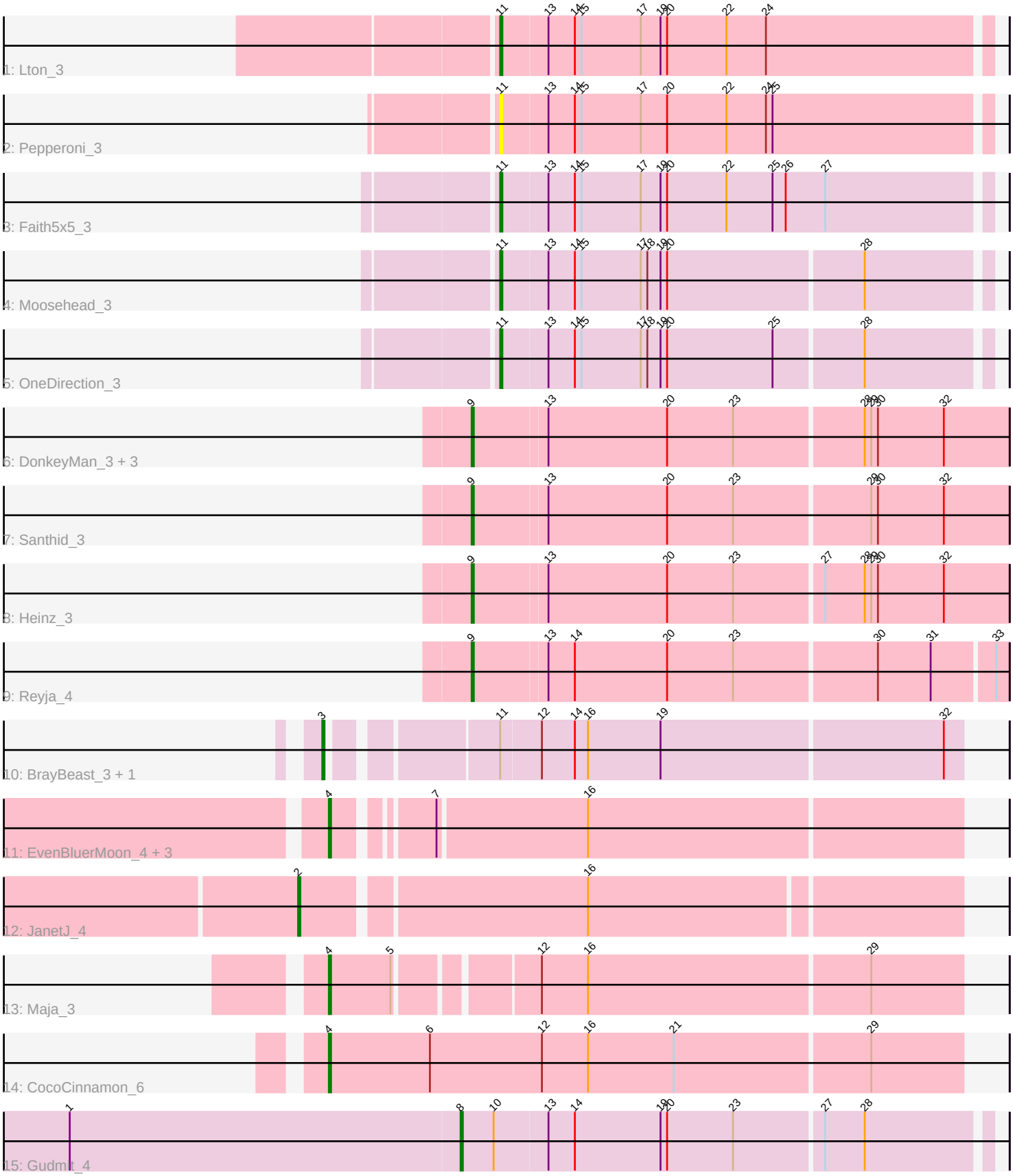
# Pham 293133


1: Lton_3
2: Pepperoni_3
3: Faith5x5_3
4: Moosehead_3
5: OneDirection_3
6: DonkeyMan_3 + 3
7: Santhid_3
8: Heinz_3
9: Reyja_4
10: BrayBeast_3 + 1
11: EvenBluerMoon_4 + 3
12: JanetJ_4
13: Maja_3
14: CocoCinnamon_6
15: Gudmit_4

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 293133 Report

This analysis was run 04/18/26 on database version 643.

Pham number 293133 has 22 members, 2 are drafts.

Phages represented in each track:
• Track 1 : Lton_3
• Track 2 : Pepperoni_3
• Track 3 : Faith5x5_3
• Track 4 : Moosehead_3
• Track 5 : OneDirection_3
• Track 6 : DonkeyMan_3, Jojo24_3, Tarzan_3, Hibiscus_3
• Track 7 : Santhid_3
• Track 8 : Heinz_3
• Track 9 : Reyja_4
• Track 10 : BrayBeast_3, Sarge_3
• Track 11 : EvenBluerMoon_4, Aoka_4, Hereford_7, PrairieDogTown_4
• Track 12 : JanetJ_4
• Track 13 : Maja_3
• Track 14 : CocoCinnamon_6
• Track 15 : Gudmit_4

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

The start number called the most often in the published annotations is 9, it was called in 7 of the 20 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• DonkeyMan_3, Heinz_3, Hibiscus_3, Jojo24_3, Reyja_4, Santhid_3, Tarzan_3,

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

Genes that do not have the "Most Annotated" start:
• Aoka_4, BrayBeast_3, CocoCinnamon_6, EvenBluerMoon_4, Faith5x5_3, Gudmit_4, Hereford_7, JanetJ_4, Lton_3, Maja_3, Moosehead_3, OneDirection_3, Pepperoni_3, PrairieDogTown_4, Sarge_3,

**Summary by start number:**

Start 2:
• Found in 1 of 22 ( 4.5% ) of genes in pham
• Manual Annotations of this start: 1 of 20
• Called 100.0% of time when present
• Phage (with cluster) where this start called: JanetJ_4 (FO),

Start 3:
• Found in 2 of 22 ( 9.1% ) of genes in pham
• Manual Annotations of this start: 2 of 20
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BrayBeast_3 (FB), Sarge_3 (FB),

Start 4:
• Found in 6 of 22 ( 27.3% ) of genes in pham
• Manual Annotations of this start: 5 of 20
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Aoka_4 (FO), CocoCinnamon_6 (FO), EvenBluerMoon_4 (FO), Hereford_7 (FO), Maja_3 (FO), PrairieDogTown_4 (FO),

Start 8:
• Found in 1 of 22 ( 4.5% ) of genes in pham
• Manual Annotations of this start: 1 of 20
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Gudmit_4 (singleton),

Start 9:
• Found in 7 of 22 ( 31.8% ) of genes in pham
• Manual Annotations of this start: 7 of 20
• Called 100.0% of time when present
• Phage (with cluster) where this start called: DonkeyMan_3 (DY), Heinz_3 (DY), Hibiscus_3 (DY), Jojo24_3 (DY), Reyja_4 (DY), Santhid_3 (DY), Tarzan_3 (DY),

Start 11:
• Found in 7 of 22 ( 31.8% ) of genes in pham
• Manual Annotations of this start: 4 of 20
• Called 71.4% of time when present
• Phage (with cluster) where this start called: Faith5x5_3 (CZ6), Lton_3 (CZ), Moosehead_3 (CZ6), OneDirection_3 (CZ6), Pepperoni_3 (CZ),

**Summary by clusters:**

There are 6 clusters represented in this pham: singleton, CZ6, CZ, FB, DY, FO,

Info for manual annotations of cluster CZ:
•Start number 11 was manually annotated 1 time for cluster CZ.

Info for manual annotations of cluster CZ6:
•Start number 11 was manually annotated 3 times for cluster CZ6.

Info for manual annotations of cluster DY:
•Start number 9 was manually annotated 7 times for cluster DY.

Info for manual annotations of cluster FB:

•Start number 3 was manually annotated 2 times for cluster FB.

Info for manual annotations of cluster FO:
•Start number 2 was manually annotated 1 time for cluster FO.
•Start number 4 was manually annotated 5 times for cluster FO.

### *Gene Information:*

Gene: Aoka_4 Start: 2853, Stop: 3122, Start Num: 4
Candidate Starts for Aoka_4:
(Start: 4 @2853 has 5 MA's), (7, 2889), (16, 2955),

Gene: BrayBeast_3 Start: 1772, Stop: 2044, Start Num: 3
Candidate Starts for BrayBeast_3:
(Start: 3 @1772 has 2 MA's), (Start: 11 @1838 has 4 MA's), (12, 1856), (14, 1871), (16, 1877), (19, 1910), (32, 2036),

Gene: CocoCinnamon_6 Start: 2894, Stop: 3178, Start Num: 4
Candidate Starts for CocoCinnamon_6:
(Start: 4 @2894 has 5 MA's), (6, 2939), (12, 2990), (16, 3011), (21, 3050), (29, 3137),

Gene: DonkeyMan_3 Start: 2115, Stop: 2354, Start Num: 9
Candidate Starts for DonkeyMan_3:
(Start: 9 @2115 has 7 MA's), (13, 2148), (20, 2202), (23, 2232), (28, 2289), (29, 2292), (30, 2295), (32, 2325),

Gene: EvenBluerMoon_4 Start: 2851, Stop: 3120, Start Num: 4
Candidate Starts for EvenBluerMoon_4:
(Start: 4 @2851 has 5 MA's), (7, 2887), (16, 2953),

Gene: Faith5x5_3 Start: 1948, Stop: 2166, Start Num: 11
Candidate Starts for Faith5x5_3:
(Start: 11 @1948 has 4 MA's), (13, 1969), (14, 1981), (15, 1984), (17, 2011), (19, 2020), (20, 2023), (22, 2050), (25, 2071), (26, 2077), (27, 2095),

Gene: Gudmit_4 Start: 2701, Stop: 2934, Start Num: 8
Candidate Starts for Gudmit_4:
(1, 2524), (Start: 8 @2701 has 1 MA's), (10, 2716), (13, 2740), (14, 2752), (19, 2791), (20, 2794), (23, 2824), (27, 2863), (28, 2881),

Gene: Heinz_3 Start: 2117, Stop: 2356, Start Num: 9
Candidate Starts for Heinz_3:
(Start: 9 @2117 has 7 MA's), (13, 2150), (20, 2204), (23, 2234), (27, 2273), (28, 2291), (29, 2294), (30, 2297), (32, 2327),

Gene: Hereford_7 Start: 3032, Stop: 3301, Start Num: 4
Candidate Starts for Hereford_7:
(Start: 4 @3032 has 5 MA's), (7, 3068), (16, 3134),

Gene: Hibiscus_3 Start: 2117, Stop: 2356, Start Num: 9
Candidate Starts for Hibiscus_3:

(Start: 9 @2117 has 7 MA's), (13, 2150), (20, 2204), (23, 2234), (28, 2291), (29, 2294), (30, 2297), (32, 2327),

Gene: JanetJ_4 Start: 2612, Stop: 2899, Start Num: 2
Candidate Starts for JanetJ_4:
(Start: 2 @2612 has 1 MA's), (16, 2735),

Gene: Jojo24_3 Start: 2112, Stop: 2351, Start Num: 9
Candidate Starts for Jojo24_3:
(Start: 9 @2112 has 7 MA's), (13, 2145), (20, 2199), (23, 2229), (28, 2286), (29, 2289), (30, 2292), (32, 2322),

Gene: Lton_3 Start: 1952, Stop: 2170, Start Num: 11
Candidate Starts for Lton_3:
(Start: 11 @1952 has 4 MA's), (13, 1973), (14, 1985), (15, 1988), (17, 2015), (19, 2024), (20, 2027), (22, 2054), (24, 2072),

Gene: Maja_3 Start: 2197, Stop: 2469, Start Num: 4
Candidate Starts for Maja_3:
(Start: 4 @2197 has 5 MA's), (5, 2224), (12, 2281), (16, 2302), (29, 2428),

Gene: Moosehead_3 Start: 1948, Stop: 2163, Start Num: 11
Candidate Starts for Moosehead_3:
(Start: 11 @1948 has 4 MA's), (13, 1969), (14, 1981), (15, 1984), (17, 2011), (18, 2014), (19, 2020), (20, 2023), (28, 2110),

Gene: OneDirection_3 Start: 1949, Stop: 2164, Start Num: 11
Candidate Starts for OneDirection_3:
(Start: 11 @1949 has 4 MA's), (13, 1970), (14, 1982), (15, 1985), (17, 2012), (18, 2015), (19, 2021), (20, 2024), (25, 2072), (28, 2111),

Gene: Pepperoni_3 Start: 2246, Stop: 2464, Start Num: 11
Candidate Starts for Pepperoni_3:
(Start: 11 @2246 has 4 MA's), (13, 2267), (14, 2279), (15, 2282), (17, 2309), (20, 2321), (22, 2348), (24, 2366), (25, 2369),

Gene: PrairieDogTown_4 Start: 2853, Stop: 3122, Start Num: 4
Candidate Starts for PrairieDogTown_4:
(Start: 4 @2853 has 5 MA's), (7, 2889), (16, 2955),

Gene: Reyja_4 Start: 2231, Stop: 2467, Start Num: 9
Candidate Starts for Reyja_4:
(Start: 9 @2231 has 7 MA's), (13, 2264), (14, 2276), (20, 2318), (23, 2348), (30, 2411), (31, 2435), (33, 2462),

Gene: Santhid_3 Start: 2114, Stop: 2353, Start Num: 9
Candidate Starts for Santhid_3:
(Start: 9 @2114 has 7 MA's), (13, 2147), (20, 2201), (23, 2231), (29, 2291), (30, 2294), (32, 2324),

Gene: Sarge_3 Start: 1772, Stop: 2044, Start Num: 3
Candidate Starts for Sarge_3:
(Start: 3 @1772 has 2 MA's), (Start: 11 @1838 has 4 MA's), (12, 1856), (14, 1871), (16, 1877), (19, 1910), (32, 2036),

Gene: Tarzan_3 Start: 2114, Stop: 2353, Start Num: 9
Candidate Starts for Tarzan_3:
(Start: 9 @2114 has 7 MA's), (13, 2147), (20, 2201), (23, 2231), (28, 2288), (29, 2291), (30, 2294), (32, 2324),