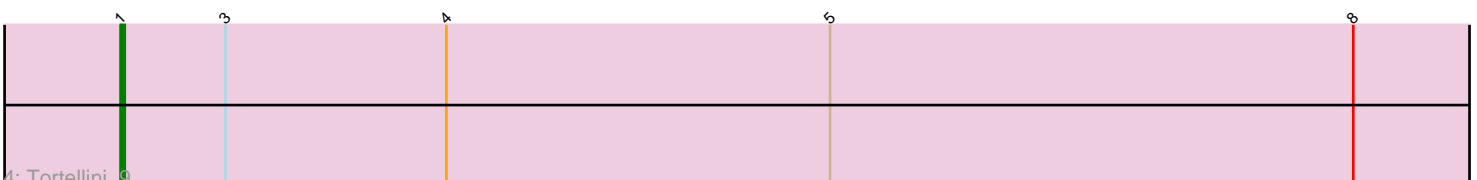
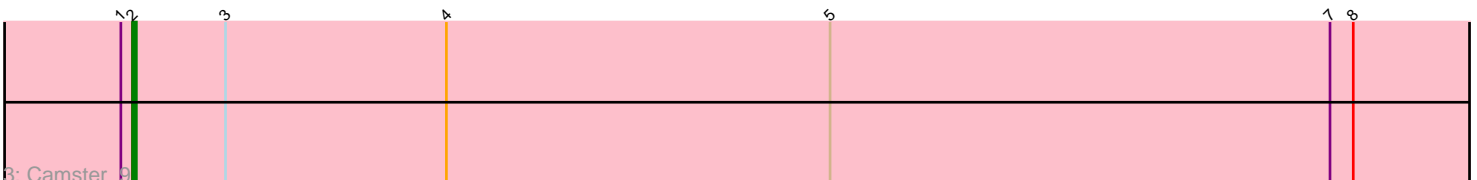
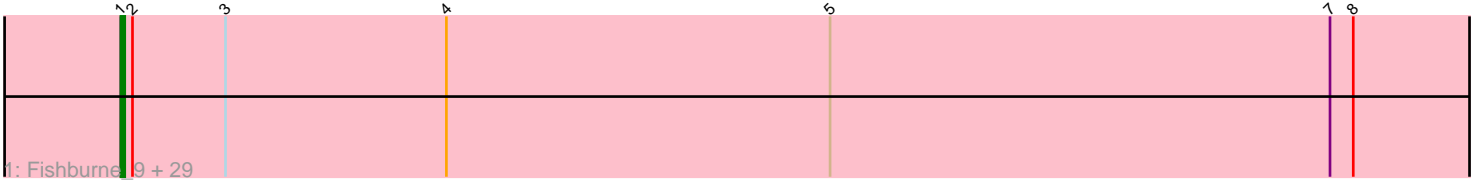


Pham 1940



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 1940 Report

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

Pham number 1940 has 49 members, 4 are drafts.

Phages represented in each track:

- Track 1 : Fishburne\_9, StevieRay\_9, Zilizebeth\_9, Jung\_9, Glaske\_9, FirstPlacePfu\_9, Brusacoram\_9, KilKor\_9, Dynamo\_9, Venti\_9, Thespis\_9, Atcoo\_9, Bunnies\_9, Bartholomew\_9, Phalm\_9, Kari\_9, Willsammy\_9, Ksquared\_9, Pygmy\_9, HUHilltop\_9, GreaseLightnin\_9, Polkaroo\_9, StressBall\_9, Necropolis\_9, Malithi\_9, Phineas\_9, CactusJack\_9, Vidya\_9, Megiddo\_9, Bogie\_9
- Track 2 : Mangethe\_9, Jebeks\_9, Langerak\_9, Arib1\_9, Sonah\_9, Phegasus\_9, Techage\_9, Shipwreck\_9, Donovan\_9, Juniormint\_9, Majeke\_9
- Track 3 : Camster\_9
- Track 4 : Tortellini\_9
- Track 5 : Xavia\_9
- Track 6 : Nazo\_9, BigNuz\_9
- Track 7 : Phayonce\_9, ThulaThula\_9
- Track 8 : Purky\_9

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

The start number called the most often in the published annotations is 1, it was called in 44 of the 45 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Arib1\_9, Atcoo\_9, Bartholomew\_9, BigNuz\_9, Bogie\_9, Brusacoram\_9, Bunnies\_9, CactusJack\_9, Donovan\_9, Dynamo\_9, FirstPlacePfu\_9, Fishburne\_9, Glaske\_9, GreaseLightnin\_9, HUHilltop\_9, Jebeks\_9, Jung\_9, Juniormint\_9, Kari\_9, KilKor\_9, Ksquared\_9, Langerak\_9, Majeke\_9, Malithi\_9, Mangethe\_9, Megiddo\_9, Nazo\_9, Necropolis\_9, Phalm\_9, Phayonce\_9, Phegasus\_9, Phineas\_9, Polkaroo\_9, Purky\_9, Pygmy\_9, Shipwreck\_9, Sonah\_9, StevieRay\_9, StressBall\_9, Techage\_9, Thespis\_9, ThulaThula\_9, Tortellini\_9, Venti\_9, Vidya\_9, Willsammy\_9, Xavia\_9, Zilizebeth\_9,

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

- Camster\_9,

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

-

## Summary by start number:

### Start 1:

- Found in 49 of 49 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 44 of 45
- Called 98.0% of time when present
- Phage (with cluster) where this start called: Arib1\_9 (P1), Atcoo\_9 (P1), Bartholomew\_9 (P1), BigNuz\_9 (P4), Bogie\_9 (P1), Brusacoram\_9 (P1), Bunnies\_9 (P1), CactusJack\_9 (P1), Donovan\_9 (P1), Dynamo\_9 (P1), FirstPlacePfu\_9 (P1), Fishburne\_9 (P1), Glaske\_9 (P1), GreaseLightnin\_9 (P1), HUHilltop\_9 (P1), Jebeks\_9 (P1), Jung\_9 (P1), Juniormint\_9 (P1), Kari\_9 (P1), KilKor\_9 (P1), Ksquared\_9 (P1), Langerak\_9 (P1), Majeke\_9 (P1), Malithi\_9 (P1), Mangethe\_9 (P1), Megiddo\_9 (P1), Nazo\_9 (P4), Necropolis\_9 (P1), Phalm\_9 (P1), Phayonce\_9 (P5), Phegasus\_9 (P1), Phineas\_9 (P1), Polkaroo\_9 (P1), Purky\_9 (P6), Pygmy\_9 (P1), Shipwreck\_9 (P1), Sonah\_9 (P1), StevieRay\_9 (P1), StressBall\_9 (P1), Techage\_9 (P1), Thespis\_9 (P1), ThulaThula\_9 (P5), Tortellini\_9 (P2), Venti\_9 (P1), Vidya\_9 (P1), Willsammy\_9 (P1), Xavia\_9 (P3), Zilizebeth\_9 (P1),

### Start 2:

- Found in 46 of 49 ( 93.9% ) of genes in pham
- Manual Annotations of this start: 1 of 45
- Called 2.2% of time when present
- Phage (with cluster) where this start called: Camster\_9 (P1),

## Summary by clusters:

There are 6 clusters represented in this pham: P2, P3, P1, P6, P4, P5,

### Info for manual annotations of cluster P1:

- Start number 1 was manually annotated 37 times for cluster P1.
- Start number 2 was manually annotated 1 time for cluster P1.

### Info for manual annotations of cluster P2:

- Start number 1 was manually annotated 1 time for cluster P2.

### Info for manual annotations of cluster P3:

- Start number 1 was manually annotated 1 time for cluster P3.

### Info for manual annotations of cluster P4:

- Start number 1 was manually annotated 2 times for cluster P4.

### Info for manual annotations of cluster P5:

- Start number 1 was manually annotated 2 times for cluster P5.

### Info for manual annotations of cluster P6:

- Start number 1 was manually annotated 1 time for cluster P6.

## Gene Information:

Gene: Arib1\_9 Start: 6956, Stop: 7306, Start Num: 1

Candidate Starts for Arib1\_9:

(Start: 1 @6956 has 44 MA's), (Start: 2 @6959 has 1 MA's), (3, 6983), (4, 7040), (5, 7139), (8, 7274),

Gene: Atcoo\_9 Start: 6942, Stop: 7292, Start Num: 1

Candidate Starts for Atcoo\_9:

(Start: 1 @6942 has 44 MA's), (Start: 2 @6945 has 1 MA's), (3, 6969), (4, 7026), (5, 7125), (7, 7254), (8, 7260),

Gene: Bartholomew\_9 Start: 6954, Stop: 7304, Start Num: 1

Candidate Starts for Bartholomew\_9:

(Start: 1 @6954 has 44 MA's), (Start: 2 @6957 has 1 MA's), (3, 6981), (4, 7038), (5, 7137), (7, 7266), (8, 7272),

Gene: BigNuz\_9 Start: 6923, Stop: 7273, Start Num: 1

Candidate Starts for BigNuz\_9:

(Start: 1 @6923 has 44 MA's), (Start: 2 @6926 has 1 MA's), (3, 6950), (4, 7007), (5, 7106), (6, 7205), (8, 7241),

Gene: Bogie\_9 Start: 6942, Stop: 7292, Start Num: 1

Candidate Starts for Bogie\_9:

(Start: 1 @6942 has 44 MA's), (Start: 2 @6945 has 1 MA's), (3, 6969), (4, 7026), (5, 7125), (7, 7254), (8, 7260),

Gene: Brusacoram\_9 Start: 6941, Stop: 7291, Start Num: 1

Candidate Starts for Brusacoram\_9:

(Start: 1 @6941 has 44 MA's), (Start: 2 @6944 has 1 MA's), (3, 6968), (4, 7025), (5, 7124), (7, 7253), (8, 7259),

Gene: Bunnies\_9 Start: 6954, Stop: 7304, Start Num: 1

Candidate Starts for Bunnies\_9:

(Start: 1 @6954 has 44 MA's), (Start: 2 @6957 has 1 MA's), (3, 6981), (4, 7038), (5, 7137), (7, 7266), (8, 7272),

Gene: CactusJack\_9 Start: 6941, Stop: 7291, Start Num: 1

Candidate Starts for CactusJack\_9:

(Start: 1 @6941 has 44 MA's), (Start: 2 @6944 has 1 MA's), (3, 6968), (4, 7025), (5, 7124), (7, 7253), (8, 7259),

Gene: Camster\_9 Start: 6957, Stop: 7304, Start Num: 2

Candidate Starts for Camster\_9:

(Start: 1 @6954 has 44 MA's), (Start: 2 @6957 has 1 MA's), (3, 6981), (4, 7038), (5, 7137), (7, 7266), (8, 7272),

Gene: Donovan\_9 Start: 6956, Stop: 7306, Start Num: 1

Candidate Starts for Donovan\_9:

(Start: 1 @6956 has 44 MA's), (Start: 2 @6959 has 1 MA's), (3, 6983), (4, 7040), (5, 7139), (8, 7274),

Gene: Dynamo\_9 Start: 6954, Stop: 7304, Start Num: 1

Candidate Starts for Dynamo\_9:

(Start: 1 @6954 has 44 MA's), (Start: 2 @6957 has 1 MA's), (3, 6981), (4, 7038), (5, 7137), (7, 7266), (8, 7272),

Gene: FirstPlacePfu\_9 Start: 6954, Stop: 7304, Start Num: 1

Candidate Starts for FirstPlacePfu\_9:

(Start: 1 @6954 has 44 MA's), (Start: 2 @6957 has 1 MA's), (3, 6981), (4, 7038), (5, 7137), (7, 7266), (8, 7272),

Gene: Fishburne\_9 Start: 6954, Stop: 7304, Start Num: 1

Candidate Starts for Fishburne\_9:

(Start: 1 @6954 has 44 MA's), (Start: 2 @6957 has 1 MA's), (3, 6981), (4, 7038), (5, 7137), (7, 7266), (8, 7272),

Gene: Glaske\_9 Start: 6941, Stop: 7291, Start Num: 1

Candidate Starts for Glaske\_9:

(Start: 1 @6941 has 44 MA's), (Start: 2 @6944 has 1 MA's), (3, 6968), (4, 7025), (5, 7124), (7, 7253), (8, 7259),

Gene: GreaseLightnin\_9 Start: 6954, Stop: 7304, Start Num: 1

Candidate Starts for GreaseLightnin\_9:

(Start: 1 @6954 has 44 MA's), (Start: 2 @6957 has 1 MA's), (3, 6981), (4, 7038), (5, 7137), (7, 7266), (8, 7272),

Gene: HUHilltop\_9 Start: 6954, Stop: 7304, Start Num: 1

Candidate Starts for HUHilltop\_9:

(Start: 1 @6954 has 44 MA's), (Start: 2 @6957 has 1 MA's), (3, 6981), (4, 7038), (5, 7137), (7, 7266), (8, 7272),

Gene: Jebeks\_9 Start: 6956, Stop: 7306, Start Num: 1

Candidate Starts for Jebeks\_9:

(Start: 1 @6956 has 44 MA's), (Start: 2 @6959 has 1 MA's), (3, 6983), (4, 7040), (5, 7139), (8, 7274),

Gene: Jung\_9 Start: 6941, Stop: 7291, Start Num: 1

Candidate Starts for Jung\_9:

(Start: 1 @6941 has 44 MA's), (Start: 2 @6944 has 1 MA's), (3, 6968), (4, 7025), (5, 7124), (7, 7253), (8, 7259),

Gene: Juniormint\_9 Start: 6959, Stop: 7309, Start Num: 1

Candidate Starts for Juniormint\_9:

(Start: 1 @6959 has 44 MA's), (Start: 2 @6962 has 1 MA's), (3, 6986), (4, 7043), (5, 7142), (8, 7277),

Gene: Kari\_9 Start: 6954, Stop: 7304, Start Num: 1

Candidate Starts for Kari\_9:

(Start: 1 @6954 has 44 MA's), (Start: 2 @6957 has 1 MA's), (3, 6981), (4, 7038), (5, 7137), (7, 7266), (8, 7272),

Gene: KilKor\_9 Start: 6941, Stop: 7291, Start Num: 1

Candidate Starts for KilKor\_9:

(Start: 1 @6941 has 44 MA's), (Start: 2 @6944 has 1 MA's), (3, 6968), (4, 7025), (5, 7124), (7, 7253), (8, 7259),

Gene: Ksquared\_9 Start: 6954, Stop: 7304, Start Num: 1

Candidate Starts for Ksquared\_9:

(Start: 1 @6954 has 44 MA's), (Start: 2 @6957 has 1 MA's), (3, 6981), (4, 7038), (5, 7137), (7, 7266), (8, 7272),

Gene: Langerak\_9 Start: 6956, Stop: 7306, Start Num: 1

Candidate Starts for Langerak\_9:

(Start: 1 @6956 has 44 MA's), (Start: 2 @6959 has 1 MA's), (3, 6983), (4, 7040), (5, 7139), (8, 7274),

Gene: Majeke\_9 Start: 6956, Stop: 7306, Start Num: 1

Candidate Starts for Majeke\_9:

(Start: 1 @6956 has 44 MA's), (Start: 2 @6959 has 1 MA's), (3, 6983), (4, 7040), (5, 7139), (8, 7274),

Gene: Malithi\_9 Start: 6954, Stop: 7304, Start Num: 1

Candidate Starts for Malithi\_9:

(Start: 1 @6954 has 44 MA's), (Start: 2 @6957 has 1 MA's), (3, 6981), (4, 7038), (5, 7137), (7, 7266), (8, 7272),

Gene: Mangethe\_9 Start: 6956, Stop: 7306, Start Num: 1

Candidate Starts for Mangethe\_9:

(Start: 1 @6956 has 44 MA's), (Start: 2 @6959 has 1 MA's), (3, 6983), (4, 7040), (5, 7139), (8, 7274),

Gene: Megiddo\_9 Start: 6941, Stop: 7291, Start Num: 1

Candidate Starts for Megiddo\_9:

(Start: 1 @6941 has 44 MA's), (Start: 2 @6944 has 1 MA's), (3, 6968), (4, 7025), (5, 7124), (7, 7253), (8, 7259),

Gene: Nazo\_9 Start: 6923, Stop: 7273, Start Num: 1

Candidate Starts for Nazo\_9:

(Start: 1 @6923 has 44 MA's), (Start: 2 @6926 has 1 MA's), (3, 6950), (4, 7007), (5, 7106), (6, 7205), (8, 7241),

Gene: Necropolis\_9 Start: 6954, Stop: 7304, Start Num: 1

Candidate Starts for Necropolis\_9:

(Start: 1 @6954 has 44 MA's), (Start: 2 @6957 has 1 MA's), (3, 6981), (4, 7038), (5, 7137), (7, 7266), (8, 7272),

Gene: Phalm\_9 Start: 6941, Stop: 7291, Start Num: 1

Candidate Starts for Phalm\_9:

(Start: 1 @6941 has 44 MA's), (Start: 2 @6944 has 1 MA's), (3, 6968), (4, 7025), (5, 7124), (7, 7253), (8, 7259),

Gene: Phayonce\_9 Start: 6943, Stop: 7293, Start Num: 1

Candidate Starts for Phayonce\_9:

(Start: 1 @6943 has 44 MA's), (Start: 2 @6946 has 1 MA's), (3, 6970), (4, 7027), (5, 7126), (6, 7225), (7, 7255), (8, 7261),

Gene: Phegasus\_9 Start: 6956, Stop: 7306, Start Num: 1

Candidate Starts for Phegasus\_9:

(Start: 1 @6956 has 44 MA's), (Start: 2 @6959 has 1 MA's), (3, 6983), (4, 7040), (5, 7139), (8, 7274),

Gene: Phineas\_9 Start: 6942, Stop: 7292, Start Num: 1

Candidate Starts for Phineas\_9:

(Start: 1 @6942 has 44 MA's), (Start: 2 @6945 has 1 MA's), (3, 6969), (4, 7026), (5, 7125), (7, 7254), (8, 7260),

Gene: Polkaroo\_9 Start: 6954, Stop: 7304, Start Num: 1

Candidate Starts for Polkaroo\_9:

(Start: 1 @6954 has 44 MA's), (Start: 2 @6957 has 1 MA's), (3, 6981), (4, 7038), (5, 7137), (7, 7266), (8, 7272),

Gene: Purky\_9 Start: 6959, Stop: 7309, Start Num: 1

Candidate Starts for Purky\_9:

(Start: 1 @6959 has 44 MA's), (3, 6986), (4, 7043), (5, 7142), (8, 7277),

Gene: Pygmy\_9 Start: 6942, Stop: 7292, Start Num: 1

Candidate Starts for Pygmy\_9:

(Start: 1 @6942 has 44 MA's), (Start: 2 @6945 has 1 MA's), (3, 6969), (4, 7026), (5, 7125), (7, 7254), (8, 7260),

Gene: Shipwreck\_9 Start: 6942, Stop: 7292, Start Num: 1

Candidate Starts for Shipwreck\_9:

(Start: 1 @6942 has 44 MA's), (Start: 2 @6945 has 1 MA's), (3, 6969), (4, 7026), (5, 7125), (8, 7260),

Gene: Sonah\_9 Start: 6956, Stop: 7306, Start Num: 1

Candidate Starts for Sonah\_9:

(Start: 1 @6956 has 44 MA's), (Start: 2 @6959 has 1 MA's), (3, 6983), (4, 7040), (5, 7139), (8, 7274),

Gene: StevieRay\_9 Start: 6945, Stop: 7295, Start Num: 1

Candidate Starts for StevieRay\_9:

(Start: 1 @6945 has 44 MA's), (Start: 2 @6948 has 1 MA's), (3, 6972), (4, 7029), (5, 7128), (7, 7257), (8, 7263),

Gene: StressBall\_9 Start: 6941, Stop: 7291, Start Num: 1

Candidate Starts for StressBall\_9:

(Start: 1 @6941 has 44 MA's), (Start: 2 @6944 has 1 MA's), (3, 6968), (4, 7025), (5, 7124), (7, 7253), (8, 7259),

Gene: Techage\_9 Start: 6959, Stop: 7309, Start Num: 1

Candidate Starts for Techage\_9:

(Start: 1 @6959 has 44 MA's), (Start: 2 @6962 has 1 MA's), (3, 6986), (4, 7043), (5, 7142), (8, 7277),

Gene: Thespis\_9 Start: 6941, Stop: 7291, Start Num: 1

Candidate Starts for Thespis\_9:

(Start: 1 @6941 has 44 MA's), (Start: 2 @6944 has 1 MA's), (3, 6968), (4, 7025), (5, 7124), (7, 7253), (8, 7259),

Gene: ThulaThula\_9 Start: 6988, Stop: 7338, Start Num: 1

Candidate Starts for ThulaThula\_9:

(Start: 1 @6988 has 44 MA's), (Start: 2 @6991 has 1 MA's), (3, 7015), (4, 7072), (5, 7171), (6, 7270), (7, 7300), (8, 7306),

Gene: Tortellini\_9 Start: 6901, Stop: 7251, Start Num: 1

Candidate Starts for Tortellini\_9:

(Start: 1 @6901 has 44 MA's), (3, 6928), (4, 6985), (5, 7084), (8, 7219),

Gene: Venti\_9 Start: 6954, Stop: 7304, Start Num: 1

Candidate Starts for Venti\_9:

(Start: 1 @6954 has 44 MA's), (Start: 2 @6957 has 1 MA's), (3, 6981), (4, 7038), (5, 7137), (7, 7266), (8, 7272),

Gene: Vidya\_9 Start: 6954, Stop: 7304, Start Num: 1

Candidate Starts for Vidya\_9:

(Start: 1 @6954 has 44 MA's), (Start: 2 @6957 has 1 MA's), (3, 6981), (4, 7038), (5, 7137), (7, 7266), (8, 7272),

Gene: Willsammy\_9 Start: 6944, Stop: 7294, Start Num: 1

Candidate Starts for Willsammy\_9:

(Start: 1 @6944 has 44 MA's), (Start: 2 @6947 has 1 MA's), (3, 6971), (4, 7028), (5, 7127), (7, 7256), (8, 7262),

Gene: Xavia\_9 Start: 6956, Stop: 7306, Start Num: 1

Candidate Starts for Xavia\_9:

(Start: 1 @6956 has 44 MA's), (3, 6983), (4, 7040), (5, 7139), (7, 7268), (8, 7274),

Gene: Zilizebeth\_9 Start: 6954, Stop: 7304, Start Num: 1

Candidate Starts for Zilizebeth\_9:

(Start: 1 @6954 has 44 MA's), (Start: 2 @6957 has 1 MA's), (3, 6981), (4, 7038), (5, 7137), (7, 7266), (8, 7272),