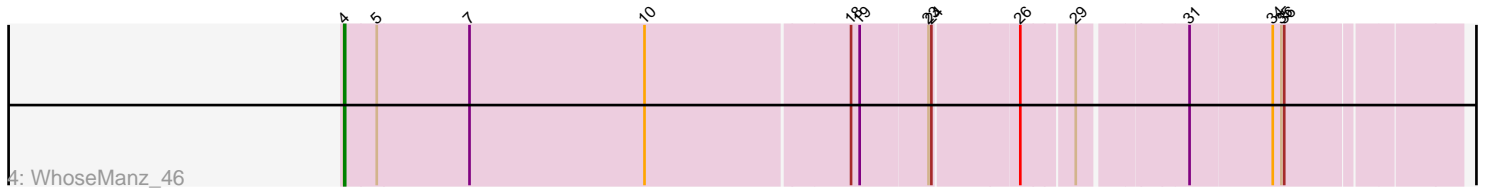
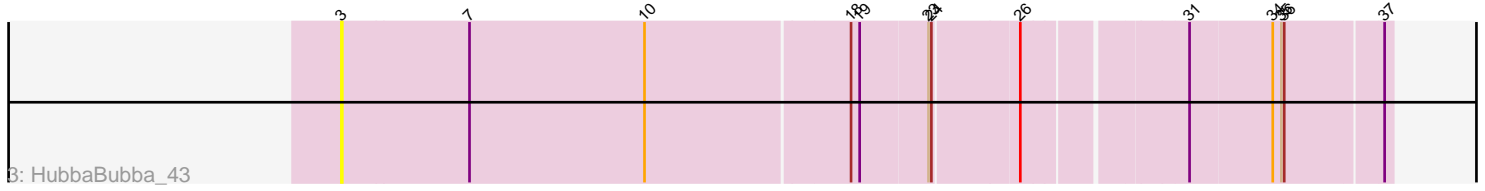
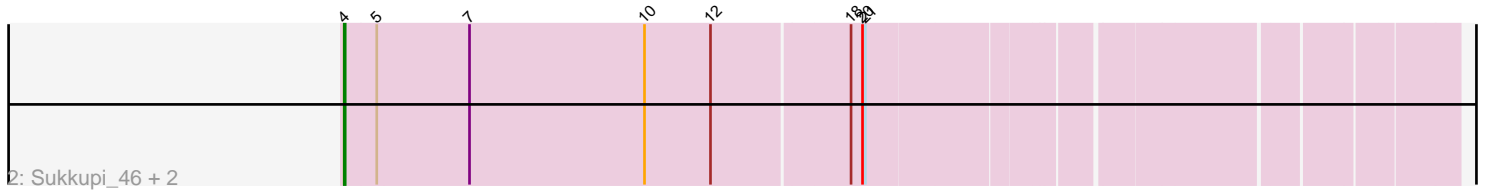
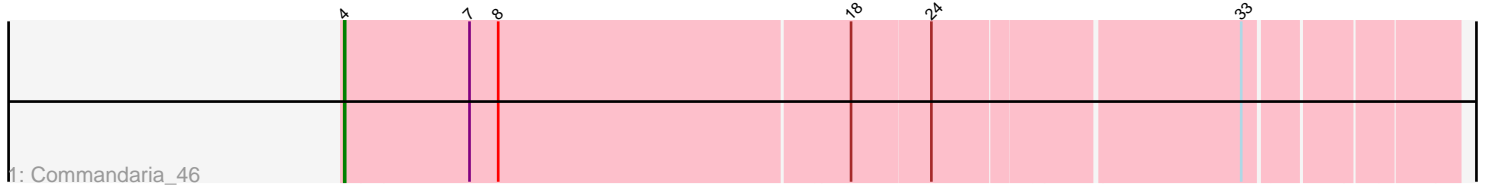


Pham 200498



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 200498 Report

This analysis was run 01/18/25 on database version 583.

Pham number 200498 has 31 members, 5 are drafts.

Phages represented in each track:

- Track 1 : Commandaria\_46
- Track 2 : Sukkupi\_46, Yndexa\_46, BiPauneto\_47
- Track 3 : HubbaBubba\_43
- Track 4 : WhoseManz\_46
- Track 5 : Scuba\_53
- Track 6 : Fury\_53, Pleakley\_53
- Track 7 : Xerxes\_22, Journey\_22, Silvy\_22, Magsby\_22, EGUnicorn\_23, Melville\_22, Parmesanjohn\_22, Smurph\_22, Chewbacca\_22, LilSpotty\_25, Duplicity\_22, Schnauzer\_22, MulchSalad\_20, Tapioca\_22, Bosection6\_22, Gex\_22, Silvafighter\_22
- Track 8 : Charlie\_22, Pipsqueaks\_22, Philonius\_22, Carcharodon\_22, Aggie\_22

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

The start number called the most often in the published annotations is 4, it was called in 21 of the 26 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- BiPauneto\_47, Bosection6\_22, Chewbacca\_22, Commandaria\_46, Duplicity\_22, EGUnicorn\_23, Fury\_53, Gex\_22, Journey\_22, LilSpotty\_25, Magsby\_22, Melville\_22, MulchSalad\_20, Parmesanjohn\_22, Pleakley\_53, Schnauzer\_22, Scuba\_53, Silvafighter\_22, Silvy\_22, Smurph\_22, Sukkupi\_46, Tapioca\_22, WhoseManz\_46, Xerxes\_22, Yndexa\_46,

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

- Aggie\_22, Carcharodon\_22, Charlie\_22, Philonius\_22, Pipsqueaks\_22,

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

- HubbaBubba\_43,

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

Start 3:

- Found in 23 of 31 ( 74.2% ) of genes in pham

- Manual Annotations of this start: 5 of 26
- Called 26.1% of time when present
- Phage (with cluster) where this start called: Aggie\_22 (N), Carcharodon\_22 (N), Charlie\_22 (N), HubbaBubba\_43 (CR4), Philonius\_22 (N), Pipsqueaks\_22 (N),

Start 4:

- Found in 30 of 31 ( 96.8% ) of genes in pham
- Manual Annotations of this start: 21 of 26
- Called 83.3% of time when present
- Phage (with cluster) where this start called: BiPauneto\_47 (CR4), Bosection6\_22 (N), Chewbacca\_22 (N), Commandaria\_46 (CR2), Duplicity\_22 (N), EGUunicorn\_23 (N), Fury\_53 (CR5), Gex\_22 (N), Journey\_22 (N), LilSpotty\_25 (singleton), Magsby\_22 (N), Melville\_22 (N), MulchSalad\_20 (F), Parmesanjohn\_22 (N), Pleakley\_53 (CR5), Schnauzer\_22 (N), Scuba\_53 (CR5), Silvafighter\_22 (N), Silvy\_22 (N), Smurph\_22 (N), Sukkupi\_46 (CR4), Tapioca\_22 (N), WhoseManz\_46 (CR4), Xerxes\_22 (N), Yndexa\_46 (CR4),

### Summary by clusters:

There are 6 clusters represented in this pham: CR2, singleton, CR4, CR5, F, N,

Info for manual annotations of cluster CR2:

- Start number 4 was manually annotated 1 time for cluster CR2.

Info for manual annotations of cluster CR4:

- Start number 4 was manually annotated 4 times for cluster CR4.

Info for manual annotations of cluster CR5:

- Start number 4 was manually annotated 2 times for cluster CR5.

Info for manual annotations of cluster N:

- Start number 3 was manually annotated 5 times for cluster N.
- Start number 4 was manually annotated 13 times for cluster N.

### Gene Information:

Gene: Aggie\_22 Start: 20221, Stop: 21438, Start Num: 3

Candidate Starts for Aggie\_22:

(1, 19894), (2, 20092), (Start: 3 @20221 has 5 MA's), (Start: 4 @20224 has 21 MA's), (9, 20485), (15, 20656), (22, 20806), (25, 20845), (28, 20947), (30, 20989), (39, 21361),

Gene: BiPauneto\_47 Start: 34721, Stop: 35812, Start Num: 4

Candidate Starts for BiPauneto\_47:

(Start: 4 @34721 has 21 MA's), (5, 34754), (7, 34850), (10, 35033), (12, 35102), (18, 35240), (20, 35252), (21, 35255),

Gene: Bosection6\_22 Start: 20223, Stop: 21437, Start Num: 4

Candidate Starts for Bosection6\_22:

(1, 19893), (2, 20091), (Start: 3 @20220 has 5 MA's), (Start: 4 @20223 has 21 MA's), (9, 20484), (15, 20655), (22, 20805), (25, 20844), (28, 20946), (30, 20988), (39, 21360),

Gene: Carcharodon\_22 Start: 20220, Stop: 21437, Start Num: 3

Candidate Starts for Carcharodon\_22:

(1, 19893), (2, 20091), (Start: 3 @20220 has 5 MA's), (Start: 4 @20223 has 21 MA's), (9, 20484), (15, 20655), (22, 20805), (25, 20844), (28, 20946), (30, 20988), (39, 21360),

Gene: Charlie\_22 Start: 20220, Stop: 21437, Start Num: 3

Candidate Starts for Charlie\_22:

(1, 19893), (2, 20091), (Start: 3 @20220 has 5 MA's), (Start: 4 @20223 has 21 MA's), (9, 20484), (15, 20655), (22, 20805), (25, 20844), (28, 20946), (30, 20988), (39, 21360),

Gene: Chewbacca\_22 Start: 20223, Stop: 21437, Start Num: 4

Candidate Starts for Chewbacca\_22:

(1, 19893), (2, 20091), (Start: 3 @20220 has 5 MA's), (Start: 4 @20223 has 21 MA's), (9, 20484), (15, 20655), (22, 20805), (25, 20844), (28, 20946), (30, 20988), (39, 21360),

Gene: Commandaria\_46 Start: 36317, Stop: 37420, Start Num: 4

Candidate Starts for Commandaria\_46:

(Start: 4 @36317 has 21 MA's), (7, 36446), (8, 36476), (18, 36836), (24, 36917), (33, 37220),

Gene: Duplicity\_22 Start: 20223, Stop: 21437, Start Num: 4

Candidate Starts for Duplicity\_22:

(1, 19893), (2, 20091), (Start: 3 @20220 has 5 MA's), (Start: 4 @20223 has 21 MA's), (9, 20484), (15, 20655), (22, 20805), (25, 20844), (28, 20946), (30, 20988), (39, 21360),

Gene: EGUunicorn\_23 Start: 20223, Stop: 21437, Start Num: 4

Candidate Starts for EGUunicorn\_23:

(1, 19893), (2, 20091), (Start: 3 @20220 has 5 MA's), (Start: 4 @20223 has 21 MA's), (9, 20484), (15, 20655), (22, 20805), (25, 20844), (28, 20946), (30, 20988), (39, 21360),

Gene: Fury\_53 Start: 35397, Stop: 36479, Start Num: 4

Candidate Starts for Fury\_53:

(Start: 4 @35397 has 21 MA's), (6, 35514), (11, 35742), (13, 35826), (14, 35832), (16, 35871), (17, 35886), (20, 35928), (27, 36093), (32, 36273), (38, 36411),

Gene: Gex\_22 Start: 20219, Stop: 21433, Start Num: 4

Candidate Starts for Gex\_22:

(1, 19889), (2, 20087), (Start: 3 @20216 has 5 MA's), (Start: 4 @20219 has 21 MA's), (9, 20480), (15, 20651), (22, 20801), (25, 20840), (28, 20942), (30, 20984), (39, 21356),

Gene: HubbaBubba\_43 Start: 31720, Stop: 32760, Start Num: 3

Candidate Starts for HubbaBubba\_43:

(Start: 3 @31720 has 5 MA's), (7, 31852), (10, 32035), (18, 32242), (19, 32251), (23, 32320), (24, 32323), (26, 32407), (31, 32560), (34, 32644), (35, 32653), (36, 32656), (37, 32752),

Gene: Journey\_22 Start: 20223, Stop: 21437, Start Num: 4

Candidate Starts for Journey\_22:

(1, 19893), (2, 20091), (Start: 3 @20220 has 5 MA's), (Start: 4 @20223 has 21 MA's), (9, 20484), (15, 20655), (22, 20805), (25, 20844), (28, 20946), (30, 20988), (39, 21360),

Gene: LilSpotty\_25 Start: 21191, Stop: 22405, Start Num: 4

Candidate Starts for LilSpotty\_25:

(1, 20861), (2, 21059), (Start: 3 @21188 has 5 MA's), (Start: 4 @21191 has 21 MA's), (9, 21452), (15, 21623), (22, 21773), (25, 21812), (28, 21914), (30, 21956), (39, 22328),

Gene: Magsby\_22 Start: 20220, Stop: 21434, Start Num: 4

Candidate Starts for Magsby\_22:

(1, 19890), (2, 20088), (Start: 3 @20217 has 5 MA's), (Start: 4 @20220 has 21 MA's), (9, 20481), (15, 20652), (22, 20802), (25, 20841), (28, 20943), (30, 20985), (39, 21357),

Gene: Melville\_22 Start: 20223, Stop: 21437, Start Num: 4

Candidate Starts for Melville\_22:

(1, 19893), (2, 20091), (Start: 3 @20220 has 5 MA's), (Start: 4 @20223 has 21 MA's), (9, 20484), (15, 20655), (22, 20805), (25, 20844), (28, 20946), (30, 20988), (39, 21360),

Gene: MulchSalad\_20 Start: 19992, Stop: 21206, Start Num: 4

Candidate Starts for MulchSalad\_20:

(1, 19662), (2, 19860), (Start: 3 @19989 has 5 MA's), (Start: 4 @19992 has 21 MA's), (9, 20253), (15, 20424), (22, 20574), (25, 20613), (28, 20715), (30, 20757), (39, 21129),

Gene: Parmesanjohn\_22 Start: 20223, Stop: 21437, Start Num: 4

Candidate Starts for Parmesanjohn\_22:

(1, 19893), (2, 20091), (Start: 3 @20220 has 5 MA's), (Start: 4 @20223 has 21 MA's), (9, 20484), (15, 20655), (22, 20805), (25, 20844), (28, 20946), (30, 20988), (39, 21360),

Gene: Philonius\_22 Start: 20220, Stop: 21437, Start Num: 3

Candidate Starts for Philonius\_22:

(1, 19893), (2, 20091), (Start: 3 @20220 has 5 MA's), (Start: 4 @20223 has 21 MA's), (9, 20484), (15, 20655), (22, 20805), (25, 20844), (28, 20946), (30, 20988), (39, 21360),

Gene: Pipsqueaks\_22 Start: 20220, Stop: 21437, Start Num: 3

Candidate Starts for Pipsqueaks\_22:

(1, 19893), (2, 20091), (Start: 3 @20220 has 5 MA's), (Start: 4 @20223 has 21 MA's), (9, 20484), (15, 20655), (22, 20805), (25, 20844), (28, 20946), (30, 20988), (39, 21360),

Gene: Pleakley\_53 Start: 35398, Stop: 36480, Start Num: 4

Candidate Starts for Pleakley\_53:

(Start: 4 @35398 has 21 MA's), (6, 35515), (11, 35743), (13, 35827), (14, 35833), (16, 35872), (17, 35887), (20, 35929), (27, 36094), (32, 36274), (38, 36412),

Gene: Schnauzer\_22 Start: 20223, Stop: 21437, Start Num: 4

Candidate Starts for Schnauzer\_22:

(1, 19893), (2, 20091), (Start: 3 @20220 has 5 MA's), (Start: 4 @20223 has 21 MA's), (9, 20484), (15, 20655), (22, 20805), (25, 20844), (28, 20946), (30, 20988), (39, 21360),

Gene: Scuba\_53 Start: 35472, Stop: 36554, Start Num: 4

Candidate Starts for Scuba\_53:

(Start: 4 @35472 has 21 MA's), (6, 35589), (11, 35817), (13, 35901), (14, 35907), (17, 35961), (38, 36486),

Gene: Silvafighter\_22 Start: 20223, Stop: 21437, Start Num: 4

Candidate Starts for Silvafighter\_22:

(1, 19893), (2, 20091), (Start: 3 @20220 has 5 MA's), (Start: 4 @20223 has 21 MA's), (9, 20484), (15, 20655), (22, 20805), (25, 20844), (28, 20946), (30, 20988), (39, 21360),

Gene: Silvy\_22 Start: 20224, Stop: 21438, Start Num: 4

Candidate Starts for Silvy\_22:

(1, 19894), (2, 20092), (Start: 3 @20221 has 5 MA's), (Start: 4 @20224 has 21 MA's), (9, 20485), (15, 20656), (22, 20806), (25, 20845), (28, 20947), (30, 20989), (39, 21361),

Gene: Smurph\_22 Start: 20223, Stop: 21437, Start Num: 4

Candidate Starts for Smurph\_22:

(1, 19893), (2, 20091), (Start: 3 @20220 has 5 MA's), (Start: 4 @20223 has 21 MA's), (9, 20484), (15, 20655), (22, 20805), (25, 20844), (28, 20946), (30, 20988), (39, 21360),

Gene: Sukkupi\_46 Start: 34612, Stop: 35703, Start Num: 4

Candidate Starts for Sukkupi\_46:

(Start: 4 @34612 has 21 MA's), (5, 34645), (7, 34741), (10, 34924), (12, 34993), (18, 35131), (20, 35143), (21, 35146),

Gene: Tapioca\_22 Start: 20223, Stop: 21437, Start Num: 4

Candidate Starts for Tapioca\_22:

(1, 19893), (2, 20091), (Start: 3 @20220 has 5 MA's), (Start: 4 @20223 has 21 MA's), (9, 20484), (15, 20655), (22, 20805), (25, 20844), (28, 20946), (30, 20988), (39, 21360),

Gene: WhoseManz\_46 Start: 32658, Stop: 33761, Start Num: 4

Candidate Starts for WhoseManz\_46:

(Start: 4 @32658 has 21 MA's), (5, 32691), (7, 32787), (10, 32970), (18, 33177), (19, 33186), (23, 33255), (24, 33258), (26, 33342), (29, 33393), (31, 33495), (34, 33579), (35, 33588), (36, 33591),

Gene: Xerxes\_22 Start: 20220, Stop: 21434, Start Num: 4

Candidate Starts for Xerxes\_22:

(1, 19890), (2, 20088), (Start: 3 @20217 has 5 MA's), (Start: 4 @20220 has 21 MA's), (9, 20481), (15, 20652), (22, 20802), (25, 20841), (28, 20943), (30, 20985), (39, 21357),

Gene: Yndexa\_46 Start: 34612, Stop: 35703, Start Num: 4

Candidate Starts for Yndexa\_46:

(Start: 4 @34612 has 21 MA's), (5, 34645), (7, 34741), (10, 34924), (12, 34993), (18, 35131), (20, 35143), (21, 35146),