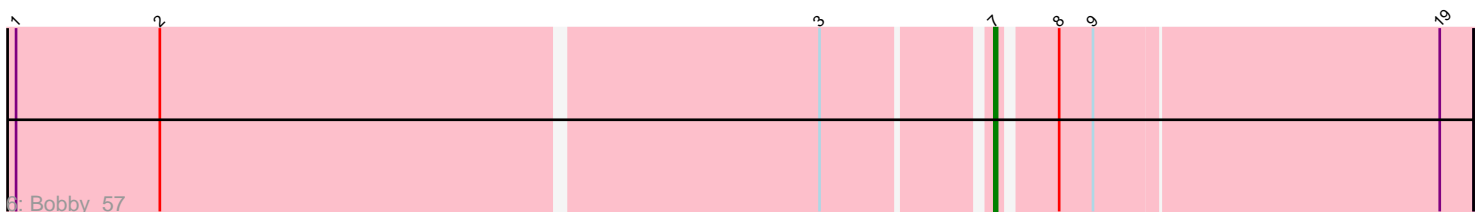
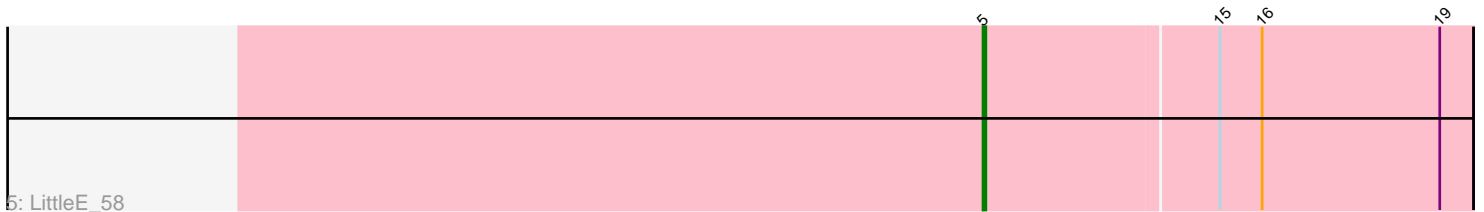
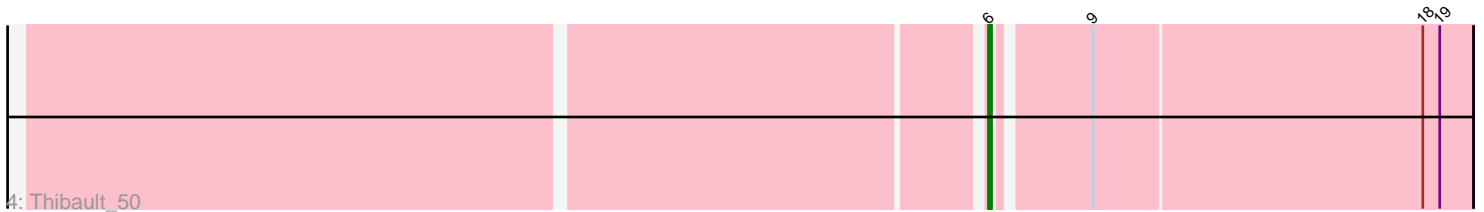
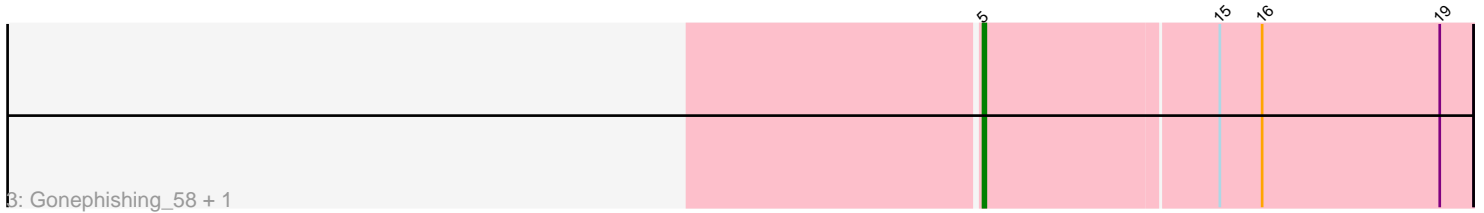
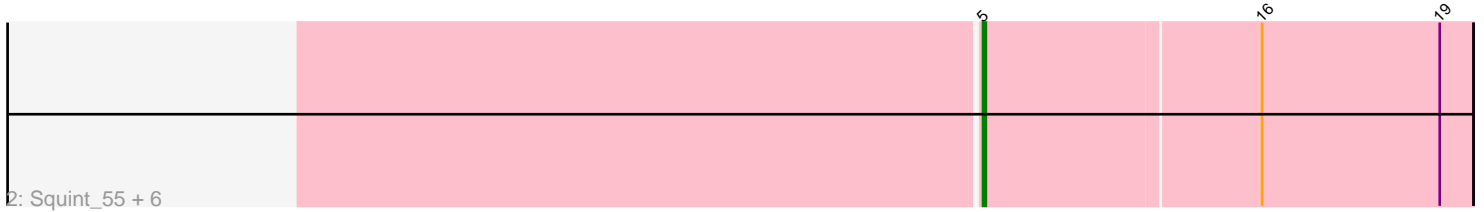
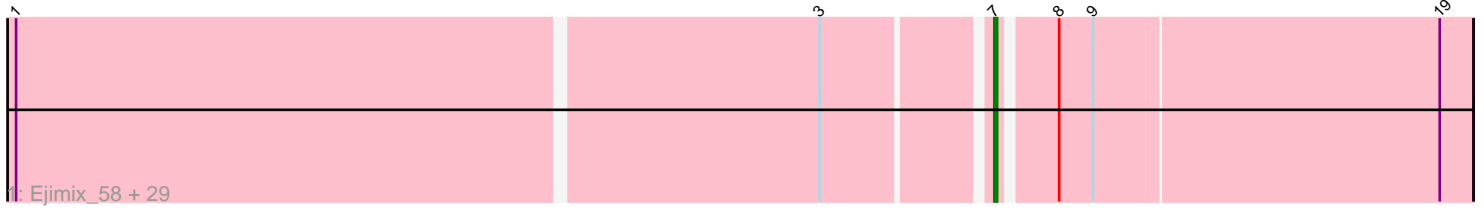


Pham 161989



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 161989 Report

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

Pham number 161989 has 44 members, 4 are drafts.

Phages represented in each track:

- Track 1 : Ejimix\_58, NihilNomen\_57, Wanda\_64, DmpstrDiver\_57, Phoebus\_57, Constella\_48, Bagrid\_57, Kalah2\_54, Minerva\_64, BAKA\_62, HokkenD\_51, Bombitas\_55, EricMillard\_58, Yeet\_56, Beem\_58, KashFlow\_51, Dove\_55, Odette\_56, Dallas\_57, Halley\_58, Duke13\_61, Hughesyang\_56, Klein\_58, JuicyJay\_57, ThreeRngTarjay\_56, Hannaconda\_54, Redno2\_55, Optimus\_63, Zelink\_56, Schatzie\_53
- Track 2 : Squint\_55, Ariel\_55, Superphikiman\_56, Lucky2013\_56, MiaZeal\_55, Porcelain\_54, Courthouse\_55
- Track 3 : Gonephishing\_58, Omega\_60
- Track 4 : Thibault\_50
- Track 5 : LittleE\_58
- Track 6 : Bobby\_57
- Track 7 : Nebkiss\_42, Gaia\_42

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

The start number called the most often in the published annotations is 7, it was called in 28 of the 40 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- BAKA\_62, Bagrid\_57, Beem\_58, Bobby\_57, Bombitas\_55, Constella\_48, Dallas\_57, DmpstrDiver\_57, Dove\_55, Duke13\_61, Ejimix\_58, EricMillard\_58, Halley\_58, Hannaconda\_54, HokkenD\_51, Hughesyang\_56, JuicyJay\_57, Kalah2\_54, KashFlow\_51, Klein\_58, Minerva\_64, NihilNomen\_57, Odette\_56, Optimus\_63, Phoebus\_57, Redno2\_55, Schatzie\_53, ThreeRngTarjay\_56, Wanda\_64, Yeet\_56, Zelink\_56,

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

- 

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

- Ariel\_55, Courthouse\_55, Gaia\_42, Gonephishing\_58, LittleE\_58, Lucky2013\_56, MiaZeal\_55, Nebkiss\_42, Omega\_60, Porcelain\_54, Squint\_55, Superphikiman\_56, Thibault\_50,

## Summary by start number:

### Start 4:

- Found in 2 of 44 ( 4.5% ) of genes in pham
- Manual Annotations of this start: 2 of 40
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gaia\_42 (X), Nebkiss\_42 (X),

### Start 5:

- Found in 10 of 44 ( 22.7% ) of genes in pham
- Manual Annotations of this start: 9 of 40
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ariel\_55 (J), Courthouse\_55 (J), Gonephishing\_58 (J), LittleE\_58 (J), Lucky2013\_56 (J), MiaZeal\_55 (J), Omega\_60 (J), Porcelain\_54 (J), Squint\_55 (J), Superphikiman\_56 (J),

### Start 6:

- Found in 1 of 44 ( 2.3% ) of genes in pham
- Manual Annotations of this start: 1 of 40
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Thibault\_50 (J),

### Start 7:

- Found in 31 of 44 ( 70.5% ) of genes in pham
- Manual Annotations of this start: 28 of 40
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BAKA\_62 (J), Bagrid\_57 (J), Beem\_58 (J), Bobby\_57 (J), Bombitas\_55 (J), Constella\_48 (J), Dallas\_57 (J), DmpstrDiver\_57 (J), Dove\_55 (J), Duke13\_61 (J), Ejimix\_58 (J), EricMillard\_58 (J), Halley\_58 (J), Hannaconda\_54 (J), HokkenD\_51 (J), Hughesyang\_56 (J), JuicyJay\_57 (J), Kalah2\_54 (J), KashFlow\_51 (J), Klein\_58 (J), Minerva\_64 (J), NihilNomen\_57 (J), Odette\_56 (J), Optimus\_63 (J), Phoebus\_57 (J), Redno2\_55 (J), Schatzie\_53 (J), ThreeRngTarjay\_56 (J), Wanda\_64 (J), Yeet\_56 (J), Zelink\_56 (J),

## Summary by clusters:

There are 2 clusters represented in this pham: X, J,

### Info for manual annotations of cluster J:

- Start number 5 was manually annotated 9 times for cluster J.
- Start number 6 was manually annotated 1 time for cluster J.
- Start number 7 was manually annotated 28 times for cluster J.

### Info for manual annotations of cluster X:

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

## Gene Information:

Gene: Ariel\_55 Start: 42057, Stop: 41887, Start Num: 5

Candidate Starts for Ariel\_55:

(Start: 5 @42057 has 9 MA's), (16, 41961), (19, 41898),

Gene: BAKA\_62 Start: 46161, Stop: 46000, Start Num: 7

Candidate Starts for BAKA\_62:

(1, 46494), (3, 46215), (Start: 7 @46161 has 28 MA's), (8, 46143), (9, 46131), (19, 46011),

Gene: Bagrid\_57 Start: 45494, Stop: 45333, Start Num: 7

Candidate Starts for Bagrid\_57:

(1, 45827), (3, 45548), (Start: 7 @45494 has 28 MA's), (8, 45476), (9, 45464), (19, 45344),

Gene: Beem\_58 Start: 46060, Stop: 45899, Start Num: 7

Candidate Starts for Beem\_58:

(1, 46393), (3, 46114), (Start: 7 @46060 has 28 MA's), (8, 46042), (9, 46030), (19, 45910),

Gene: Bobby\_57 Start: 45006, Stop: 44845, Start Num: 7

Candidate Starts for Bobby\_57:

(1, 45339), (2, 45288), (3, 45060), (Start: 7 @45006 has 28 MA's), (8, 44988), (9, 44976), (19, 44856),

Gene: Bombitas\_55 Start: 45655, Stop: 45494, Start Num: 7

Candidate Starts for Bombitas\_55:

(1, 45988), (3, 45709), (Start: 7 @45655 has 28 MA's), (8, 45637), (9, 45625), (19, 45505),

Gene: Constella\_48 Start: 42097, Stop: 41936, Start Num: 7

Candidate Starts for Constella\_48:

(1, 42430), (3, 42151), (Start: 7 @42097 has 28 MA's), (8, 42079), (9, 42067), (19, 41947),

Gene: Courthouse\_55 Start: 42461, Stop: 42291, Start Num: 5

Candidate Starts for Courthouse\_55:

(Start: 5 @42461 has 9 MA's), (16, 42365), (19, 42302),

Gene: Dallas\_57 Start: 44981, Stop: 44820, Start Num: 7

Candidate Starts for Dallas\_57:

(1, 45314), (3, 45035), (Start: 7 @44981 has 28 MA's), (8, 44963), (9, 44951), (19, 44831),

Gene: DmpstrDiver\_57 Start: 45408, Stop: 45247, Start Num: 7

Candidate Starts for DmpstrDiver\_57:

(1, 45741), (3, 45462), (Start: 7 @45408 has 28 MA's), (8, 45390), (9, 45378), (19, 45258),

Gene: Dove\_55 Start: 45021, Stop: 44860, Start Num: 7

Candidate Starts for Dove\_55:

(1, 45354), (3, 45075), (Start: 7 @45021 has 28 MA's), (8, 45003), (9, 44991), (19, 44871),

Gene: Duke13\_61 Start: 45928, Stop: 45767, Start Num: 7

Candidate Starts for Duke13\_61:

(1, 46261), (3, 45982), (Start: 7 @45928 has 28 MA's), (8, 45910), (9, 45898), (19, 45778),

Gene: Ejimix\_58 Start: 46845, Stop: 46684, Start Num: 7

Candidate Starts for Ejimix\_58:

(1, 47178), (3, 46899), (Start: 7 @46845 has 28 MA's), (8, 46827), (9, 46815), (19, 46695),

Gene: EricMillard\_58 Start: 46346, Stop: 46185, Start Num: 7

Candidate Starts for EricMillard\_58:

(1, 46679), (3, 46400), (Start: 7 @46346 has 28 MA's), (8, 46328), (9, 46316), (19, 46196),

Gene: Gaia\_42 Start: 33487, Stop: 33320, Start Num: 4

Candidate Starts for Gaia\_42:

(Start: 4 @33487 has 2 MA's), (8, 33457), (10, 33442), (11, 33427), (12, 33415), (13, 33412), (14, 33409), (17, 33370),

Gene: Gonephishing\_58 Start: 43739, Stop: 43569, Start Num: 5

Candidate Starts for Gonephishing\_58:

(Start: 5 @43739 has 9 MA's), (15, 43658), (16, 43643), (19, 43580),

Gene: Halley\_58 Start: 46059, Stop: 45898, Start Num: 7

Candidate Starts for Halley\_58:

(1, 46392), (3, 46113), (Start: 7 @46059 has 28 MA's), (8, 46041), (9, 46029), (19, 45909),

Gene: Hannaconda\_54 Start: 40548, Stop: 40387, Start Num: 7

Candidate Starts for Hannaconda\_54:

(1, 40881), (3, 40602), (Start: 7 @40548 has 28 MA's), (8, 40530), (9, 40518), (19, 40398),

Gene: HokkenD\_51 Start: 44328, Stop: 44167, Start Num: 7

Candidate Starts for HokkenD\_51:

(1, 44661), (3, 44382), (Start: 7 @44328 has 28 MA's), (8, 44310), (9, 44298), (19, 44178),

Gene: Hughesyang\_56 Start: 45988, Stop: 45827, Start Num: 7

Candidate Starts for Hughesyang\_56:

(1, 46321), (3, 46042), (Start: 7 @45988 has 28 MA's), (8, 45970), (9, 45958), (19, 45838),

Gene: JuicyJay\_57 Start: 47194, Stop: 47033, Start Num: 7

Candidate Starts for JuicyJay\_57:

(1, 47527), (3, 47248), (Start: 7 @47194 has 28 MA's), (8, 47176), (9, 47164), (19, 47044),

Gene: Kalah2\_54 Start: 45603, Stop: 45442, Start Num: 7

Candidate Starts for Kalah2\_54:

(1, 45936), (3, 45657), (Start: 7 @45603 has 28 MA's), (8, 45585), (9, 45573), (19, 45453),

Gene: KashFlow\_51 Start: 40169, Stop: 40008, Start Num: 7

Candidate Starts for KashFlow\_51:

(1, 40502), (3, 40223), (Start: 7 @40169 has 28 MA's), (8, 40151), (9, 40139), (19, 40019),

Gene: Klein\_58 Start: 45626, Stop: 45465, Start Num: 7

Candidate Starts for Klein\_58:

(1, 45959), (3, 45680), (Start: 7 @45626 has 28 MA's), (8, 45608), (9, 45596), (19, 45476),

Gene: LittleE\_58 Start: 45068, Stop: 44898, Start Num: 5

Candidate Starts for LittleE\_58:

(Start: 5 @45068 has 9 MA's), (15, 44987), (16, 44972), (19, 44909),

Gene: Lucky2013\_56 Start: 42597, Stop: 42427, Start Num: 5

Candidate Starts for Lucky2013\_56:

(Start: 5 @42597 has 9 MA's), (16, 42501), (19, 42438),

Gene: MiaZeal\_55 Start: 42272, Stop: 42102, Start Num: 5

Candidate Starts for MiaZeal\_55:

(Start: 5 @42272 has 9 MA's), (16, 42176), (19, 42113),

Gene: Minerva\_64 Start: 47476, Stop: 47315, Start Num: 7

Candidate Starts for Minerva\_64:

(1, 47809), (3, 47530), (Start: 7 @47476 has 28 MA's), (8, 47458), (9, 47446), (19, 47326),

Gene: Nebkiss\_42 Start: 33188, Stop: 33021, Start Num: 4

Candidate Starts for Nebkiss\_42:

(Start: 4 @33188 has 2 MA's), (8, 33158), (10, 33143), (11, 33128), (12, 33116), (13, 33113), (14, 33110), (17, 33071),

Gene: NihilNomen\_57 Start: 46146, Stop: 45985, Start Num: 7

Candidate Starts for NihilNomen\_57:

(1, 46479), (3, 46200), (Start: 7 @46146 has 28 MA's), (8, 46128), (9, 46116), (19, 45996),

Gene: Odette\_56 Start: 45189, Stop: 45028, Start Num: 7

Candidate Starts for Odette\_56:

(1, 45522), (3, 45243), (Start: 7 @45189 has 28 MA's), (8, 45171), (9, 45159), (19, 45039),

Gene: Omega\_60 Start: 46741, Stop: 46571, Start Num: 5

Candidate Starts for Omega\_60:

(Start: 5 @46741 has 9 MA's), (15, 46660), (16, 46645), (19, 46582),

Gene: Optimus\_63 Start: 47062, Stop: 46901, Start Num: 7

Candidate Starts for Optimus\_63:

(1, 47395), (3, 47116), (Start: 7 @47062 has 28 MA's), (8, 47044), (9, 47032), (19, 46912),

Gene: Phoebus\_57 Start: 46347, Stop: 46186, Start Num: 7

Candidate Starts for Phoebus\_57:

(1, 46680), (3, 46401), (Start: 7 @46347 has 28 MA's), (8, 46329), (9, 46317), (19, 46197),

Gene: Porcelain\_54 Start: 42272, Stop: 42102, Start Num: 5

Candidate Starts for Porcelain\_54:

(Start: 5 @42272 has 9 MA's), (16, 42176), (19, 42113),

Gene: Redno2\_55 Start: 42942, Stop: 42781, Start Num: 7

Candidate Starts for Redno2\_55:

(1, 43275), (3, 42996), (Start: 7 @42942 has 28 MA's), (8, 42924), (9, 42912), (19, 42792),

Gene: Schatzie\_53 Start: 44937, Stop: 44776, Start Num: 7

Candidate Starts for Schatzie\_53:

(1, 45270), (3, 44991), (Start: 7 @44937 has 28 MA's), (8, 44919), (9, 44907), (19, 44787),

Gene: Squint\_55 Start: 42391, Stop: 42221, Start Num: 5

Candidate Starts for Squint\_55:

(Start: 5 @42391 has 9 MA's), (16, 42295), (19, 42232),

Gene: Superphikiman\_56 Start: 42463, Stop: 42293, Start Num: 5

Candidate Starts for Superphikiman\_56:

(Start: 5 @42463 has 9 MA's), (16, 42367), (19, 42304),

Gene: Thibault\_50 Start: 43255, Stop: 43094, Start Num: 6

Candidate Starts for Thibault\_50:

(Start: 6 @43255 has 1 MA's), (9, 43225), (18, 43111), (19, 43105),

Gene: ThreeRngTarjay\_56 Start: 46223, Stop: 46062, Start Num: 7

Candidate Starts for ThreeRngTarjay\_56:

(1, 46556), (3, 46277), (Start: 7 @46223 has 28 MA's), (8, 46205), (9, 46193), (19, 46073),

Gene: Wanda\_64 Start: 45935, Stop: 45774, Start Num: 7

Candidate Starts for Wanda\_64:

(1, 46268), (3, 45989), (Start: 7 @45935 has 28 MA's), (8, 45917), (9, 45905), (19, 45785),

Gene: Yeet\_56 Start: 45356, Stop: 45195, Start Num: 7

Candidate Starts for Yeet\_56:

(1, 45689), (3, 45410), (Start: 7 @45356 has 28 MA's), (8, 45338), (9, 45326), (19, 45206),

Gene: Zelink\_56 Start: 46536, Stop: 46375, Start Num: 7

Candidate Starts for Zelink\_56:

(1, 46869), (3, 46590), (Start: 7 @46536 has 28 MA's), (8, 46518), (9, 46506), (19, 46386),