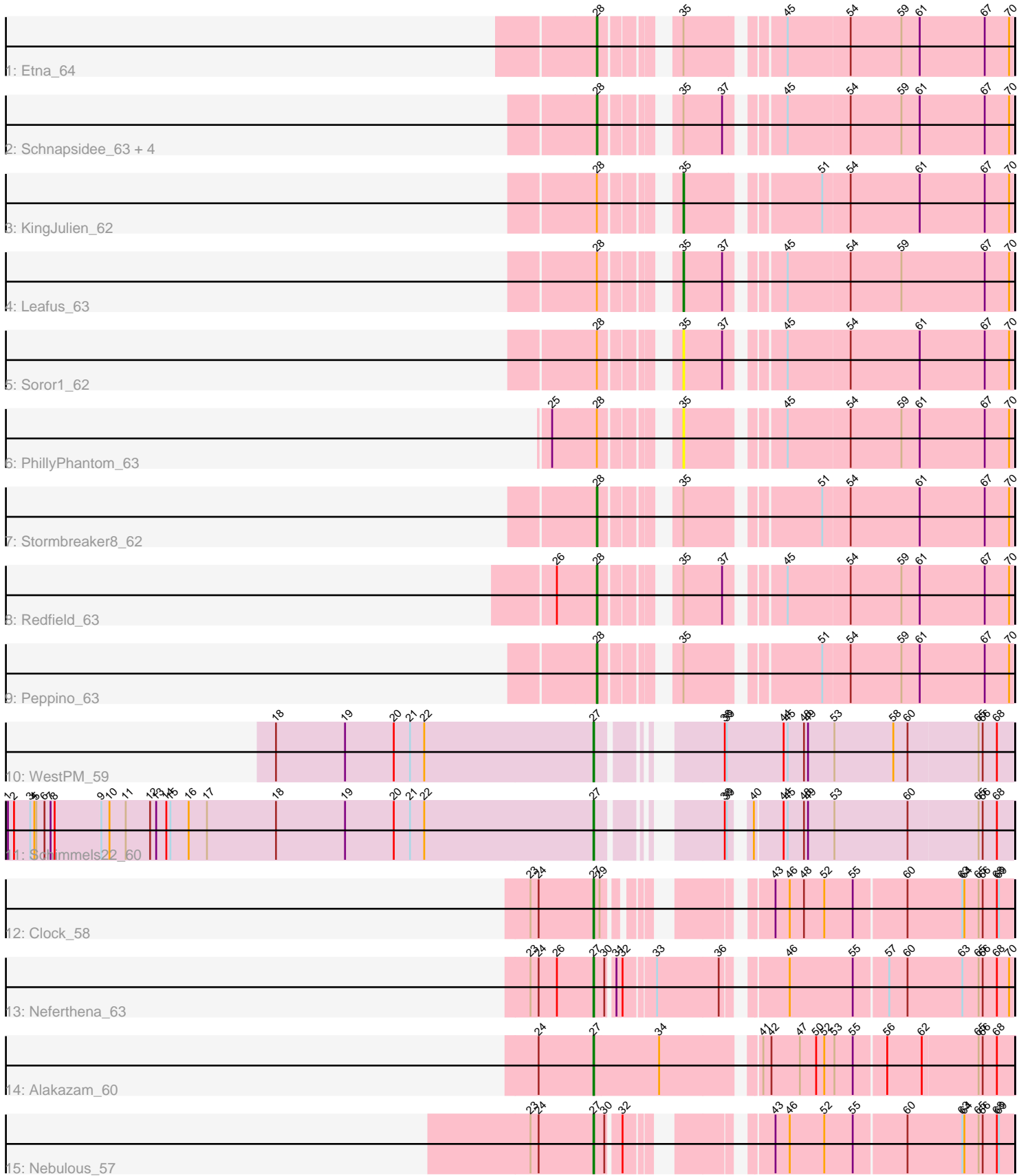


Pham 305347



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 305347 Report

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

Pham number 305347 has 19 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Etna\_64
- Track 2 : Schnapsidee\_63, BeeBee8\_65, Hamlet\_63, Balsa\_62, Raccoon\_63
- Track 3 : KingJulien\_62
- Track 4 : Leafus\_63
- Track 5 : Soror1\_62
- Track 6 : PhillyPhantom\_63
- Track 7 : Stormbreaker8\_62
- Track 8 : Redfield\_63
- Track 9 : Peppino\_63
- Track 10 : WestPM\_59
- Track 11 : Schimmels22\_60
- Track 12 : Clock\_58
- Track 13 : Neferthena\_63
- Track 14 : Alakazam\_60
- Track 15 : Nebulous\_57

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

The start number called the most often in the published annotations is 28, it was called in 9 of the 17 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Balsa\_62, BeeBee8\_65, Etna\_64, Hamlet\_63, Peppino\_63, Raccoon\_63, Redfield\_63, Schnapsidee\_63, Stormbreaker8\_62,

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

- KingJulien\_62, Leafus\_63, PhillyPhantom\_63, Soror1\_62,

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

- Alakazam\_60, Clock\_58, Nebulous\_57, Neferthena\_63, Schimmels22\_60, WestPM\_59,

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

**Start 27:**

- Found in 6 of 19 ( 31.6% ) of genes in pham
- Manual Annotations of this start: 6 of 17
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Alakazam\_60 (EA5), Clock\_58 (EA5), Nebulous\_57 (EA5), Neferthena\_63 (EA5), Schimmels22\_60 (EA11), WestPM\_59 (EA11),

**Start 28:**

- Found in 13 of 19 ( 68.4% ) of genes in pham
- Manual Annotations of this start: 9 of 17
- Called 69.2% of time when present
- Phage (with cluster) where this start called: Balsa\_62 (EA1), BeeBee8\_65 (EA1), Etna\_64 (EA1), Hamlet\_63 (EA1), Peppino\_63 (EA1), Raccoon\_63 (EA1), Redfield\_63 (EA1), Schnapsidee\_63 (EA1), Stormbreaker8\_62 (EA1),

**Start 35:**

- Found in 13 of 19 ( 68.4% ) of genes in pham
- Manual Annotations of this start: 2 of 17
- Called 30.8% of time when present
- Phage (with cluster) where this start called: KingJulien\_62 (EA1), Leafus\_63 (EA1), PhillyPhantom\_63 (EA1), Soror1\_62 (EA1),

**Summary by clusters:**

There are 3 clusters represented in this pham: EA1, EA5, EA11,

Info for manual annotations of cluster EA1:

- Start number 28 was manually annotated 9 times for cluster EA1.
- Start number 35 was manually annotated 2 times for cluster EA1.

Info for manual annotations of cluster EA11:

- Start number 27 was manually annotated 2 times for cluster EA11.

Info for manual annotations of cluster EA5:

- Start number 27 was manually annotated 4 times for cluster EA5.

**Gene Information:**

Gene: Alakazam\_60 Start: 40514, Stop: 41098, Start Num: 27

Candidate Starts for Alakazam\_60:

(24, 40433), (Start: 27 @40514 has 6 MA's), (34, 40610), (41, 40736), (42, 40748), (47, 40790), (50, 40814), (52, 40826), (53, 40841), (55, 40868), (56, 40913), (62, 40964), (65, 41045), (66, 41051), (68, 41072),

Gene: Balsa\_62 Start: 41165, Stop: 41695, Start Num: 28

Candidate Starts for Balsa\_62:

(Start: 28 @41165 has 9 MA's), (Start: 35 @41246 has 2 MA's), (37, 41303), (45, 41366), (54, 41456), (59, 41531), (61, 41558), (67, 41654), (70, 41690),

Gene: BeeBee8\_65 Start: 41330, Stop: 41860, Start Num: 28

Candidate Starts for BeeBee8\_65:

(Start: 28 @41330 has 9 MA's), (Start: 35 @41411 has 2 MA's), (37, 41468), (45, 41531), (54, 41621), (59, 41696), (61, 41723), (67, 41819), (70, 41855),

Gene: Clock\_58 Start: 40957, Stop: 41472, Start Num: 27

Candidate Starts for Clock\_58:

(23, 40864), (24, 40876), (Start: 27 @40957 has 6 MA's), (29, 40966), (43, 41128), (46, 41149), (48, 41170), (52, 41200), (55, 41242), (60, 41317), (63, 41398), (64, 41401), (65, 41422), (66, 41428), (68, 41449), (69, 41452),

Gene: Etna\_64 Start: 41211, Stop: 41741, Start Num: 28

Candidate Starts for Etna\_64:

(Start: 28 @41211 has 9 MA's), (Start: 35 @41292 has 2 MA's), (45, 41412), (54, 41502), (59, 41577), (61, 41604), (67, 41700), (70, 41736),

Gene: Hamlet\_63 Start: 41237, Stop: 41767, Start Num: 28

Candidate Starts for Hamlet\_63:

(Start: 28 @41237 has 9 MA's), (Start: 35 @41318 has 2 MA's), (37, 41375), (45, 41438), (54, 41528), (59, 41603), (61, 41630), (67, 41726), (70, 41762),

Gene: KingJulien\_62 Start: 41134, Stop: 41583, Start Num: 35

Candidate Starts for KingJulien\_62:

(Start: 28 @41053 has 9 MA's), (Start: 35 @41134 has 2 MA's), (51, 41305), (54, 41344), (61, 41446), (67, 41542), (70, 41578),

Gene: Leafus\_63 Start: 41384, Stop: 41833, Start Num: 35

Candidate Starts for Leafus\_63:

(Start: 28 @41303 has 9 MA's), (Start: 35 @41384 has 2 MA's), (37, 41441), (45, 41504), (54, 41594), (59, 41669), (67, 41792), (70, 41828),

Gene: Nebulous\_57 Start: 40714, Stop: 41241, Start Num: 27

Candidate Starts for Nebulous\_57:

(23, 40621), (24, 40633), (Start: 27 @40714 has 6 MA's), (30, 40729), (32, 40747), (43, 40897), (46, 40918), (52, 40969), (55, 41011), (60, 41086), (63, 41167), (64, 41170), (65, 41191), (66, 41197), (68, 41218), (69, 41221),

Gene: Neferthena\_63 Start: 40908, Stop: 41468, Start Num: 27

Candidate Starts for Neferthena\_63:

(23, 40815), (24, 40827), (26, 40854), (Start: 27 @40908 has 6 MA's), (30, 40923), (31, 40932), (32, 40941), (33, 40983), (36, 41073), (46, 41145), (55, 41238), (57, 41286), (60, 41313), (63, 41394), (65, 41418), (66, 41424), (68, 41445), (70, 41463),

Gene: Peppino\_63 Start: 41235, Stop: 41765, Start Num: 28

Candidate Starts for Peppino\_63:

(Start: 28 @41235 has 9 MA's), (Start: 35 @41316 has 2 MA's), (51, 41487), (54, 41526), (59, 41601), (61, 41628), (67, 41724), (70, 41760),

Gene: PhillyPhantom\_63 Start: 41205, Stop: 41654, Start Num: 35

Candidate Starts for PhillyPhantom\_63:

(25, 41061), (Start: 28 @41124 has 9 MA's), (Start: 35 @41205 has 2 MA's), (45, 41325), (54, 41415), (59, 41490), (61, 41517), (67, 41613), (70, 41649),

Gene: Raccoon\_63 Start: 41197, Stop: 41727, Start Num: 28

Candidate Starts for Raccoon\_63:

(Start: 28 @41197 has 9 MA's), (Start: 35 @41278 has 2 MA's), (37, 41335), (45, 41398), (54, 41488), (59, 41563), (61, 41590), (67, 41686), (70, 41722),

Gene: Redfield\_63 Start: 41233, Stop: 41763, Start Num: 28

Candidate Starts for Redfield\_63:

(26, 41176), (Start: 28 @41233 has 9 MA's), (Start: 35 @41314 has 2 MA's), (37, 41371), (45, 41434), (54, 41524), (59, 41599), (61, 41626), (67, 41722), (70, 41758),

Gene: Schimmels22\_60 Start: 38999, Stop: 39520, Start Num: 27

Candidate Starts for Schimmels22\_60:

(1, 38135), (2, 38144), (3, 38168), (4, 38174), (5, 38177), (6, 38189), (7, 38198), (8, 38204), (9, 38273), (10, 38285), (11, 38309), (12, 38345), (13, 38354), (14, 38369), (15, 38375), (16, 38402), (17, 38429), (18, 38531), (19, 38633), (20, 38705), (21, 38729), (22, 38750), (Start: 27 @38999 has 6 MA's), (38, 39125), (39, 39128), (40, 39146), (44, 39185), (45, 39191), (48, 39215), (49, 39221), (53, 39260), (60, 39368), (65, 39470), (66, 39476), (68, 39497),

Gene: Schnapsidee\_63 Start: 41175, Stop: 41705, Start Num: 28

Candidate Starts for Schnapsidee\_63:

(Start: 28 @41175 has 9 MA's), (Start: 35 @41256 has 2 MA's), (37, 41313), (45, 41376), (54, 41466), (59, 41541), (61, 41568), (67, 41664), (70, 41700),

Gene: Soror1\_62 Start: 41128, Stop: 41577, Start Num: 35

Candidate Starts for Soror1\_62:

(Start: 28 @41047 has 9 MA's), (Start: 35 @41128 has 2 MA's), (37, 41185), (45, 41248), (54, 41338), (61, 41440), (67, 41536), (70, 41572),

Gene: Stormbreaker8\_62 Start: 41054, Stop: 41584, Start Num: 28

Candidate Starts for Stormbreaker8\_62:

(Start: 28 @41054 has 9 MA's), (Start: 35 @41135 has 2 MA's), (51, 41306), (54, 41345), (61, 41447), (67, 41543), (70, 41579),

Gene: WestPM\_59 Start: 38858, Stop: 39406, Start Num: 27

Candidate Starts for WestPM\_59:

(18, 38390), (19, 38492), (20, 38564), (21, 38588), (22, 38609), (Start: 27 @38858 has 6 MA's), (38, 38984), (39, 38987), (44, 39071), (45, 39077), (48, 39101), (49, 39107), (53, 39146), (58, 39233), (60, 39254), (65, 39356), (66, 39362), (68, 39383),