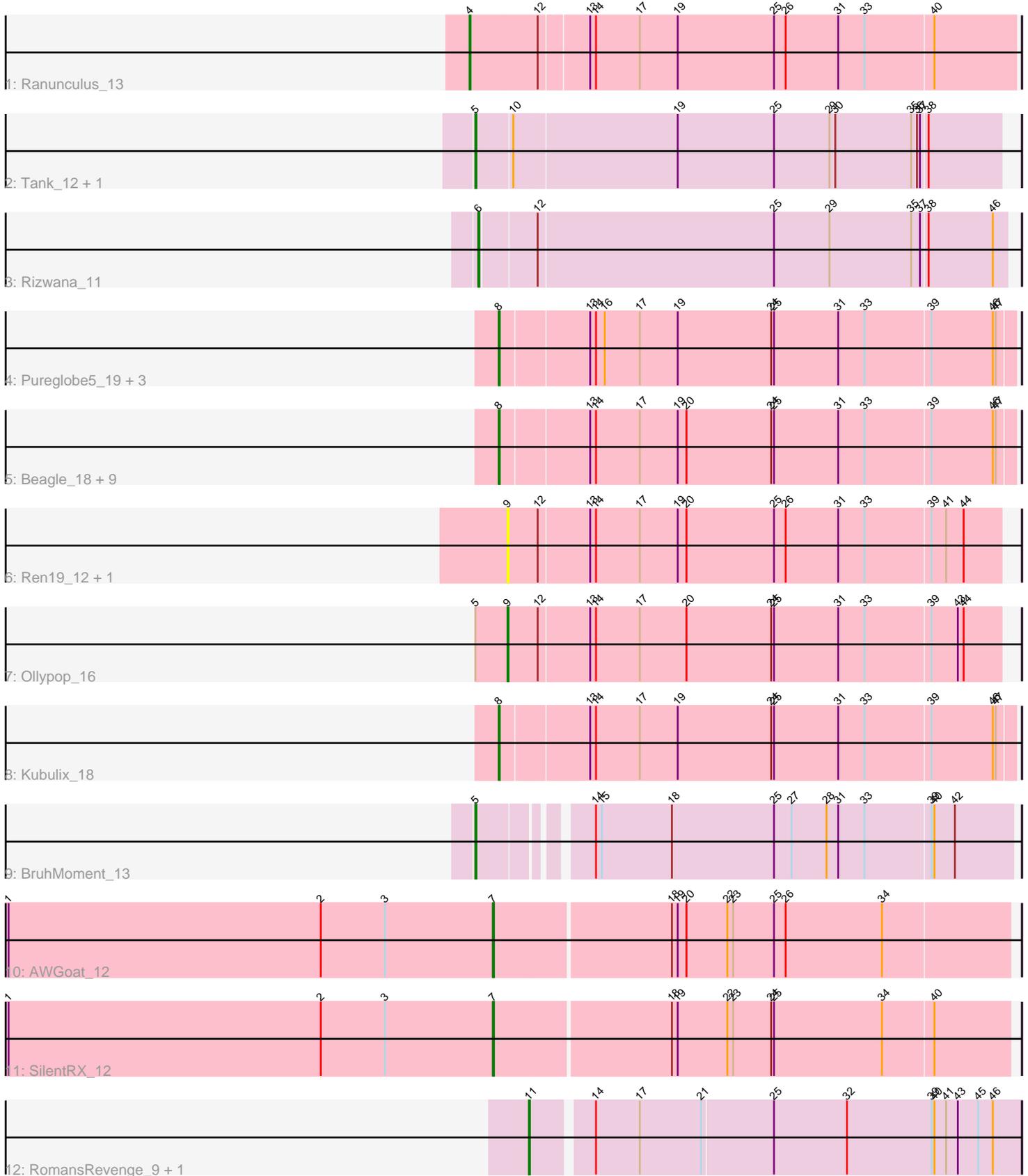


# Pham 291448



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 291448 Report

This analysis was run 03/28/26 on database version 641.

Pham number 291448 has 27 members, 9 are drafts.

Phages represented in each track:

- Track 1 : Ranunculus\_13
- Track 2 : Tank\_12, Wilde\_12
- Track 3 : Rizwana\_11
- Track 4 : Pureglobe5\_19, Popstraw\_16, Odyssey395\_19, BetaFish\_17
- Track 5 : Beagle\_18, Pointis\_17, Hive\_16, RazzB\_14, MellowYellow\_15, Forrestell\_15, NyleyClemson\_15, PhuzzTulsa\_15, RIPWilbur\_15, DogYard\_17
- Track 6 : Ren19\_12, Nikan\_14
- Track 7 : Ollypop\_16
- Track 8 : Kubulix\_18
- Track 9 : BruhMoment\_13
- Track 10 : AWGoat\_12
- Track 11 : SilentRX\_12
- Track 12 : RomansRevenge\_9, Boise\_9

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

The start number called the most often in the published annotations is 8, it was called in 9 of the 18 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Beagle\_18, BetaFish\_17, DogYard\_17, Forrestell\_15, Hive\_16, Kubulix\_18, MellowYellow\_15, NyleyClemson\_15, Odyssey395\_19, PhuzzTulsa\_15, Pointis\_17, Popstraw\_16, Pureglobe5\_19, RIPWilbur\_15, RazzB\_14,

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

- 

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

- AWGoat\_12, Boise\_9, BruhMoment\_13, Nikan\_14, Ollypop\_16, Ranunculus\_13, Ren19\_12, Rizwana\_11, RomansRevenge\_9, SilentRX\_12, Tank\_12, Wilde\_12,

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

Start 4:

- Found in 1 of 27 ( 3.7% ) of genes in pham
- Manual Annotations of this start: 1 of 18
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ranunculus\_13 (AP),

Start 5:

- Found in 4 of 27 ( 14.8% ) of genes in pham
- Manual Annotations of this start: 3 of 18
- Called 75.0% of time when present
- Phage (with cluster) where this start called: BruhMoment\_13 (AP3), Tank\_12 (AP1), Wilde\_12 (AP1),

Start 6:

- Found in 1 of 27 ( 3.7% ) of genes in pham
- Manual Annotations of this start: 1 of 18
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Rizwana\_11 (AP1),

Start 7:

- Found in 2 of 27 ( 7.4% ) of genes in pham
- Manual Annotations of this start: 2 of 18
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AWGoat\_12 (AP4), SilentRX\_12 (AP4),

Start 8:

- Found in 15 of 27 ( 55.6% ) of genes in pham
- Manual Annotations of this start: 9 of 18
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Beagle\_18 (AP2), BetaFish\_17 (AP2), DogYard\_17 (AP2), Forrestell\_15 (AP2), Hive\_16 (AP2), Kubulix\_18 (AP2), MellowYellow\_15 (AP2), NyleyClemson\_15 (AP2), Odyssey395\_19 (AP2), PhuzzTulsa\_15 (AP2), Pointis\_17 (AP2), Popstraw\_16 (AP2), Pureglobe5\_19 (AP2), RIPWilbur\_15 (AP2), RazzB\_14 (AP2),

Start 9:

- Found in 3 of 27 ( 11.1% ) of genes in pham
- Manual Annotations of this start: 1 of 18
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Nikan\_14 (AP2), Ollypop\_16 (AP2), Ren19\_12 (AP2),

Start 11:

- Found in 2 of 27 ( 7.4% ) of genes in pham
- Manual Annotations of this start: 1 of 18
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Boise\_9 (FT), RomansRevenge\_9 (FT),

**Summary by clusters:**

There are 6 clusters represented in this pham: FT, AP2, AP3, AP1, AP4, AP,

Info for manual annotations of cluster AP:

- Start number 4 was manually annotated 1 time for cluster AP.

Info for manual annotations of cluster AP1:

- Start number 5 was manually annotated 2 times for cluster AP1.
- Start number 6 was manually annotated 1 time for cluster AP1.

Info for manual annotations of cluster AP2:

- Start number 8 was manually annotated 9 times for cluster AP2.
- Start number 9 was manually annotated 1 time for cluster AP2.

Info for manual annotations of cluster AP3:

- Start number 5 was manually annotated 1 time for cluster AP3.

Info for manual annotations of cluster AP4:

- Start number 7 was manually annotated 2 times for cluster AP4.

Info for manual annotations of cluster FT:

- Start number 11 was manually annotated 1 time for cluster FT.

**Gene Information:**

Gene: AWGoat\_12 Start: 5020, Stop: 5541, Start Num: 7

Candidate Starts for AWGoat\_12:

(1, 4522), (2, 4843), (3, 4909), (Start: 7 @5020 has 2 MA's), (18, 5197), (19, 5203), (20, 5212), (22, 5254), (23, 5260), (25, 5302), (26, 5314), (34, 5413),

Gene: Beagle\_18 Start: 5586, Stop: 6104, Start Num: 8

Candidate Starts for Beagle\_18:

(Start: 8 @5586 has 9 MA's), (13, 5673), (14, 5679), (17, 5724), (19, 5763), (20, 5772), (24, 5859), (25, 5862), (31, 5928), (33, 5955), (39, 6021), (46, 6084), (47, 6087),

Gene: BetaFish\_17 Start: 5789, Stop: 6307, Start Num: 8

Candidate Starts for BetaFish\_17:

(Start: 8 @5789 has 9 MA's), (13, 5876), (14, 5882), (16, 5891), (17, 5927), (19, 5966), (24, 6062), (25, 6065), (31, 6131), (33, 6158), (39, 6224), (46, 6287), (47, 6290),

Gene: Boise\_9 Start: 3610, Stop: 4101, Start Num: 11

Candidate Starts for Boise\_9:

(Start: 11 @3610 has 1 MA's), (14, 3667), (17, 3712), (21, 3775), (25, 3847), (32, 3922), (39, 4009), (40, 4012), (41, 4024), (43, 4036), (45, 4057), (46, 4072),

Gene: BruhMoment\_13 Start: 5305, Stop: 5826, Start Num: 5

Candidate Starts for BruhMoment\_13:

(Start: 5 @5305 has 3 MA's), (14, 5401), (15, 5407), (18, 5479), (25, 5584), (27, 5602), (28, 5638), (31, 5650), (33, 5677), (39, 5743), (40, 5746), (42, 5767),

Gene: DogYard\_17 Start: 5656, Stop: 6174, Start Num: 8

Candidate Starts for DogYard\_17:

(Start: 8 @5656 has 9 MA's), (13, 5743), (14, 5749), (17, 5794), (19, 5833), (20, 5842), (24, 5929), (25, 5932), (31, 5998), (33, 6025), (39, 6091), (46, 6154), (47, 6157),

Gene: Forrestell\_15 Start: 5013, Stop: 5531, Start Num: 8

Candidate Starts for Forrestell\_15:

(Start: 8 @5013 has 9 MA's), (13, 5100), (14, 5106), (17, 5151), (19, 5190), (20, 5199), (24, 5286), (25, 5289), (31, 5355), (33, 5382), (39, 5448), (46, 5511), (47, 5514),

Gene: Hive\_16 Start: 5670, Stop: 6188, Start Num: 8

Candidate Starts for Hive\_16:

(Start: 8 @5670 has 9 MA's), (13, 5757), (14, 5763), (17, 5808), (19, 5847), (20, 5856), (24, 5943), (25, 5946), (31, 6012), (33, 6039), (39, 6105), (46, 6168), (47, 6171),

Gene: Kubulix\_18 Start: 5785, Stop: 6303, Start Num: 8

Candidate Starts for Kubulix\_18:

(Start: 8 @5785 has 9 MA's), (13, 5872), (14, 5878), (17, 5923), (19, 5962), (24, 6058), (25, 6061), (31, 6127), (33, 6154), (39, 6220), (46, 6283), (47, 6286),

Gene: MellowYellow\_15 Start: 5043, Stop: 5561, Start Num: 8

Candidate Starts for MellowYellow\_15:

(Start: 8 @5043 has 9 MA's), (13, 5130), (14, 5136), (17, 5181), (19, 5220), (20, 5229), (24, 5316), (25, 5319), (31, 5385), (33, 5412), (39, 5478), (46, 5541), (47, 5544),

Gene: Nikan\_14 Start: 5509, Stop: 6009, Start Num: 9

Candidate Starts for Nikan\_14:

(Start: 9 @5509 has 1 MA's), (12, 5539), (13, 5590), (14, 5596), (17, 5641), (19, 5680), (20, 5689), (25, 5779), (26, 5791), (31, 5845), (33, 5872), (39, 5938), (41, 5953), (44, 5971),

Gene: NyleyClemson\_15 Start: 4985, Stop: 5503, Start Num: 8

Candidate Starts for NyleyClemson\_15:

(Start: 8 @4985 has 9 MA's), (13, 5072), (14, 5078), (17, 5123), (19, 5162), (20, 5171), (24, 5258), (25, 5261), (31, 5327), (33, 5354), (39, 5420), (46, 5483), (47, 5486),

Gene: Odyssey395\_19 Start: 5787, Stop: 6305, Start Num: 8

Candidate Starts for Odyssey395\_19:

(Start: 8 @5787 has 9 MA's), (13, 5874), (14, 5880), (16, 5889), (17, 5925), (19, 5964), (24, 6060), (25, 6063), (31, 6129), (33, 6156), (39, 6222), (46, 6285), (47, 6288),

Gene: Ollypop\_16 Start: 5474, Stop: 5974, Start Num: 9

Candidate Starts for Ollypop\_16:

(Start: 5 @5441 has 3 MA's), (Start: 9 @5474 has 1 MA's), (12, 5504), (13, 5555), (14, 5561), (17, 5606), (20, 5654), (24, 5741), (25, 5744), (31, 5810), (33, 5837), (39, 5903), (43, 5930), (44, 5936),

Gene: PhuzzTulsa\_15 Start: 5574, Stop: 6092, Start Num: 8

Candidate Starts for PhuzzTulsa\_15:

(Start: 8 @5574 has 9 MA's), (13, 5661), (14, 5667), (17, 5712), (19, 5751), (20, 5760), (24, 5847), (25, 5850), (31, 5916), (33, 5943), (39, 6009), (46, 6072), (47, 6075),

Gene: Pointis\_17 Start: 5785, Stop: 6303, Start Num: 8

Candidate Starts for Pointis\_17:

(Start: 8 @5785 has 9 MA's), (13, 5872), (14, 5878), (17, 5923), (19, 5962), (20, 5971), (24, 6058), (25, 6061), (31, 6127), (33, 6154), (39, 6220), (46, 6283), (47, 6286),

Gene: Popstraw\_16 Start: 5574, Stop: 6092, Start Num: 8

Candidate Starts for Popstraw\_16:

(Start: 8 @5574 has 9 MA's), (13, 5661), (14, 5667), (16, 5676), (17, 5712), (19, 5751), (24, 5847), (25, 5850), (31, 5916), (33, 5943), (39, 6009), (46, 6072), (47, 6075),

Gene: Pureglobe5\_19 Start: 5801, Stop: 6319, Start Num: 8

Candidate Starts for Pureglobe5\_19:

(Start: 8 @5801 has 9 MA's), (13, 5888), (14, 5894), (16, 5903), (17, 5939), (19, 5978), (24, 6074), (25, 6077), (31, 6143), (33, 6170), (39, 6236), (46, 6299), (47, 6302),

Gene: RIPWilbur\_15 Start: 5438, Stop: 5956, Start Num: 8

Candidate Starts for RIPWilbur\_15:

(Start: 8 @5438 has 9 MA's), (13, 5525), (14, 5531), (17, 5576), (19, 5615), (20, 5624), (24, 5711), (25, 5714), (31, 5780), (33, 5807), (39, 5873), (46, 5936), (47, 5939),

Gene: Ranunculus\_13 Start: 5362, Stop: 5913, Start Num: 4

Candidate Starts for Ranunculus\_13:

(Start: 4 @5362 has 1 MA's), (12, 5431), (13, 5479), (14, 5485), (17, 5530), (19, 5569), (25, 5668), (26, 5680), (31, 5734), (33, 5761), (40, 5830),

Gene: RazzB\_14 Start: 4813, Stop: 5331, Start Num: 8

Candidate Starts for RazzB\_14:

(Start: 8 @4813 has 9 MA's), (13, 4900), (14, 4906), (17, 4951), (19, 4990), (20, 4999), (24, 5086), (25, 5089), (31, 5155), (33, 5182), (39, 5248), (46, 5311), (47, 5314),

Gene: Ren19\_12 Start: 5509, Stop: 6009, Start Num: 9

Candidate Starts for Ren19\_12:

(Start: 9 @5509 has 1 MA's), (12, 5539), (13, 5590), (14, 5596), (17, 5641), (19, 5680), (20, 5689), (25, 5779), (26, 5791), (31, 5845), (33, 5872), (39, 5938), (41, 5953), (44, 5971),

Gene: Rizwana\_11 Start: 5074, Stop: 5604, Start Num: 6

Candidate Starts for Rizwana\_11:

(Start: 6 @5074 has 1 MA's), (12, 5128), (25, 5368), (29, 5425), (35, 5509), (37, 5518), (38, 5524), (46, 5590),

Gene: RomansRevenge\_9 Start: 3610, Stop: 4101, Start Num: 11

Candidate Starts for RomansRevenge\_9:

(Start: 11 @3610 has 1 MA's), (14, 3667), (17, 3712), (21, 3775), (25, 3847), (32, 3922), (39, 4009), (40, 4012), (41, 4024), (43, 4036), (45, 4057), (46, 4072),

Gene: SilentRX\_12 Start: 4625, Stop: 5146, Start Num: 7

Candidate Starts for SilentRX\_12:

(1, 4127), (2, 4448), (3, 4514), (Start: 7 @4625 has 2 MA's), (18, 4802), (19, 4808), (22, 4859), (23, 4865), (24, 4904), (25, 4907), (34, 5018), (40, 5069),

Gene: Tank\_12 Start: 5089, Stop: 5619, Start Num: 5

Candidate Starts for Tank\_12:

(Start: 5 @5089 has 3 MA's), (10, 5125), (19, 5290), (25, 5389), (29, 5446), (30, 5452), (35, 5530), (36, 5536), (37, 5539), (38, 5545),

Gene: Wilde\_12 Start: 5017, Stop: 5547, Start Num: 5

Candidate Starts for Wilde\_12:

(Start: 5 @5017 has 3 MA's), (10, 5053), (19, 5218), (25, 5317), (29, 5374), (30, 5380), (35, 5458), (36, 5464), (37, 5467), (38, 5473),