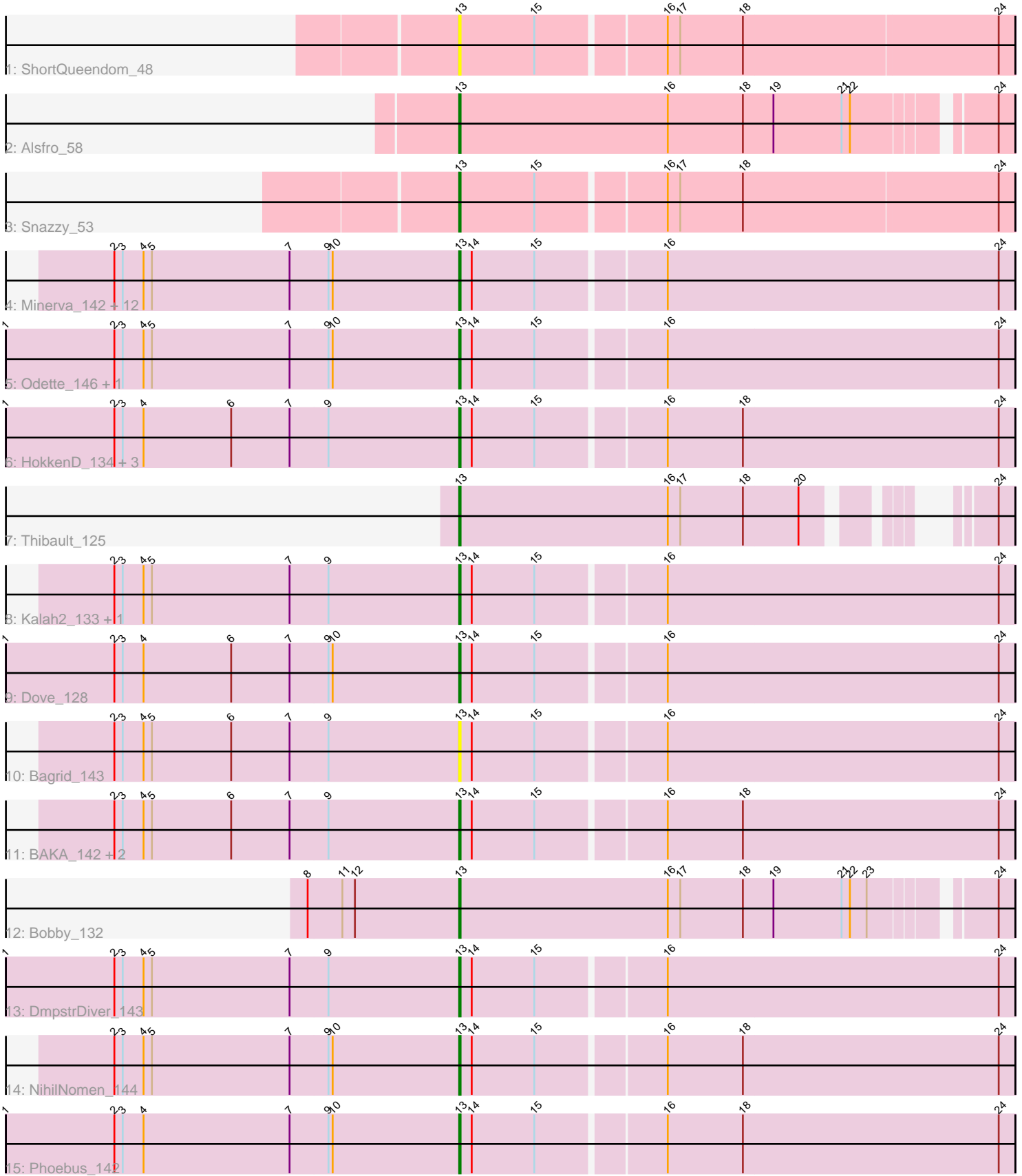


Pham 173050



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 173050 Report

This analysis was run 11/02/24 on database version 579.

Pham number 173050 has 34 members, 3 are drafts.

Phages represented in each track:

- Track 1 : ShortQueendom\_48
- Track 2 : Alsfro\_58
- Track 3 : Snazzy\_53
- Track 4 : Minerva\_142, JuicyJay\_138, Pound\_130, Beem\_144, Optimus\_133, Hughesyang\_141, Klein\_140, Halley\_144, Ejimix\_135, Constella\_136, Zelink\_137, Dallas\_143, Bombitas\_130
- Track 5 : Odette\_146, Wanda\_142
- Track 6 : HokkenD\_134, ThreeRngTarjay\_137, Redno2\_134, Yeet\_135
- Track 7 : Thibault\_125
- Track 8 : Kalah2\_133, Schatzie\_138
- Track 9 : Dove\_128
- Track 10 : Bagrid\_143
- Track 11 : BAKA\_142, Duke13\_138, EricMillard\_134
- Track 12 : Bobby\_132
- Track 13 : DmpstrDiver\_143
- Track 14 : NihilNomen\_144
- Track 15 : Phoebus\_142

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

The start number called the most often in the published annotations is 13, it was called in 31 of the 31 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Alsfro\_58, BAKA\_142, Bagrid\_143, Beem\_144, Bobby\_132, Bombitas\_130, Constella\_136, Dallas\_143, DmpstrDiver\_143, Dove\_128, Duke13\_138, Ejimix\_135, EricMillard\_134, Halley\_144, HokkenD\_134, Hughesyang\_141, JuicyJay\_138, Kalah2\_133, Klein\_140, Minerva\_142, NihilNomen\_144, Odette\_146, Optimus\_133, Phoebus\_142, Pound\_130, Redno2\_134, Schatzie\_138, ShortQueendom\_48, Snazzy\_53, Thibault\_125, ThreeRngTarjay\_137, Wanda\_142, Yeet\_135, Zelink\_137,

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

-

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

- 

### Summary by start number:

Start 13:

- Found in 34 of 34 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 31 of 31
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Alsfro\_58 (A1), BAKA\_142 (J), Bagrid\_143 (J), Beem\_144 (J), Bobby\_132 (J), Bombitas\_130 (J), Constella\_136 (J), Dallas\_143 (J), DmpstrDiver\_143 (J), Dove\_128 (J), Duke13\_138 (J), Ejimix\_135 (J), EricMillard\_134 (J), Halley\_144 (J), HokkenD\_134 (J), Hughesyang\_141 (J), JuicyJay\_138 (J), Kalah2\_133 (J), Klein\_140 (J), Minerva\_142 (J), NihilNomen\_144 (J), Odette\_146 (J), Optimus\_133 (J), Phoebus\_142 (J), Pound\_130 (J), Redno2\_134 (J), Schatzie\_138 (J), ShortQueendom\_48 (A1), Snazzy\_53 (A1), Thibault\_125 (J), ThreeRngTarjay\_137 (J), Wanda\_142 (J), Yeet\_135 (J), Zelink\_137 (J),

### Summary by clusters:

There are 2 clusters represented in this pham: A1, J,

Info for manual annotations of cluster A1:

- Start number 13 was manually annotated 2 times for cluster A1.

Info for manual annotations of cluster J:

- Start number 13 was manually annotated 29 times for cluster J.

### Gene Information:

Gene: Alsfro\_58 Start: 38822, Stop: 38445, Start Num: 13

Candidate Starts for Alsfro\_58:

(Start: 13 @38822 has 31 MA's), (16, 38672), (18, 38618), (19, 38597), (21, 38549), (22, 38543), (24, 38456),

Gene: BAKA\_142 Start: 75397, Stop: 75786, Start Num: 13

Candidate Starts for BAKA\_142:

(2, 75151), (3, 75157), (4, 75172), (5, 75178), (6, 75235), (7, 75277), (9, 75304), (Start: 13 @75397 has 31 MA's), (14, 75406), (15, 75451), (16, 75538), (18, 75592), (24, 75775),

Gene: Bagrid\_143 Start: 76092, Stop: 76481, Start Num: 13

Candidate Starts for Bagrid\_143:

(2, 75846), (3, 75852), (4, 75867), (5, 75873), (6, 75930), (7, 75972), (9, 75999), (Start: 13 @76092 has 31 MA's), (14, 76101), (15, 76146), (16, 76233), (24, 76470),

Gene: Beem\_144 Start: 76995, Stop: 77384, Start Num: 13

Candidate Starts for Beem\_144:

(2, 76749), (3, 76755), (4, 76770), (5, 76776), (7, 76875), (9, 76902), (10, 76905), (Start: 13 @76995 has 31 MA's), (14, 77004), (15, 77049), (16, 77136), (24, 77373),

Gene: Bobby\_132 Start: 76850, Stop: 77227, Start Num: 13

Candidate Starts for Bobby\_132:

(8, 76742), (11, 76766), (12, 76775), (Start: 13 @76850 has 31 MA's), (16, 77000), (17, 77009), (18, 77054), (19, 77075), (21, 77123), (22, 77129), (23, 77141), (24, 77216),

Gene: Bombitas\_130 Start: 74406, Stop: 74795, Start Num: 13

Candidate Starts for Bombitas\_130:

(2, 74160), (3, 74166), (4, 74181), (5, 74187), (7, 74286), (9, 74313), (10, 74316), (Start: 13 @74406 has 31 MA's), (14, 74415), (15, 74460), (16, 74547), (24, 74784),

Gene: Constella\_136 Start: 75648, Stop: 76037, Start Num: 13

Candidate Starts for Constella\_136:

(2, 75402), (3, 75408), (4, 75423), (5, 75429), (7, 75528), (9, 75555), (10, 75558), (Start: 13 @75648 has 31 MA's), (14, 75657), (15, 75702), (16, 75789), (24, 76026),

Gene: Dallas\_143 Start: 76462, Stop: 76851, Start Num: 13

Candidate Starts for Dallas\_143:

(2, 76216), (3, 76222), (4, 76237), (5, 76243), (7, 76342), (9, 76369), (10, 76372), (Start: 13 @76462 has 31 MA's), (14, 76471), (15, 76516), (16, 76603), (24, 76840),

Gene: DmpstrDiver\_143 Start: 76381, Stop: 76770, Start Num: 13

Candidate Starts for DmpstrDiver\_143:

(1, 76057), (2, 76135), (3, 76141), (4, 76156), (5, 76162), (7, 76261), (9, 76288), (Start: 13 @76381 has 31 MA's), (14, 76390), (15, 76435), (16, 76522), (24, 76759),

Gene: Dove\_128 Start: 71980, Stop: 72369, Start Num: 13

Candidate Starts for Dove\_128:

(1, 71656), (2, 71734), (3, 71740), (4, 71755), (6, 71818), (7, 71860), (9, 71887), (10, 71890), (Start: 13 @71980 has 31 MA's), (14, 71989), (15, 72034), (16, 72121), (24, 72358),

Gene: Duke13\_138 Start: 73682, Stop: 74071, Start Num: 13

Candidate Starts for Duke13\_138:

(2, 73436), (3, 73442), (4, 73457), (5, 73463), (6, 73520), (7, 73562), (9, 73589), (Start: 13 @73682 has 31 MA's), (14, 73691), (15, 73736), (16, 73823), (18, 73877), (24, 74060),

Gene: Ejimix\_135 Start: 76530, Stop: 76919, Start Num: 13

Candidate Starts for Ejimix\_135:

(2, 76284), (3, 76290), (4, 76305), (5, 76311), (7, 76410), (9, 76437), (10, 76440), (Start: 13 @76530 has 31 MA's), (14, 76539), (15, 76584), (16, 76671), (24, 76908),

Gene: EricMillard\_134 Start: 75034, Stop: 75423, Start Num: 13

Candidate Starts for EricMillard\_134:

(2, 74788), (3, 74794), (4, 74809), (5, 74815), (6, 74872), (7, 74914), (9, 74941), (Start: 13 @75034 has 31 MA's), (14, 75043), (15, 75088), (16, 75175), (18, 75229), (24, 75412),

Gene: Halley\_144 Start: 76846, Stop: 77235, Start Num: 13

Candidate Starts for Halley\_144:

(2, 76600), (3, 76606), (4, 76621), (5, 76627), (7, 76726), (9, 76753), (10, 76756), (Start: 13 @76846 has 31 MA's), (14, 76855), (15, 76900), (16, 76987), (24, 77224),

Gene: HokkenD\_134 Start: 75730, Stop: 76119, Start Num: 13

Candidate Starts for HokkenD\_134:

(1, 75406), (2, 75484), (3, 75490), (4, 75505), (6, 75568), (7, 75610), (9, 75637), (Start: 13 @75730 has 31 MA's), (14, 75739), (15, 75784), (16, 75871), (18, 75925), (24, 76108),

Gene: Hughesyang\_141 Start: 76616, Stop: 77005, Start Num: 13  
Candidate Starts for Hughesyang\_141:  
(2, 76370), (3, 76376), (4, 76391), (5, 76397), (7, 76496), (9, 76523), (10, 76526), (Start: 13 @76616 has 31 MA's), (14, 76625), (15, 76670), (16, 76757), (24, 76994),

Gene: JuicyJay\_138 Start: 78131, Stop: 78520, Start Num: 13  
Candidate Starts for JuicyJay\_138:  
(2, 77885), (3, 77891), (4, 77906), (5, 77912), (7, 78011), (9, 78038), (10, 78041), (Start: 13 @78131 has 31 MA's), (14, 78140), (15, 78185), (16, 78272), (24, 78509),

Gene: Kalah2\_133 Start: 75737, Stop: 76126, Start Num: 13  
Candidate Starts for Kalah2\_133:  
(2, 75491), (3, 75497), (4, 75512), (5, 75518), (7, 75617), (9, 75644), (Start: 13 @75737 has 31 MA's), (14, 75746), (15, 75791), (16, 75878), (24, 76115),

Gene: Klein\_140 Start: 74339, Stop: 74728, Start Num: 13  
Candidate Starts for Klein\_140:  
(2, 74093), (3, 74099), (4, 74114), (5, 74120), (7, 74219), (9, 74246), (10, 74249), (Start: 13 @74339 has 31 MA's), (14, 74348), (15, 74393), (16, 74480), (24, 74717),

Gene: Minerva\_142 Start: 75788, Stop: 76177, Start Num: 13  
Candidate Starts for Minerva\_142:  
(2, 75542), (3, 75548), (4, 75563), (5, 75569), (7, 75668), (9, 75695), (10, 75698), (Start: 13 @75788 has 31 MA's), (14, 75797), (15, 75842), (16, 75929), (24, 76166),

Gene: NihilNomen\_144 Start: 76076, Stop: 76465, Start Num: 13  
Candidate Starts for NihilNomen\_144:  
(2, 75830), (3, 75836), (4, 75851), (5, 75857), (7, 75956), (9, 75983), (10, 75986), (Start: 13 @76076 has 31 MA's), (14, 76085), (15, 76130), (16, 76217), (18, 76271), (24, 76454),

Gene: Odette\_146 Start: 78219, Stop: 78608, Start Num: 13  
Candidate Starts for Odette\_146:  
(1, 77895), (2, 77973), (3, 77979), (4, 77994), (5, 78000), (7, 78099), (9, 78126), (10, 78129), (Start: 13 @78219 has 31 MA's), (14, 78228), (15, 78273), (16, 78360), (24, 78597),

Gene: Optimus\_133 Start: 73356, Stop: 73745, Start Num: 13  
Candidate Starts for Optimus\_133:  
(2, 73110), (3, 73116), (4, 73131), (5, 73137), (7, 73236), (9, 73263), (10, 73266), (Start: 13 @73356 has 31 MA's), (14, 73365), (15, 73410), (16, 73497), (24, 73734),

Gene: Phoebus\_142 Start: 77970, Stop: 78359, Start Num: 13  
Candidate Starts for Phoebus\_142:  
(1, 77646), (2, 77724), (3, 77730), (4, 77745), (7, 77850), (9, 77877), (10, 77880), (Start: 13 @77970 has 31 MA's), (14, 77979), (15, 78024), (16, 78111), (18, 78165), (24, 78348),

Gene: Pound\_130 Start: 74668, Stop: 75057, Start Num: 13  
Candidate Starts for Pound\_130:  
(2, 74422), (3, 74428), (4, 74443), (5, 74449), (7, 74548), (9, 74575), (10, 74578), (Start: 13 @74668 has 31 MA's), (14, 74677), (15, 74722), (16, 74809), (24, 75046),

Gene: Redno2\_134 Start: 73358, Stop: 73747, Start Num: 13  
Candidate Starts for Redno2\_134:

(1, 73034), (2, 73112), (3, 73118), (4, 73133), (6, 73196), (7, 73238), (9, 73265), (Start: 13 @73358 has 31 MA's), (14, 73367), (15, 73412), (16, 73499), (18, 73553), (24, 73736),

Gene: Schatzie\_138 Start: 76638, Stop: 77027, Start Num: 13

Candidate Starts for Schatzie\_138:

(2, 76392), (3, 76398), (4, 76413), (5, 76419), (7, 76518), (9, 76545), (Start: 13 @76638 has 31 MA's), (14, 76647), (15, 76692), (16, 76779), (24, 77016),

Gene: ShortQueendom\_48 Start: 35685, Stop: 35299, Start Num: 13

Candidate Starts for ShortQueendom\_48:

(Start: 13 @35685 has 31 MA's), (15, 35631), (16, 35544), (17, 35535), (18, 35490), (24, 35310),

Gene: Snazzy\_53 Start: 38294, Stop: 37908, Start Num: 13

Candidate Starts for Snazzy\_53:

(Start: 13 @38294 has 31 MA's), (15, 38240), (16, 38153), (17, 38144), (18, 38099), (24, 37919),

Gene: Thibault\_125 Start: 73030, Stop: 73368, Start Num: 13

Candidate Starts for Thibault\_125:

(Start: 13 @73030 has 31 MA's), (16, 73180), (17, 73189), (18, 73234), (20, 73273), (24, 73357),

Gene: ThreeRngTarjay\_137 Start: 76561, Stop: 76950, Start Num: 13

Candidate Starts for ThreeRngTarjay\_137:

(1, 76237), (2, 76315), (3, 76321), (4, 76336), (6, 76399), (7, 76441), (9, 76468), (Start: 13 @76561 has 31 MA's), (14, 76570), (15, 76615), (16, 76702), (18, 76756), (24, 76939),

Gene: Wanda\_142 Start: 74268, Stop: 74657, Start Num: 13

Candidate Starts for Wanda\_142:

(1, 73944), (2, 74022), (3, 74028), (4, 74043), (5, 74049), (7, 74148), (9, 74175), (10, 74178), (Start: 13 @74268 has 31 MA's), (14, 74277), (15, 74322), (16, 74409), (24, 74646),

Gene: Yeet\_135 Start: 75759, Stop: 76148, Start Num: 13

Candidate Starts for Yeet\_135:

(1, 75435), (2, 75513), (3, 75519), (4, 75534), (6, 75597), (7, 75639), (9, 75666), (Start: 13 @75759 has 31 MA's), (14, 75768), (15, 75813), (16, 75900), (18, 75954), (24, 76137),

Gene: Zelink\_137 Start: 77080, Stop: 77469, Start Num: 13

Candidate Starts for Zelink\_137:

(2, 76834), (3, 76840), (4, 76855), (5, 76861), (7, 76960), (9, 76987), (10, 76990), (Start: 13 @77080 has 31 MA's), (14, 77089), (15, 77134), (16, 77221), (24, 77458),