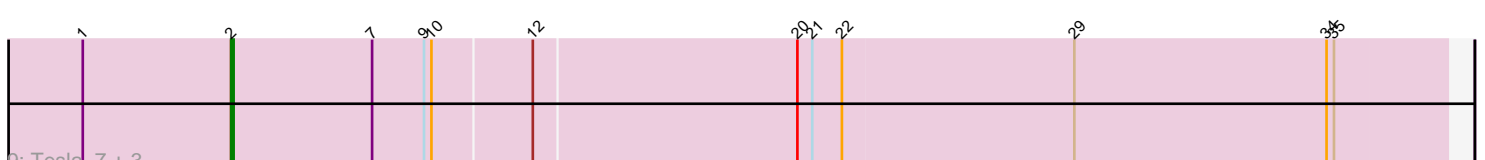
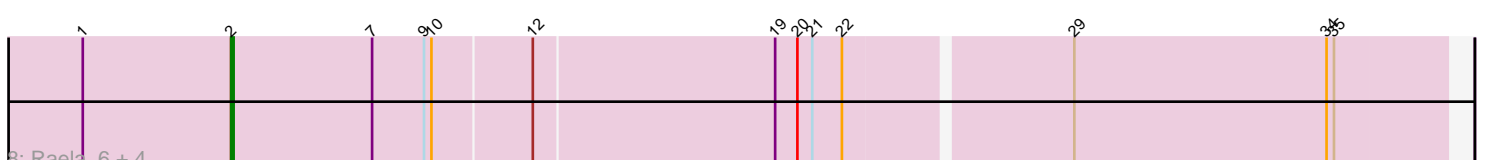
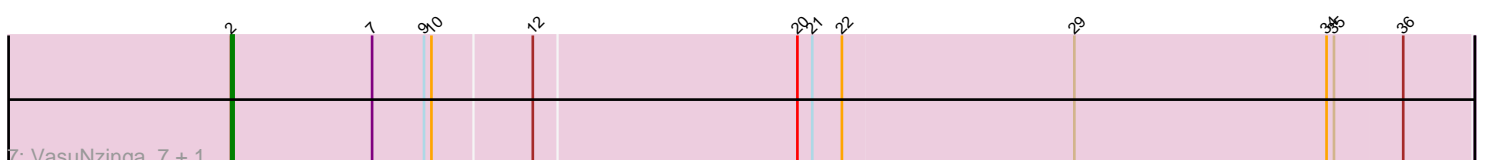
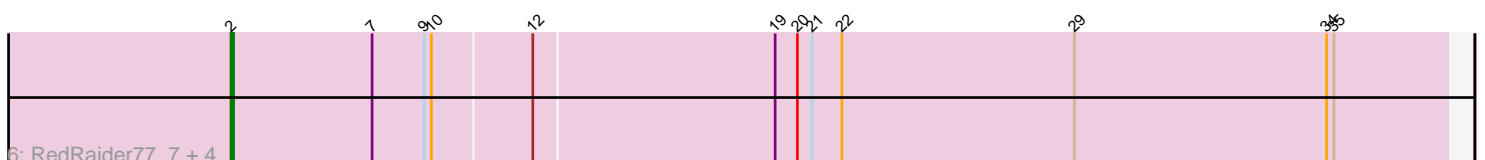
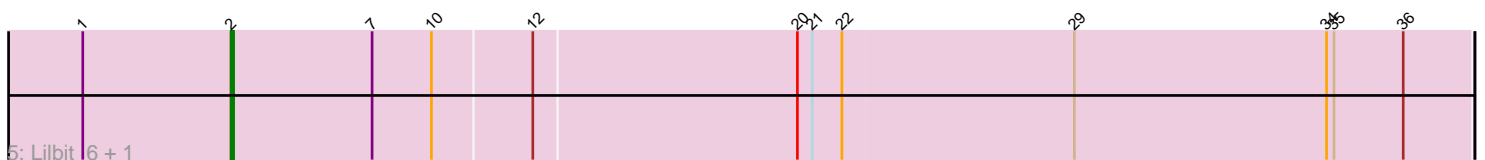
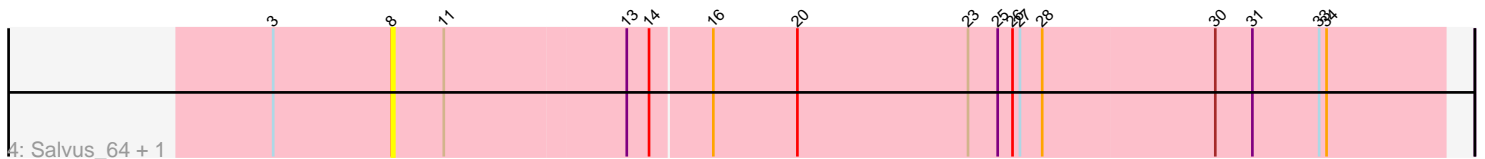
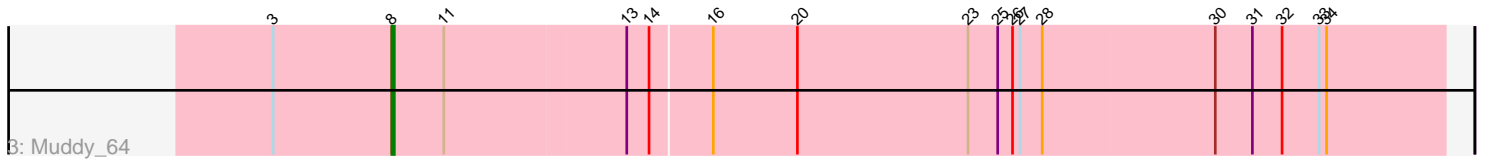
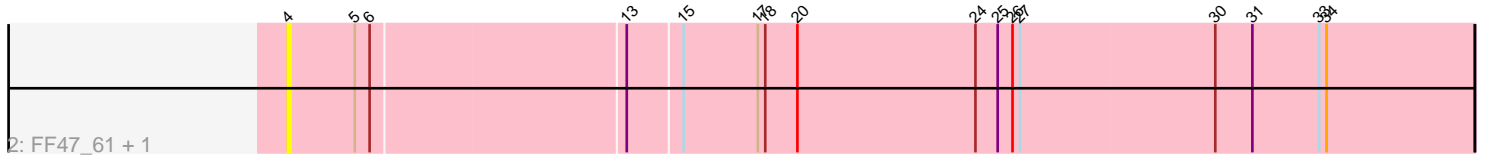
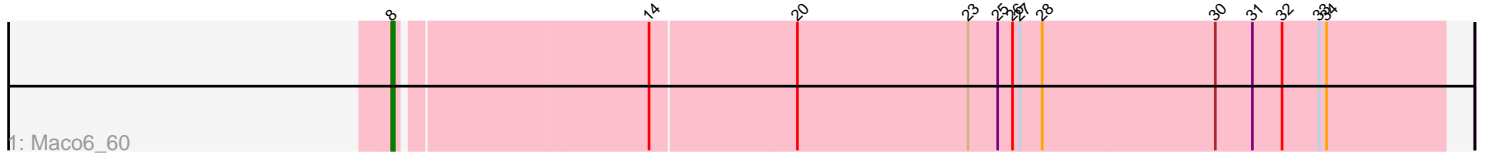


# Pham 311940



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 311940 Report

This analysis was run 06/27/26 on database version 652.

Pham number 311940 has 26 members, 5 are drafts.

Phages represented in each track:

- Track 1 : Maco6\_60
- Track 2 : FF47\_61, 8UZL\_64
- Track 3 : Muddy\_64
- Track 4 : Salvus\_64, LongHai\_64
- Track 5 : Lilbit\_6, Pringar\_5
- Track 6 : RedRaider77\_7, Blackbeetle\_7, LittleLaf\_6, Poise\_7, Caprice\_7
- Track 7 : VasuNzinga\_7, Beelzebub\_7
- Track 8 : Raela\_6, GoongGoong\_7, JoieB\_7, MosMoris\_8, Gattaca\_8
- Track 9 : Tesla\_7, Huphlepuuff\_6, Corazon\_6, Marvin\_6
- Track 10 : Clarkson\_6, FeliMaine\_6

### ***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 19 of the 21 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Beelzebub\_7, Blackbeetle\_7, Caprice\_7, Clarkson\_6, Corazon\_6, FeliMaine\_6, Gattaca\_8, GoongGoong\_7, Huphlepuuff\_6, JoieB\_7, Lilbit\_6, LittleLaf\_6, Marvin\_6, MosMoris\_8, Poise\_7, Pringar\_5, Raela\_6, RedRaider77\_7, Tesla\_7, VasuNzinga\_7,

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

- 

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

- 8UZL\_64, FF47\_61, LongHai\_64, Maco6\_60, Muddy\_64, Salvus\_64,

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

Start 2:

- Found in 20 of 26 ( 76.9% ) of genes in pham
- Manual Annotations of this start: 19 of 21
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Beelzebub\_7 (S), Blackbeetle\_7 (S), Caprice\_7 (S), Clarkson\_6 (S), Corazon\_6 (S), FeliMaine\_6 (S), Gattaca\_8 (S), GoongGoong\_7 (S), Huphlepuuff\_6 (S), JoieB\_7 (S), Lilbit\_6 (S), LittleLaf\_6 (S), Marvin\_6 (S), MosMoris\_8 (S), Poise\_7 (S), Pringar\_5 (S), Raela\_6 (S), RedRaider77\_7 (S), Tesla\_7 (S), VasuNzinga\_7 (S),

Start 4:

- Found in 2 of 26 ( 7.7% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: 8UZL\_64 (AB), FF47\_61 (AB),

Start 8:

- Found in 4 of 26 ( 15.4% ) of genes in pham
- Manual Annotations of this start: 2 of 21
- Called 100.0% of time when present
- Phage (with cluster) where this start called: LongHai\_64 (AB), Maco6\_60 (AB), Muddy\_64 (AB), Salvus\_64 (AB),

### **Summary by clusters:**

There are 2 clusters represented in this pham: S, AB,

Info for manual annotations of cluster AB:

- Start number 8 was manually annotated 2 times for cluster AB.

Info for manual annotations of cluster S:

- Start number 2 was manually annotated 19 times for cluster S.

### **Gene Information:**

Gene: 8UZL\_64 Start: 45162, Stop: 45632, Start Num: 4

Candidate Starts for 8UZL\_64:

(4, 45162), (5, 45189), (6, 45195), (13, 45294), (15, 45315), (17, 45345), (18, 45348), (20, 45360), (24, 45432), (25, 45441), (26, 45447), (27, 45450), (30, 45528), (31, 45543), (33, 45570), (34, 45573),

Gene: Beelzebub\_7 Start: 2048, Stop: 2542, Start Num: 2

Candidate Starts for Beelzebub\_7:

(Start: 2 @2048 has 19 MA's), (7, 2105), (9, 2126), (10, 2129), (12, 2168), (20, 2273), (21, 2279), (22, 2291), (29, 2384), (34, 2486), (35, 2489), (36, 2516),

Gene: Blackbeetle\_7 Start: 2057, Stop: 2542, Start Num: 2

Candidate Starts for Blackbeetle\_7:

(Start: 2 @2057 has 19 MA's), (7, 2114), (9, 2135), (10, 2138), (12, 2177), (19, 2273), (20, 2282), (21, 2288), (22, 2300), (29, 2393), (34, 2495), (35, 2498),

Gene: Caprice\_7 Start: 2057, Stop: 2542, Start Num: 2

Candidate Starts for Caprice\_7:

(Start: 2 @2057 has 19 MA's), (7, 2114), (9, 2135), (10, 2138), (12, 2177), (19, 2273), (20, 2282), (21, 2288), (22, 2300), (29, 2393), (34, 2495), (35, 2498),

Gene: Clarkson\_6 Start: 1824, Stop: 2318, Start Num: 2

Candidate Starts for Clarkson\_6:

(1, 1764), (Start: 2 @1824 has 19 MA's), (7, 1881), (9, 1902), (10, 1905), (12, 1944), (20, 2049), (21, 2055), (22, 2067), (29, 2160), (34, 2262), (35, 2265), (36, 2292),

Gene: Corazon\_6 Start: 2048, Stop: 2533, Start Num: 2

Candidate Starts for Corazon\_6:

(1, 1988), (Start: 2 @2048 has 19 MA's), (7, 2105), (9, 2126), (10, 2129), (12, 2168), (20, 2273), (21, 2279), (22, 2291), (29, 2384), (34, 2486), (35, 2489),

Gene: FF47\_61 Start: 45076, Stop: 45546, Start Num: 4

Candidate Starts for FF47\_61:

(4, 45076), (5, 45103), (6, 45109), (13, 45208), (15, 45229), (17, 45259), (18, 45262), (20, 45274), (24, 45346), (25, 45355), (26, 45361), (27, 45364), (30, 45442), (31, 45457), (33, 45484), (34, 45487),

Gene: FeliMaine\_6 Start: 1825, Stop: 2319, Start Num: 2

Candidate Starts for FeliMaine\_6:

(1, 1765), (Start: 2 @1825 has 19 MA's), (7, 1882), (9, 1903), (10, 1906), (12, 1945), (20, 2050), (21, 2056), (22, 2068), (29, 2161), (34, 2263), (35, 2266), (36, 2293),

Gene: Gattaca\_8 Start: 2048, Stop: 2527, Start Num: 2

Candidate Starts for Gattaca\_8:

(1, 1988), (Start: 2 @2048 has 19 MA's), (7, 2105), (9, 2126), (10, 2129), (12, 2168), (19, 2264), (20, 2273), (21, 2279), (22, 2291), (29, 2378), (34, 2480), (35, 2483),

Gene: GoongGoong\_7 Start: 2057, Stop: 2536, Start Num: 2

Candidate Starts for GoongGoong\_7:

(1, 1997), (Start: 2 @2057 has 19 MA's), (7, 2114), (9, 2135), (10, 2138), (12, 2177), (19, 2273), (20, 2282), (21, 2288), (22, 2300), (29, 2387), (34, 2489), (35, 2492),

Gene: Huphlepuuff\_6 Start: 1825, Stop: 2310, Start Num: 2

Candidate Starts for Huphlepuuff\_6:

(1, 1765), (Start: 2 @1825 has 19 MA's), (7, 1882), (9, 1903), (10, 1906), (12, 1945), (20, 2050), (21, 2056), (22, 2068), (29, 2161), (34, 2263), (35, 2266),

Gene: JoieB\_7 Start: 2047, Stop: 2532, Start Num: 2

Candidate Starts for JoieB\_7:

(1, 1987), (Start: 2 @2047 has 19 MA's), (7, 2104), (9, 2125), (10, 2128), (12, 2167), (19, 2263), (20, 2272), (21, 2278), (22, 2290), (29, 2383), (34, 2485), (35, 2488),

Gene: Lilbit\_6 Start: 1825, Stop: 2319, Start Num: 2

Candidate Starts for Lilbit\_6:

(1, 1765), (Start: 2 @1825 has 19 MA's), (7, 1882), (10, 1906), (12, 1945), (20, 2050), (21, 2056), (22, 2068), (29, 2161), (34, 2263), (35, 2266), (36, 2293),

Gene: LittleLaf\_6 Start: 1825, Stop: 2310, Start Num: 2

Candidate Starts for LittleLaf\_6:

(Start: 2 @1825 has 19 MA's), (7, 1882), (9, 1903), (10, 1906), (12, 1945), (19, 2041), (20, 2050), (21, 2056), (22, 2068), (29, 2161), (34, 2263), (35, 2266),

Gene: LongHai\_64 Start: 45489, Stop: 45908, Start Num: 8

Candidate Starts for LongHai\_64:

(3, 45441), (Start: 8 @45489 has 2 MA's), (11, 45510), (13, 45582), (14, 45591), (16, 45615), (20, 45648), (23, 45717), (25, 45729), (26, 45735), (27, 45738), (28, 45747), (30, 45816), (31, 45831), (33, 45858), (34, 45861),

Gene: Maco6\_60 Start: 44565, Stop: 44978, Start Num: 8

Candidate Starts for Maco6\_60:

(Start: 8 @44565 has 2 MA's), (14, 44661), (20, 44718), (23, 44787), (25, 44799), (26, 44805), (27, 44808), (28, 44817), (30, 44886), (31, 44901), (32, 44913), (33, 44928), (34, 44931),

Gene: Marvin\_6 Start: 2048, Stop: 2533, Start Num: 2

Candidate Starts for Marvin\_6:

(1, 1988), (Start: 2 @2048 has 19 MA's), (7, 2105), (9, 2126), (10, 2129), (12, 2168), (20, 2273), (21, 2279), (22, 2291), (29, 2384), (34, 2486), (35, 2489),

Gene: MosMoris\_8 Start: 2048, Stop: 2527, Start Num: 2

Candidate Starts for MosMoris\_8:

(1, 1988), (Start: 2 @2048 has 19 MA's), (7, 2105), (9, 2126), (10, 2129), (12, 2168), (19, 2264), (20, 2273), (21, 2279), (22, 2291), (29, 2378), (34, 2480), (35, 2483),

Gene: Muddy\_64 Start: 45657, Stop: 46076, Start Num: 8

Candidate Starts for Muddy\_64:

(3, 45609), (Start: 8 @45657 has 2 MA's), (11, 45678), (13, 45750), (14, 45759), (16, 45783), (20, 45816), (23, 45885), (25, 45897), (26, 45903), (27, 45906), (28, 45915), (30, 45984), (31, 45999), (32, 46011), (33, 46026), (34, 46029),

Gene: Poise\_7 Start: 2057, Stop: 2542, Start Num: 2

Candidate Starts for Poise\_7:

(Start: 2 @2057 has 19 MA's), (7, 2114), (9, 2135), (10, 2138), (12, 2177), (19, 2273), (20, 2282), (21, 2288), (22, 2300), (29, 2393), (34, 2495), (35, 2498),

Gene: Pringar\_5 Start: 1379, Stop: 1873, Start Num: 2

Candidate Starts for Pringar\_5:

(1, 1319), (Start: 2 @1379 has 19 MA's), (7, 1436), (10, 1460), (12, 1499), (20, 1604), (21, 1610), (22, 1622), (29, 1715), (34, 1817), (35, 1820), (36, 1847),

Gene: Raela\_6 Start: 2057, Stop: 2536, Start Num: 2

Candidate Starts for Raela\_6:

(1, 1997), (Start: 2 @2057 has 19 MA's), (7, 2114), (9, 2135), (10, 2138), (12, 2177), (19, 2273), (20, 2282), (21, 2288), (22, 2300), (29, 2387), (34, 2489), (35, 2492),

Gene: RedRaider77\_7 Start: 2048, Stop: 2533, Start Num: 2

Candidate Starts for RedRaider77\_7:

(Start: 2 @2048 has 19 MA's), (7, 2105), (9, 2126), (10, 2129), (12, 2168), (19, 2264), (20, 2273), (21, 2279), (22, 2291), (29, 2384), (34, 2486), (35, 2489),

Gene: Salvus\_64 Start: 45489, Stop: 45908, Start Num: 8

Candidate Starts for Salvus\_64:

(3, 45441), (Start: 8 @45489 has 2 MA's), (11, 45510), (13, 45582), (14, 45591), (16, 45615), (20, 45648), (23, 45717), (25, 45729), (26, 45735), (27, 45738), (28, 45747), (30, 45816), (31, 45831), (33, 45858), (34, 45861),

Gene: Tesla\_7 Start: 2048, Stop: 2533, Start Num: 2

Candidate Starts for Tesla\_7:

(1, 1988), (Start: 2 @2048 has 19 MA's), (7, 2105), (9, 2126), (10, 2129), (12, 2168), (20, 2273), (21, 2279), (22, 2291), (29, 2384), (34, 2486), (35, 2489),

Gene: VasuNzinga\_7 Start: 2048, Stop: 2542, Start Num: 2

Candidate Starts for VasuNzinga\_7:

(Start: 2 @2048 has 19 MA's), (7, 2105), (9, 2126), (10, 2129), (12, 2168), (20, 2273), (21, 2279), (22, 2291), (29, 2384), (34, 2486), (35, 2489), (36, 2516),