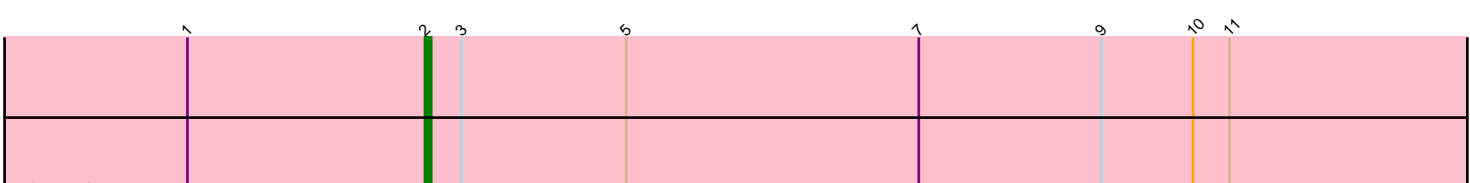
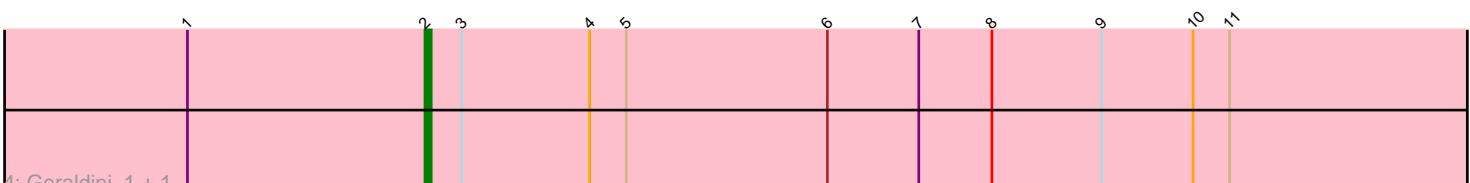
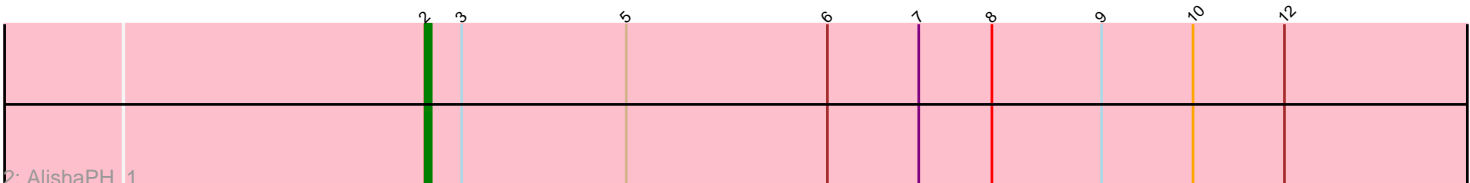


Pham 1961



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 1961 Report

This analysis was run 04/28/24 on database version 559.

Pham number 1961 has 48 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Adephagia\_1, Slimphazie\_1, Jayhawk\_1, ActinUp\_1, Zabiza\_1, Rapunzel97\_1, HedwigODU\_1, Ramen\_1
- Track 2 : AlishaPH\_1
- Track 3 : ShiaSurprise\_1, Homura\_1, Piatt\_1, TruffulaTree\_1, Asayake\_1, Hyperbowlee\_1, BEEST\_1, Jeckyll\_1, Capricorn\_1, Rosmarinus\_1, Dalmuri\_1, Veliki\_1, Lunahalos\_1, Peel\_1, BarrelRoll\_1, CREW\_1, Emerson\_1, Llorens\_1, Durfee\_1, Padfoot\_1, Jarvi\_1, Padpat\_1, Inky\_1, BGlluviae\_1, Twitch\_1, Topper\_1, Spock\_1, Belladonna\_1, Boiiii\_1, CaseJules\_1, Blizzard\_1
- Track 4 : Geraldini\_1, Beezoo\_1
- Track 5 : Deby\_1, Angelica\_1, Sulley\_1
- Track 6 : JAWS\_1
- Track 7 : Apocalypse\_1
- Track 8 : Anaya\_1

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

The start number called the most often in the published annotations is 2, it was called in 44 of the 45 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ActinUp\_1, Adephagia\_1, AlishaPH\_1, Angelica\_1, Apocalypse\_1, Asayake\_1, BEEST\_1, BGlluviae\_1, BarrelRoll\_1, Beezoo\_1, Belladonna\_1, Blizzard\_1, Boiiii\_1, CREW\_1, Capricorn\_1, CaseJules\_1, Dalmuri\_1, Deby\_1, Durfee\_1, Emerson\_1, Geraldini\_1, HedwigODU\_1, Homura\_1, Hyperbowlee\_1, Inky\_1, JAWS\_1, Jarvi\_1, Jayhawk\_1, Jeckyll\_1, Llorens\_1, Lunahalos\_1, Padfoot\_1, Padpat\_1, Peel\_1, Piatt\_1, Ramen\_1, Rapunzel97\_1, Rosmarinus\_1, ShiaSurprise\_1, Slimphazie\_1, Spock\_1, Sulley\_1, Topper\_1, TruffulaTree\_1, Twitch\_1, Veliki\_1, Zabiza\_1,

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

- Anaya\_1,

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

-

## Summary by start number:

### Start 2:

- Found in 48 of 48 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 44 of 45
- Called 97.9% of time when present
- Phage (with cluster) where this start called: ActinUp\_1 (K1), Adephagia\_1 (K1), AlishaPH\_1 (K1), Angelica\_1 (K1), Apocalypse\_1 (K1), Asayake\_1 (K1), BEEST\_1 (K1), BGIluviae\_1 (K1), BarrelRoll\_1 (K1), Beezoo\_1 (K1), Belladonna\_1 (K1), Blizzard\_1 (K1), Boiiii\_1 (K1), CREW\_1 (K1), Capricorn\_1 (K1), CaseJules\_1 (K1), Dalmuri\_1 (K1), Deby\_1 (K1), Durfee\_1 (K1), Emerson\_1 (K1), Geraldini\_1 (K1), HedwigODU\_1 (K1), Homura\_1 (K1), Hyperbowlee\_1 (K1), Inky\_1 (K1), JAWS\_1 (K1), Jarvi\_1 (K1), Jayhawk\_1 (K1), Jeckyll\_1 (K1), Llorens\_1 (K1), Lunahalos\_1 (K1), Padfoot\_1 (K1), Padpat\_1 (K1), Peel\_1 (K1), Piatt\_1 (K1), Ramen\_1 (K1), Rapunzel97\_1 (K1), Rosmarinus\_1 (K1), ShiaSurprise\_1 (K1), Slimphazie\_1 (K1), Spock\_1 (K1), Sulley\_1 (K1), Topper\_1 (K1), TruffulaTree\_1 (K1), Twitch\_1 (K1), Veliki\_1 (K1), Zabiza\_1 (K1),

### Start 3:

- Found in 48 of 48 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 1 of 45
- Called 2.1% of time when present
- Phage (with cluster) where this start called: Anaya\_1 (K1),

## Summary by clusters:

There is one cluster represented in this pham: K1

### Info for manual annotations of cluster K1:

- Start number 2 was manually annotated 44 times for cluster K1.
- Start number 3 was manually annotated 1 time for cluster K1.

## Gene Information:

Gene: ActinUp\_1 Start: 79, Stop: 297, Start Num: 2

Candidate Starts for ActinUp\_1:

(Start: 2 @79 has 44 MA's), (Start: 3 @85 has 1 MA's), (5, 112), (6, 145), (7, 160), (9, 190), (10, 205), (11, 211),

Gene: Adephagia\_1 Start: 79, Stop: 297, Start Num: 2

Candidate Starts for Adephagia\_1:

(Start: 2 @79 has 44 MA's), (Start: 3 @85 has 1 MA's), (5, 112), (6, 145), (7, 160), (9, 190), (10, 205), (11, 211),

Gene: AlishaPH\_1 Start: 78, Stop: 296, Start Num: 2

Candidate Starts for AlishaPH\_1:

(Start: 2 @78 has 44 MA's), (Start: 3 @84 has 1 MA's), (5, 111), (6, 144), (7, 159), (8, 171), (9, 189), (10, 204), (12, 219),

Gene: Anaya\_1 Start: 85, Stop: 297, Start Num: 3

Candidate Starts for Anaya\_1:

(Start: 2 @79 has 44 MA's), (Start: 3 @85 has 1 MA's), (5, 112), (6, 145), (7, 160), (8, 172), (9, 190), (10, 205),

Gene: Angelica\_1 Start: 79, Stop: 297, Start Num: 2

Candidate Starts for Angelica\_1:

(1, 40), (Start: 2 @79 has 44 MA's), (Start: 3 @85 has 1 MA's), (5, 112), (6, 145), (7, 160), (9, 190), (10, 205), (11, 211),

Gene: Apocalypse\_1 Start: 79, Stop: 297, Start Num: 2

Candidate Starts for Apocalypse\_1:

(1, 40), (Start: 2 @79 has 44 MA's), (Start: 3 @85 has 1 MA's), (5, 112), (7, 160), (9, 190), (10, 205), (11, 211),

Gene: Asayake\_1 Start: 79, Stop: 297, Start Num: 2

Candidate Starts for Asayake\_1:

(Start: 2 @79 has 44 MA's), (Start: 3 @85 has 1 MA's), (5, 112), (6, 145), (7, 160), (8, 172), (9, 190), (10, 205),

Gene: BEEST\_1 Start: 79, Stop: 297, Start Num: 2

Candidate Starts for BEEST\_1:

(Start: 2 @79 has 44 MA's), (Start: 3 @85 has 1 MA's), (5, 112), (6, 145), (7, 160), (8, 172), (9, 190), (10, 205),

Gene: BGlluviae\_1 Start: 79, Stop: 297, Start Num: 2

Candidate Starts for BGlluviae\_1:

(Start: 2 @79 has 44 MA's), (Start: 3 @85 has 1 MA's), (5, 112), (6, 145), (7, 160), (8, 172), (9, 190), (10, 205),

Gene: BarrelRoll\_1 Start: 79, Stop: 297, Start Num: 2

Candidate Starts for BarrelRoll\_1:

(Start: 2 @79 has 44 MA's), (Start: 3 @85 has 1 MA's), (5, 112), (6, 145), (7, 160), (8, 172), (9, 190), (10, 205),

Gene: Beezoo\_1 Start: 79, Stop: 297, Start Num: 2

Candidate Starts for Beezoo\_1:

(1, 40), (Start: 2 @79 has 44 MA's), (Start: 3 @85 has 1 MA's), (4, 106), (5, 112), (6, 145), (7, 160), (8, 172), (9, 190), (10, 205), (11, 211),

Gene: Belladonna\_1 Start: 79, Stop: 297, Start Num: 2

Candidate Starts for Belladonna\_1:

(Start: 2 @79 has 44 MA's), (Start: 3 @85 has 1 MA's), (5, 112), (6, 145), (7, 160), (8, 172), (9, 190), (10, 205),

Gene: Blizzard\_1 Start: 79, Stop: 297, Start Num: 2

Candidate Starts for Blizzard\_1:

(Start: 2 @79 has 44 MA's), (Start: 3 @85 has 1 MA's), (5, 112), (6, 145), (7, 160), (8, 172), (9, 190), (10, 205),

Gene: Boiiii\_1 Start: 79, Stop: 297, Start Num: 2

Candidate Starts for Boiiii\_1:

(Start: 2 @79 has 44 MA's), (Start: 3 @85 has 1 MA's), (5, 112), (6, 145), (7, 160), (8, 172), (9, 190), (10, 205),

Gene: CREW\_1 Start: 79, Stop: 297, Start Num: 2

Candidate Starts for CREW\_1:

(Start: 2 @79 has 44 MA's), (Start: 3 @85 has 1 MA's), (5, 112), (6, 145), (7, 160), (8, 172), (9, 190), (10, 205),

Gene: Capricorn\_1 Start: 79, Stop: 297, Start Num: 2

Candidate Starts for Capricorn\_1:

(Start: 2 @79 has 44 MA's), (Start: 3 @85 has 1 MA's), (5, 112), (6, 145), (7, 160), (8, 172), (9, 190), (10, 205),

Gene: CaseJules\_1 Start: 79, Stop: 297, Start Num: 2

Candidate Starts for CaseJules\_1:

(Start: 2 @79 has 44 MA's), (Start: 3 @85 has 1 MA's), (5, 112), (6, 145), (7, 160), (8, 172), (9, 190), (10, 205),

Gene: Dalmuri\_1 Start: 79, Stop: 297, Start Num: 2

Candidate Starts for Dalmuri\_1:

(Start: 2 @79 has 44 MA's), (Start: 3 @85 has 1 MA's), (5, 112), (6, 145), (7, 160), (8, 172), (9, 190), (10, 205),

Gene: Deby\_1 Start: 79, Stop: 297, Start Num: 2

Candidate Starts for Deby\_1:

(1, 40), (Start: 2 @79 has 44 MA's), (Start: 3 @85 has 1 MA's), (5, 112), (6, 145), (7, 160), (9, 190), (10, 205), (11, 211),

Gene: Durfee\_1 Start: 79, Stop: 297, Start Num: 2

Candidate Starts for Durfee\_1:

(Start: 2 @79 has 44 MA's), (Start: 3 @85 has 1 MA's), (5, 112), (6, 145), (7, 160), (8, 172), (9, 190), (10, 205),

Gene: Emerson\_1 Start: 79, Stop: 297, Start Num: 2

Candidate Starts for Emerson\_1:

(Start: 2 @79 has 44 MA's), (Start: 3 @85 has 1 MA's), (5, 112), (6, 145), (7, 160), (8, 172), (9, 190), (10, 205),

Gene: Geraldini\_1 Start: 79, Stop: 297, Start Num: 2

Candidate Starts for Geraldini\_1:

(1, 40), (Start: 2 @79 has 44 MA's), (Start: 3 @85 has 1 MA's), (4, 106), (5, 112), (6, 145), (7, 160), (8, 172), (9, 190), (10, 205), (11, 211),

Gene: HedwigODU\_1 Start: 79, Stop: 297, Start Num: 2

Candidate Starts for HedwigODU\_1:

(Start: 2 @79 has 44 MA's), (Start: 3 @85 has 1 MA's), (5, 112), (6, 145), (7, 160), (9, 190), (10, 205), (11, 211),

Gene: Homura\_1 Start: 79, Stop: 297, Start Num: 2

Candidate Starts for Homura\_1:

(Start: 2 @79 has 44 MA's), (Start: 3 @85 has 1 MA's), (5, 112), (6, 145), (7, 160), (8, 172), (9, 190), (10, 205),

Gene: Hyperbowlee\_1 Start: 79, Stop: 297, Start Num: 2

Candidate Starts for Hyperbowlee\_1:

(Start: 2 @79 has 44 MA's), (Start: 3 @85 has 1 MA's), (5, 112), (6, 145), (7, 160), (8, 172), (9, 190), (10, 205),

Gene: Inky\_1 Start: 79, Stop: 297, Start Num: 2

Candidate Starts for Inky\_1:

(Start: 2 @79 has 44 MA's), (Start: 3 @85 has 1 MA's), (5, 112), (6, 145), (7, 160), (8, 172), (9, 190), (10, 205),

Gene: JAWS\_1 Start: 79, Stop: 297, Start Num: 2

Candidate Starts for JAWS\_1:

(Start: 2 @79 has 44 MA's), (Start: 3 @85 has 1 MA's), (5, 112), (7, 160), (9, 190), (10, 205), (11, 211),

Gene: Jarvi\_1 Start: 79, Stop: 297, Start Num: 2

Candidate Starts for Jarvi\_1:

(Start: 2 @79 has 44 MA's), (Start: 3 @85 has 1 MA's), (5, 112), (6, 145), (7, 160), (8, 172), (9, 190), (10, 205),

Gene: Jayhawk\_1 Start: 79, Stop: 297, Start Num: 2

Candidate Starts for Jayhawk\_1:

(Start: 2 @79 has 44 MA's), (Start: 3 @85 has 1 MA's), (5, 112), (6, 145), (7, 160), (9, 190), (10, 205), (11, 211),

Gene: Jeckyll\_1 Start: 79, Stop: 297, Start Num: 2

Candidate Starts for Jeckyll\_1:

(Start: 2 @79 has 44 MA's), (Start: 3 @85 has 1 MA's), (5, 112), (6, 145), (7, 160), (8, 172), (9, 190), (10, 205),

Gene: Llorens\_1 Start: 79, Stop: 297, Start Num: 2

Candidate Starts for Llorens\_1:

(Start: 2 @79 has 44 MA's), (Start: 3 @85 has 1 MA's), (5, 112), (6, 145), (7, 160), (8, 172), (9, 190), (10, 205),

Gene: Lunahalos\_1 Start: 79, Stop: 297, Start Num: 2

Candidate Starts for Lunahalos\_1:

(Start: 2 @79 has 44 MA's), (Start: 3 @85 has 1 MA's), (5, 112), (6, 145), (7, 160), (8, 172), (9, 190), (10, 205),

Gene: Padfoot\_1 Start: 79, Stop: 297, Start Num: 2

Candidate Starts for Padfoot\_1:

(Start: 2 @79 has 44 MA's), (Start: 3 @85 has 1 MA's), (5, 112), (6, 145), (7, 160), (8, 172), (9, 190), (10, 205),

Gene: Padpat\_1 Start: 79, Stop: 297, Start Num: 2

Candidate Starts for Padpat\_1:

(Start: 2 @79 has 44 MA's), (Start: 3 @85 has 1 MA's), (5, 112), (6, 145), (7, 160), (8, 172), (9, 190), (10, 205),

Gene: Peel\_1 Start: 79, Stop: 297, Start Num: 2

Candidate Starts for Peel\_1:

(Start: 2 @79 has 44 MA's), (Start: 3 @85 has 1 MA's), (5, 112), (6, 145), (7, 160), (8, 172), (9, 190), (10, 205),

Gene: Piatt\_1 Start: 79, Stop: 297, Start Num: 2

Candidate Starts for Piatt\_1:

(Start: 2 @79 has 44 MA's), (Start: 3 @85 has 1 MA's), (5, 112), (6, 145), (7, 160), (8, 172), (9, 190), (10, 205),

Gene: Ramen\_1 Start: 79, Stop: 297, Start Num: 2

Candidate Starts for Ramen\_1:

(Start: 2 @79 has 44 MA's), (Start: 3 @85 has 1 MA's), (5, 112), (6, 145), (7, 160), (9, 190), (10, 205), (11, 211),

Gene: Rapunzel97\_1 Start: 79, Stop: 297, Start Num: 2

Candidate Starts for Rapunzel97\_1:

(Start: 2 @79 has 44 MA's), (Start: 3 @85 has 1 MA's), (5, 112), (6, 145), (7, 160), (9, 190), (10, 205), (11, 211),

Gene: Rosmarinus\_1 Start: 79, Stop: 297, Start Num: 2

Candidate Starts for Rosmarinus\_1:

(Start: 2 @79 has 44 MA's), (Start: 3 @85 has 1 MA's), (5, 112), (6, 145), (7, 160), (8, 172), (9, 190), (10, 205),

Gene: ShiaSurprise\_1 Start: 79, Stop: 297, Start Num: 2

Candidate Starts for ShiaSurprise\_1:

(Start: 2 @79 has 44 MA's), (Start: 3 @85 has 1 MA's), (5, 112), (6, 145), (7, 160), (8, 172), (9, 190), (10, 205),

Gene: Slimphazie\_1 Start: 79, Stop: 297, Start Num: 2

Candidate Starts for Slimphazie\_1:

(Start: 2 @79 has 44 MA's), (Start: 3 @85 has 1 MA's), (5, 112), (6, 145), (7, 160), (9, 190), (10, 205), (11, 211),

Gene: Spock\_1 Start: 79, Stop: 297, Start Num: 2

Candidate Starts for Spock\_1:

(Start: 2 @79 has 44 MA's), (Start: 3 @85 has 1 MA's), (5, 112), (6, 145), (7, 160), (8, 172), (9, 190), (10, 205),

Gene: Sulley\_1 Start: 79, Stop: 297, Start Num: 2

Candidate Starts for Sulley\_1:

(1, 40), (Start: 2 @79 has 44 MA's), (Start: 3 @85 has 1 MA's), (5, 112), (6, 145), (7, 160), (9, 190), (10, 205), (11, 211),

Gene: Topper\_1 Start: 79, Stop: 297, Start Num: 2

Candidate Starts for Topper\_1:

(Start: 2 @79 has 44 MA's), (Start: 3 @85 has 1 MA's), (5, 112), (6, 145), (7, 160), (8, 172), (9, 190), (10, 205),

Gene: TruffulaTree\_1 Start: 79, Stop: 297, Start Num: 2

Candidate Starts for TruffulaTree\_1:

(Start: 2 @79 has 44 MA's), (Start: 3 @85 has 1 MA's), (5, 112), (6, 145), (7, 160), (8, 172), (9, 190), (10, 205),

Gene: Twitch\_1 Start: 79, Stop: 297, Start Num: 2

Candidate Starts for Twitch\_1:

(Start: 2 @79 has 44 MA's), (Start: 3 @85 has 1 MA's), (5, 112), (6, 145), (7, 160), (8, 172), (9, 190), (10, 205),

Gene: Veliki\_1 Start: 79, Stop: 297, Start Num: 2

Candidate Starts for Veliki\_1:

(Start: 2 @79 has 44 MA's), (Start: 3 @85 has 1 MA's), (5, 112), (6, 145), (7, 160), (8, 172), (9, 190), (10, 205),

Gene: Zabiza\_1 Start: 79, Stop: 297, Start Num: 2

Candidate Starts for Zabiza\_1:

(Start: 2 @79 has 44 MA's), (Start: 3 @85 has 1 MA's), (5, 112), (6, 145), (7, 160), (9, 190), (10, 205), (11, 211),