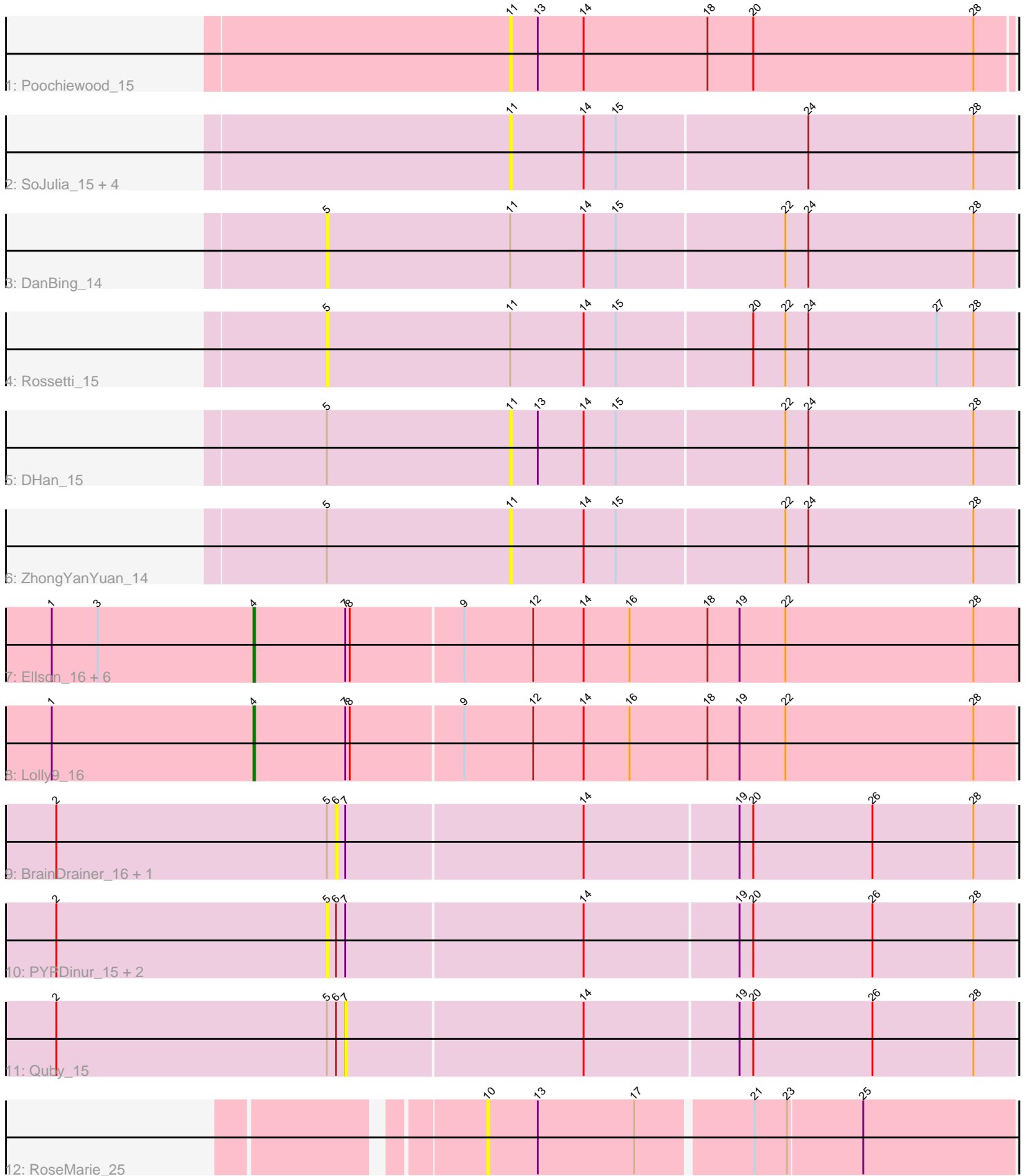


Pham 309141



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 309141 Report

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

Pham number 309141 has 25 members, 22 are drafts.

Phages represented in each track:

- Track 1 : Pochiewood\_15
- Track 2 : SoJulia\_15, Sarshaun\_15, Hafay\_15, Lynnae\_15, Soap141\_15
- Track 3 : DanBing\_14
- Track 4 : Rossetti\_15
- Track 5 : DHan\_15
- Track 6 : ZhongYanYuan\_14
- Track 7 : Ellson\_16, Red305\_16, Moostard\_16, KirDoubleO7\_14, BourbonZero\_15, LiyuLake\_16, Snenia\_16
- Track 8 : Lolly9\_16
- Track 9 : BrainDrainer\_16, Sheng711\_15
- Track 10 : PYPDinur\_15, FarmResident\_15, Douzhi\_15
- Track 11 : Quby\_15
- Track 12 : RoseMarie\_25

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

The start number called the most often in the published annotations is 4, it was called in 3 of the 3 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- BourbonZero\_15, Ellson\_16, KirDoubleO7\_14, LiyuLake\_16, Lolly9\_16, Moostard\_16, Red305\_16, Snenia\_16,

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

- 

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

- BrainDrainer\_16, DHan\_15, DanBing\_14, Douzhi\_15, FarmResident\_15, Hafay\_15, Lynnae\_15, PYPDinur\_15, Pochiewood\_15, Quby\_15, RoseMarie\_25, Rossetti\_15, Sarshaun\_15, Sheng711\_15, SoJulia\_15, Soap141\_15, ZhongYanYuan\_14,

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

Start 4:

- Found in 8 of 25 ( 32.0% ) of genes in pham
- Manual Annotations of this start: 3 of 3
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BourbonZero\_15 (L3), Ellson\_16 (L3), KirDoubleO7\_14 (L3), LiyuLake\_16 (L3), Lolly9\_16 (L3), Moostard\_16 (L3), Red305\_16 (L3), Snenia\_16 (L3),

Start 5:

- Found in 10 of 25 ( 40.0% ) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: DanBing\_14 (L2), Douzhi\_15 (L4), FarmResident\_15 (L4), PYPDinur\_15 (L4), Rossetti\_15 (L2),

Start 6:

- Found in 6 of 25 ( 24.0% ) of genes in pham
- No Manual Annotations of this start.
- Called 33.3% of time when present
- Phage (with cluster) where this start called: BrainDrainer\_16 (L4), Sheng711\_15 (L4),

Start 7:

- Found in 14 of 25 ( 56.0% ) of genes in pham
- No Manual Annotations of this start.
- Called 7.1% of time when present
- Phage (with cluster) where this start called: Quby\_15 (L4),

Start 10:

- Found in 1 of 25 ( 4.0% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: RoseMarie\_25 (M1),

Start 11:

- Found in 10 of 25 ( 40.0% ) of genes in pham
- No Manual Annotations of this start.
- Called 80.0% of time when present
- Phage (with cluster) where this start called: DHan\_15 (L2), Hafay\_15 (L2), Lynnae\_15 (L2), Poochiewood\_15 (L1), Sarshaun\_15 (L2), SoJulia\_15 (L2), Soap141\_15 (L2), ZhongYanYuan\_14 (L2),

### **Summary by clusters:**

There are 5 clusters represented in this pham: M1, L4, L2, L3, L1,

Info for manual annotations of cluster L3:

- Start number 4 was manually annotated 3 times for cluster L3.

### **Gene Information:**

Gene: BourbonZero\_15 Start: 10435, Stop: 10950, Start Num: 4

Candidate Starts for BourbonZero\_15:

(1, 10303), (3, 10333), (Start: 4 @10435 has 3 MA's), (7, 10495), (8, 10498), (9, 10570), (12, 10615), (14, 10648), (16, 10678), (18, 10729), (19, 10750), (22, 10780), (28, 10903),

Gene: BrainDrainer\_16 Start: 10170, Stop: 10622, Start Num: 6

Candidate Starts for BrainDrainer\_16:

(2, 9987), (5, 10164), (6, 10170), (7, 10176), (14, 10329), (19, 10428), (20, 10437), (26, 10515), (28, 10581),

Gene: DHan\_15 Start: 10417, Stop: 10758, Start Num: 11

Candidate Starts for DHan\_15:

(5, 10297), (11, 10417), (13, 10435), (14, 10465), (15, 10486), (22, 10594), (24, 10609), (28, 10717),

Gene: DanBing\_14 Start: 10180, Stop: 10641, Start Num: 5

Candidate Starts for DanBing\_14:

(5, 10180), (11, 10300), (14, 10348), (15, 10369), (22, 10477), (24, 10492), (28, 10600),

Gene: Douzhi\_15 Start: 10025, Stop: 10483, Start Num: 5

Candidate Starts for Douzhi\_15:

(2, 9848), (5, 10025), (6, 10031), (7, 10037), (14, 10190), (19, 10289), (20, 10298), (26, 10376), (28, 10442),

Gene: Ellson\_16 Start: 10445, Stop: 10960, Start Num: 4

Candidate Starts for Ellson\_16:

(1, 10313), (3, 10343), (Start: 4 @10445 has 3 MA's), (7, 10505), (8, 10508), (9, 10580), (12, 10625), (14, 10658), (16, 10688), (18, 10739), (19, 10760), (22, 10790), (28, 10913),

Gene: FarmResident\_15 Start: 10069, Stop: 10527, Start Num: 5

Candidate Starts for FarmResident\_15:

(2, 9892), (5, 10069), (6, 10075), (7, 10081), (14, 10234), (19, 10333), (20, 10342), (26, 10420), (28, 10486),

Gene: Hafay\_15 Start: 10506, Stop: 10847, Start Num: 11

Candidate Starts for Hafay\_15:

(11, 10506), (14, 10554), (15, 10575), (24, 10698), (28, 10806),

Gene: KirDoubleO7\_14 Start: 10446, Stop: 10961, Start Num: 4

Candidate Starts for KirDoubleO7\_14:

(1, 10314), (3, 10344), (Start: 4 @10446 has 3 MA's), (7, 10506), (8, 10509), (9, 10581), (12, 10626), (14, 10659), (16, 10689), (18, 10740), (19, 10761), (22, 10791), (28, 10914),

Gene: LiyuLake\_16 Start: 10437, Stop: 10952, Start Num: 4

Candidate Starts for LiyuLake\_16:

(1, 10305), (3, 10335), (Start: 4 @10437 has 3 MA's), (7, 10497), (8, 10500), (9, 10572), (12, 10617), (14, 10650), (16, 10680), (18, 10731), (19, 10752), (22, 10782), (28, 10905),

Gene: Lolly9\_16 Start: 10438, Stop: 10947, Start Num: 4

Candidate Starts for Lolly9\_16:

(1, 10306), (Start: 4 @10438 has 3 MA's), (7, 10498), (8, 10501), (9, 10573), (12, 10618), (14, 10651), (16, 10681), (18, 10732), (19, 10753), (22, 10783), (28, 10906),

Gene: Lynnae\_15 Start: 10473, Stop: 10814, Start Num: 11

Candidate Starts for Lynnae\_15:

(11, 10473), (14, 10521), (15, 10542), (24, 10665), (28, 10773),

Gene: Moostard\_16 Start: 10428, Stop: 10943, Start Num: 4

Candidate Starts for Moostard\_16:

(1, 10296), (3, 10326), (Start: 4 @10428 has 3 MA's), (7, 10488), (8, 10491), (9, 10563), (12, 10608), (14, 10641), (16, 10671), (18, 10722), (19, 10743), (22, 10773), (28, 10896),

Gene: PYPDinur\_15 Start: 10025, Stop: 10483, Start Num: 5

Candidate Starts for PYPDinur\_15:

(2, 9848), (5, 10025), (6, 10031), (7, 10037), (14, 10190), (19, 10289), (20, 10298), (26, 10376), (28, 10442),

Gene: Poochiewood\_15 Start: 10465, Stop: 10806, Start Num: 11

Candidate Starts for Poochiewood\_15:

(11, 10465), (13, 10483), (14, 10513), (18, 10594), (20, 10624), (28, 10768),

Gene: Quby\_15 Start: 10036, Stop: 10482, Start Num: 7

Candidate Starts for Quby\_15:

(2, 9847), (5, 10024), (6, 10030), (7, 10036), (14, 10189), (19, 10288), (20, 10297), (26, 10375), (28, 10441),

Gene: Red305\_16 Start: 10431, Stop: 10946, Start Num: 4

Candidate Starts for Red305\_16:

(1, 10299), (3, 10329), (Start: 4 @10431 has 3 MA's), (7, 10491), (8, 10494), (9, 10566), (12, 10611), (14, 10644), (16, 10674), (18, 10725), (19, 10746), (22, 10776), (28, 10899),

Gene: RoseMarie\_25 Start: 14509, Stop: 14862, Start Num: 10

Candidate Starts for RoseMarie\_25:

(10, 14509), (13, 14542), (17, 14605), (21, 14677), (23, 14698), (25, 14746),

Gene: Rossetti\_15 Start: 10352, Stop: 10813, Start Num: 5

Candidate Starts for Rossetti\_15:

(5, 10352), (11, 10472), (14, 10520), (15, 10541), (20, 10628), (22, 10649), (24, 10664), (27, 10748), (28, 10772),

Gene: Sarshaun\_15 Start: 10506, Stop: 10847, Start Num: 11

Candidate Starts for Sarshaun\_15:

(11, 10506), (14, 10554), (15, 10575), (24, 10698), (28, 10806),

Gene: Sheng711\_15 Start: 10031, Stop: 10483, Start Num: 6

Candidate Starts for Sheng711\_15:

(2, 9848), (5, 10025), (6, 10031), (7, 10037), (14, 10190), (19, 10289), (20, 10298), (26, 10376), (28, 10442),

Gene: Snenia\_16 Start: 10432, Stop: 10947, Start Num: 4

Candidate Starts for Snenia\_16:

(1, 10300), (3, 10330), (Start: 4 @10432 has 3 MA's), (7, 10492), (8, 10495), (9, 10567), (12, 10612), (14, 10645), (16, 10675), (18, 10726), (19, 10747), (22, 10777), (28, 10900),

Gene: SoJulia\_15 Start: 10472, Stop: 10813, Start Num: 11

Candidate Starts for SoJulia\_15:

(11, 10472), (14, 10520), (15, 10541), (24, 10664), (28, 10772),

Gene: Soap141\_15 Start: 10506, Stop: 10847, Start Num: 11

Candidate Starts for Soap141\_15:

(11, 10506), (14, 10554), (15, 10575), (24, 10698), (28, 10806),

Gene: ZhongYanYuan\_14 Start: 10301, Stop: 10642, Start Num: 11

Candidate Starts for ZhongYanYuan\_14:

(5, 10181), (11, 10301), (14, 10349), (15, 10370), (22, 10478), (24, 10493), (28, 10601),