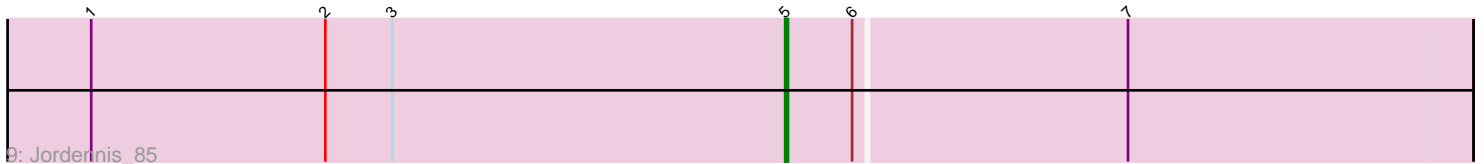
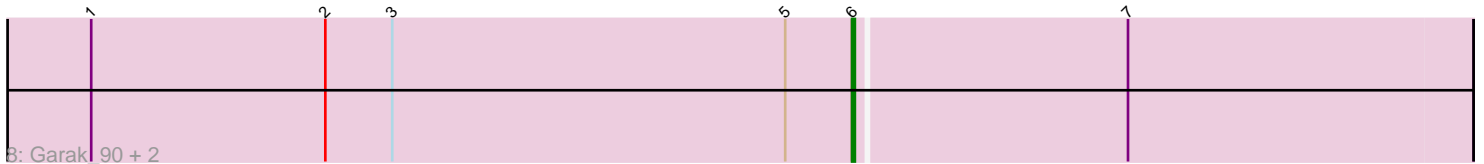
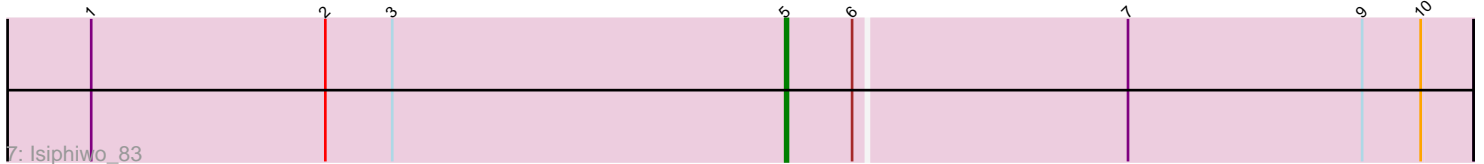
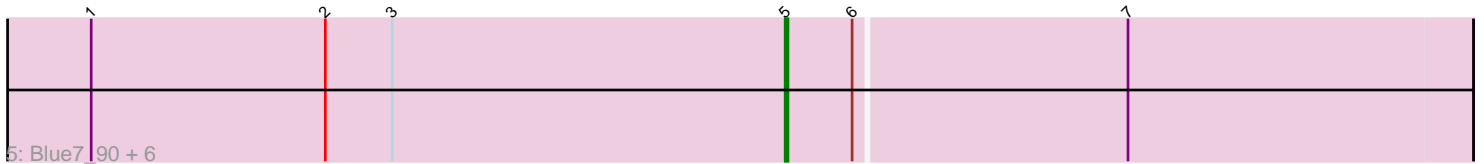
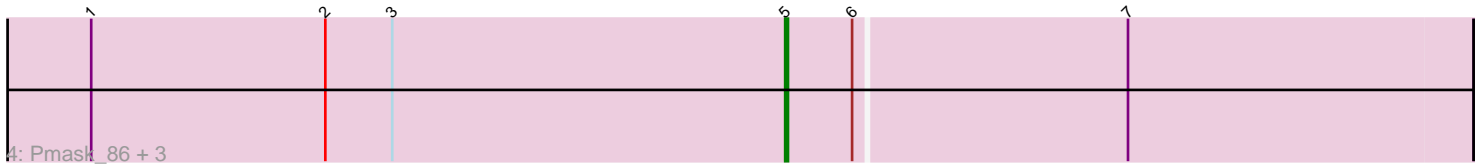
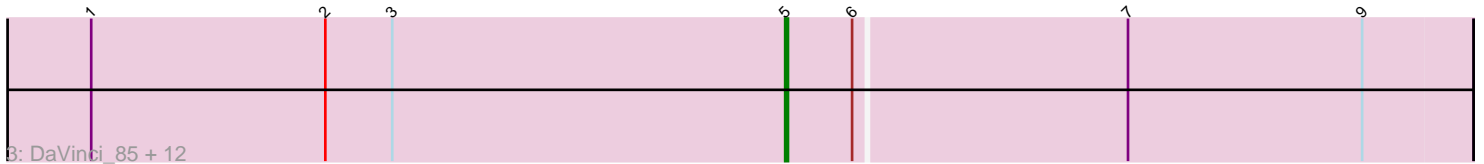
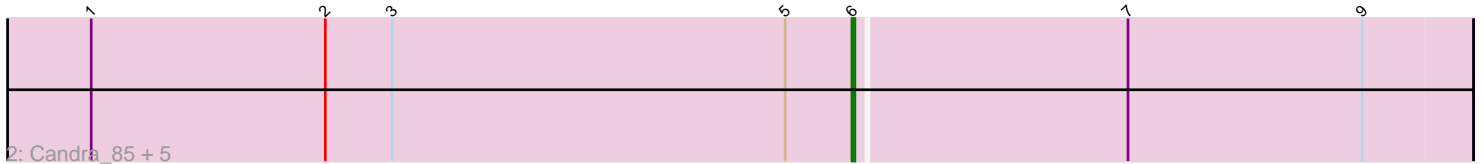
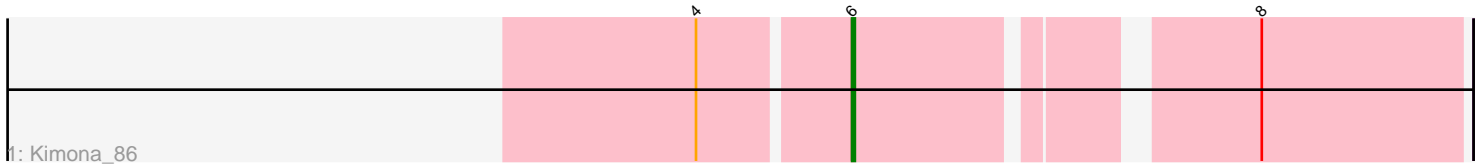


Pham 303527



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 303527 Report

This analysis was run 06/08/26 on database version 649.

Pham number 303527 has 37 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Kimona\_86
- Track 2 : Candra\_85, Neeharika16\_86, SuperCallie99\_83, DelvinSonDorr\_82, Priamo\_88, EricB\_85
- Track 3 : DaVinci\_85, Hoot\_82, Cookiedough\_87, Chartreuse\_86, Dorothea\_87, McFly\_87, SmellyB\_87, VohminGhazi\_87, BABullseye\_80, Kazan\_88, Zulu\_90, Kipper29\_87, Polyphemus\_80
- Track 4 : Pmask\_86, JewelBug\_79, Newrala\_86, SuperAwesome\_87
- Track 5 : Blue7\_90, Indra\_92, Helmet\_91, Temprado\_90, Wiks\_88, Koko\_90, BennyP\_89
- Track 6 : GreedyLawyer\_80
- Track 7 : Isiphiwo\_83
- Track 8 : Garak\_90, Yokurt\_88, Zaka\_89
- Track 9 : Jordennis\_85

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

The start number called the most often in the published annotations is 5, it was called in 26 of the 34 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- BABullseye\_80, BennyP\_89, Blue7\_90, Chartreuse\_86, Cookiedough\_87, DaVinci\_85, Dorothea\_87, Helmet\_91, Hoot\_82, Indra\_92, Isiphiwo\_83, JewelBug\_79, Jordennis\_85, Kazan\_88, Kipper29\_87, Koko\_90, McFly\_87, Newrala\_86, Pmask\_86, Polyphemus\_80, SmellyB\_87, SuperAwesome\_87, Temprado\_90, VohminGhazi\_87, Wiks\_88, Zulu\_90,

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

- Candra\_85, DelvinSonDorr\_82, EricB\_85, Garak\_90, GreedyLawyer\_80, Neeharika16\_86, Priamo\_88, SuperCallie99\_83, Yokurt\_88, Zaka\_89,

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

- Kimona\_86,

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

Start 5:

- Found in 36 of 37 ( 97.3% ) of genes in pham
- Manual Annotations of this start: 26 of 34
- Called 72.2% of time when present
- Phage (with cluster) where this start called: BABullseye\_80 (A6), BennyP\_89 (A6), Blue7\_90 (A6), Chartreuse\_86 (A6), Cookiedough\_87 (A6), DaVinci\_85 (A6), Dorothea\_87 (A6), Helmet\_91 (A6), Hoot\_82 (A6), Indra\_92 (A6), Isiphiwo\_83 (A6), JewelBug\_79 (A6), Jordennis\_85 (A6), Kazan\_88 (A6), Kipper29\_87 (A6), Koko\_90 (A6), McFly\_87 (A6), Newrala\_86 (A6), Pmask\_86 (A6), Polyphemus\_80 (A6), SmellyB\_87 (A6), SuperAwesome\_87 (A6), Temprado\_90 (A6), VohminGhazi\_87 (A6), Wiks\_88 (A6), Zulu\_90 (A6),

Start 6:

- Found in 37 of 37 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 8 of 34
- Called 29.7% of time when present
- Phage (with cluster) where this start called: Candra\_85 (A6), DelvinSonDorr\_82 (A6), EricB\_85 (A6), Garak\_90 (A6), GreedyLawyer\_80 (A6), Kimona\_86 (A19), Neeharika16\_86 (A6), Priamo\_88 (A6), SuperCallie99\_83 (A6), Yokurt\_88 (A6), Zaka\_89 (A6),

**Summary by clusters:**

There are 2 clusters represented in this pham: A19, A6,

Info for manual annotations of cluster A19:

- Start number 6 was manually annotated 1 time for cluster A19.

Info for manual annotations of cluster A6:

- Start number 5 was manually annotated 26 times for cluster A6.
- Start number 6 was manually annotated 7 times for cluster A6.

**Gene Information:**

Gene: BABullseye\_80 Start: 44890, Stop: 44648, Start Num: 5

Candidate Starts for BABullseye\_80:

(1, 45139), (2, 45055), (3, 45031), (Start: 5 @44890 has 26 MA's), (Start: 6 @44866 has 8 MA's), (7, 44770), (9, 44686),

Gene: BennyP\_89 Start: 46735, Stop: 46493, Start Num: 5

Candidate Starts for BennyP\_89:

(1, 46984), (2, 46900), (3, 46876), (Start: 5 @46735 has 26 MA's), (Start: 6 @46711 has 8 MA's), (7, 46615),

Gene: Blue7\_90 Start: 46789, Stop: 46547, Start Num: 5

Candidate Starts for Blue7\_90:

(1, 47038), (2, 46954), (3, 46930), (Start: 5 @46789 has 26 MA's), (Start: 6 @46765 has 8 MA's), (7, 46669),

Gene: Candra\_85 Start: 46570, Stop: 46352, Start Num: 6

Candidate Starts for Candra\_85:

(1, 46843), (2, 46759), (3, 46735), (Start: 5 @46594 has 26 MA's), (Start: 6 @46570 has 8 MA's), (7, 46474), (9, 46390),

Gene: Chartreuse\_86 Start: 45895, Stop: 45653, Start Num: 5

Candidate Starts for Chartreuse\_86:

(1, 46144), (2, 46060), (3, 46036), (Start: 5 @45895 has 26 MA's), (Start: 6 @45871 has 8 MA's), (7, 45775), (9, 45691),

Gene: Cookiedough\_87 Start: 47203, Stop: 46961, Start Num: 5

Candidate Starts for Cookiedough\_87:

(1, 47452), (2, 47368), (3, 47344), (Start: 5 @47203 has 26 MA's), (Start: 6 @47179 has 8 MA's), (7, 47083), (9, 46999),

Gene: DaVinci\_85 Start: 45949, Stop: 45707, Start Num: 5

Candidate Starts for DaVinci\_85:

(1, 46198), (2, 46114), (3, 46090), (Start: 5 @45949 has 26 MA's), (Start: 6 @45925 has 8 MA's), (7, 45829), (9, 45745),

Gene: DelvinSonDorr\_82 Start: 46134, Stop: 45916, Start Num: 6

Candidate Starts for DelvinSonDorr\_82:

(1, 46407), (2, 46323), (3, 46299), (Start: 5 @46158 has 26 MA's), (Start: 6 @46134 has 8 MA's), (7, 46038), (9, 45954),

Gene: Dorothea\_87 Start: 47195, Stop: 46953, Start Num: 5

Candidate Starts for Dorothea\_87:

(1, 47444), (2, 47360), (3, 47336), (Start: 5 @47195 has 26 MA's), (Start: 6 @47171 has 8 MA's), (7, 47075), (9, 46991),

Gene: EricB\_85 Start: 46068, Stop: 45850, Start Num: 6

Candidate Starts for EricB\_85:

(1, 46341), (2, 46257), (3, 46233), (Start: 5 @46092 has 26 MA's), (Start: 6 @46068 has 8 MA's), (7, 45972), (9, 45888),

Gene: Garak\_90 Start: 47008, Stop: 46790, Start Num: 6

Candidate Starts for Garak\_90:

(1, 47281), (2, 47197), (3, 47173), (Start: 5 @47032 has 26 MA's), (Start: 6 @47008 has 8 MA's), (7, 46912),

Gene: GreedyLawyer\_80 Start: 46501, Stop: 46283, Start Num: 6

Candidate Starts for GreedyLawyer\_80:

(1, 46774), (2, 46690), (3, 46666), (Start: 5 @46525 has 26 MA's), (Start: 6 @46501 has 8 MA's), (7, 46405),

Gene: Helmet\_91 Start: 47032, Stop: 46790, Start Num: 5

Candidate Starts for Helmet\_91:

(1, 47281), (2, 47197), (3, 47173), (Start: 5 @47032 has 26 MA's), (Start: 6 @47008 has 8 MA's), (7, 46912),

Gene: Hoot\_82 Start: 44409, Stop: 44167, Start Num: 5

Candidate Starts for Hoot\_82:

(1, 44658), (2, 44574), (3, 44550), (Start: 5 @44409 has 26 MA's), (Start: 6 @44385 has 8 MA's), (7, 44289), (9, 44205),

Gene: Indra\_92 Start: 47033, Stop: 46791, Start Num: 5

Candidate Starts for Indra\_92:

(1, 47282), (2, 47198), (3, 47174), (Start: 5 @47033 has 26 MA's), (Start: 6 @47009 has 8 MA's), (7, 46913),

Gene: Isiphiwo\_83 Start: 46120, Stop: 45878, Start Num: 5

Candidate Starts for Isiphiwo\_83:

(1, 46369), (2, 46285), (3, 46261), (Start: 5 @46120 has 26 MA's), (Start: 6 @46096 has 8 MA's), (7, 46000), (9, 45916), (10, 45895),

Gene: JewelBug\_79 Start: 44888, Stop: 44646, Start Num: 5

Candidate Starts for JewelBug\_79:

(1, 45137), (2, 45053), (3, 45029), (Start: 5 @44888 has 26 MA's), (Start: 6 @44864 has 8 MA's), (7, 44768),

Gene: Jordennis\_85 Start: 46792, Stop: 46550, Start Num: 5

Candidate Starts for Jordennis\_85:

(1, 47041), (2, 46957), (3, 46933), (Start: 5 @46792 has 26 MA's), (Start: 6 @46768 has 8 MA's), (7, 46672),

Gene: Kazan\_88 Start: 46564, Stop: 46322, Start Num: 5

Candidate Starts for Kazan\_88:

(1, 46813), (2, 46729), (3, 46705), (Start: 5 @46564 has 26 MA's), (Start: 6 @46540 has 8 MA's), (7, 46444), (9, 46360),

Gene: Kimona\_86 Start: 47954, Stop: 47757, Start Num: 6

Candidate Starts for Kimona\_86:

(4, 48005), (Start: 6 @47954 has 8 MA's), (8, 47828),

Gene: Kipper29\_87 Start: 46567, Stop: 46325, Start Num: 5

Candidate Starts for Kipper29\_87:

(1, 46816), (2, 46732), (3, 46708), (Start: 5 @46567 has 26 MA's), (Start: 6 @46543 has 8 MA's), (7, 46447), (9, 46363),

Gene: Koko\_90 Start: 47422, Stop: 47180, Start Num: 5

Candidate Starts for Koko\_90:

(1, 47671), (2, 47587), (3, 47563), (Start: 5 @47422 has 26 MA's), (Start: 6 @47398 has 8 MA's), (7, 47302),

Gene: McFly\_87 Start: 46903, Stop: 46661, Start Num: 5

Candidate Starts for McFly\_87:

(1, 47152), (2, 47068), (3, 47044), (Start: 5 @46903 has 26 MA's), (Start: 6 @46879 has 8 MA's), (7, 46783), (9, 46699),

Gene: Neeharika16\_86 Start: 46630, Stop: 46412, Start Num: 6

Candidate Starts for Neeharika16\_86:

(1, 46903), (2, 46819), (3, 46795), (Start: 5 @46654 has 26 MA's), (Start: 6 @46630 has 8 MA's), (7, 46534), (9, 46450),

Gene: Newrala\_86 Start: 47000, Stop: 46758, Start Num: 5

Candidate Starts for Newrala\_86:

(1, 47249), (2, 47165), (3, 47141), (Start: 5 @47000 has 26 MA's), (Start: 6 @46976 has 8 MA's), (7, 46880),

Gene: Pmask\_86 Start: 47201, Stop: 46959, Start Num: 5

Candidate Starts for Pmask\_86:

(1, 47450), (2, 47366), (3, 47342), (Start: 5 @47201 has 26 MA's), (Start: 6 @47177 has 8 MA's), (7, 47081),

Gene: Polyphemus\_80 Start: 44972, Stop: 44730, Start Num: 5

Candidate Starts for Polyphemus\_80:

(1, 45221), (2, 45137), (3, 45113), (Start: 5 @44972 has 26 MA's), (Start: 6 @44948 has 8 MA's), (7, 44852), (9, 44768),

Gene: Priamo\_88 Start: 46420, Stop: 46202, Start Num: 6

Candidate Starts for Priamo\_88:

(1, 46693), (2, 46609), (3, 46585), (Start: 5 @46444 has 26 MA's), (Start: 6 @46420 has 8 MA's), (7, 46324), (9, 46240),

Gene: SmellyB\_87 Start: 46558, Stop: 46316, Start Num: 5

Candidate Starts for SmellyB\_87:

(1, 46807), (2, 46723), (3, 46699), (Start: 5 @46558 has 26 MA's), (Start: 6 @46534 has 8 MA's), (7, 46438), (9, 46354),

Gene: SuperAwesome\_87 Start: 47240, Stop: 46998, Start Num: 5

Candidate Starts for SuperAwesome\_87:

(1, 47489), (2, 47405), (3, 47381), (Start: 5 @47240 has 26 MA's), (Start: 6 @47216 has 8 MA's), (7, 47120),

Gene: SuperCallie99\_83 Start: 46597, Stop: 46379, Start Num: 6

Candidate Starts for SuperCallie99\_83:

(1, 46870), (2, 46786), (3, 46762), (Start: 5 @46621 has 26 MA's), (Start: 6 @46597 has 8 MA's), (7, 46501), (9, 46417),

Gene: Temprado\_90 Start: 47032, Stop: 46790, Start Num: 5

Candidate Starts for Temprado\_90:

(1, 47281), (2, 47197), (3, 47173), (Start: 5 @47032 has 26 MA's), (Start: 6 @47008 has 8 MA's), (7, 46912),

Gene: VohminGhazi\_87 Start: 46559, Stop: 46317, Start Num: 5

Candidate Starts for VohminGhazi\_87:

(1, 46808), (2, 46724), (3, 46700), (Start: 5 @46559 has 26 MA's), (Start: 6 @46535 has 8 MA's), (7, 46439), (9, 46355),

Gene: Wiks\_88 Start: 46663, Stop: 46421, Start Num: 5

Candidate Starts for Wiks\_88:

(1, 46912), (2, 46828), (3, 46804), (Start: 5 @46663 has 26 MA's), (Start: 6 @46639 has 8 MA's), (7, 46543),

Gene: Yokurt\_88 Start: 46639, Stop: 46421, Start Num: 6

Candidate Starts for Yokurt\_88:

(1, 46912), (2, 46828), (3, 46804), (Start: 5 @46663 has 26 MA's), (Start: 6 @46639 has 8 MA's), (7, 46543),

Gene: Zaka\_89 Start: 46639, Stop: 46421, Start Num: 6

Candidate Starts for Zaka\_89:

(1, 46912), (2, 46828), (3, 46804), (Start: 5 @46663 has 26 MA's), (Start: 6 @46639 has 8 MA's), (7, 46543),

Gene: Zulu\_90 Start: 47040, Stop: 46798, Start Num: 5

Candidate Starts for Zulu\_90:

(1, 47289), (2, 47205), (3, 47181), (Start: 5 @47040 has 26 MA's), (Start: 6 @47016 has 8 MA's), (7, 46920), (9, 46836),