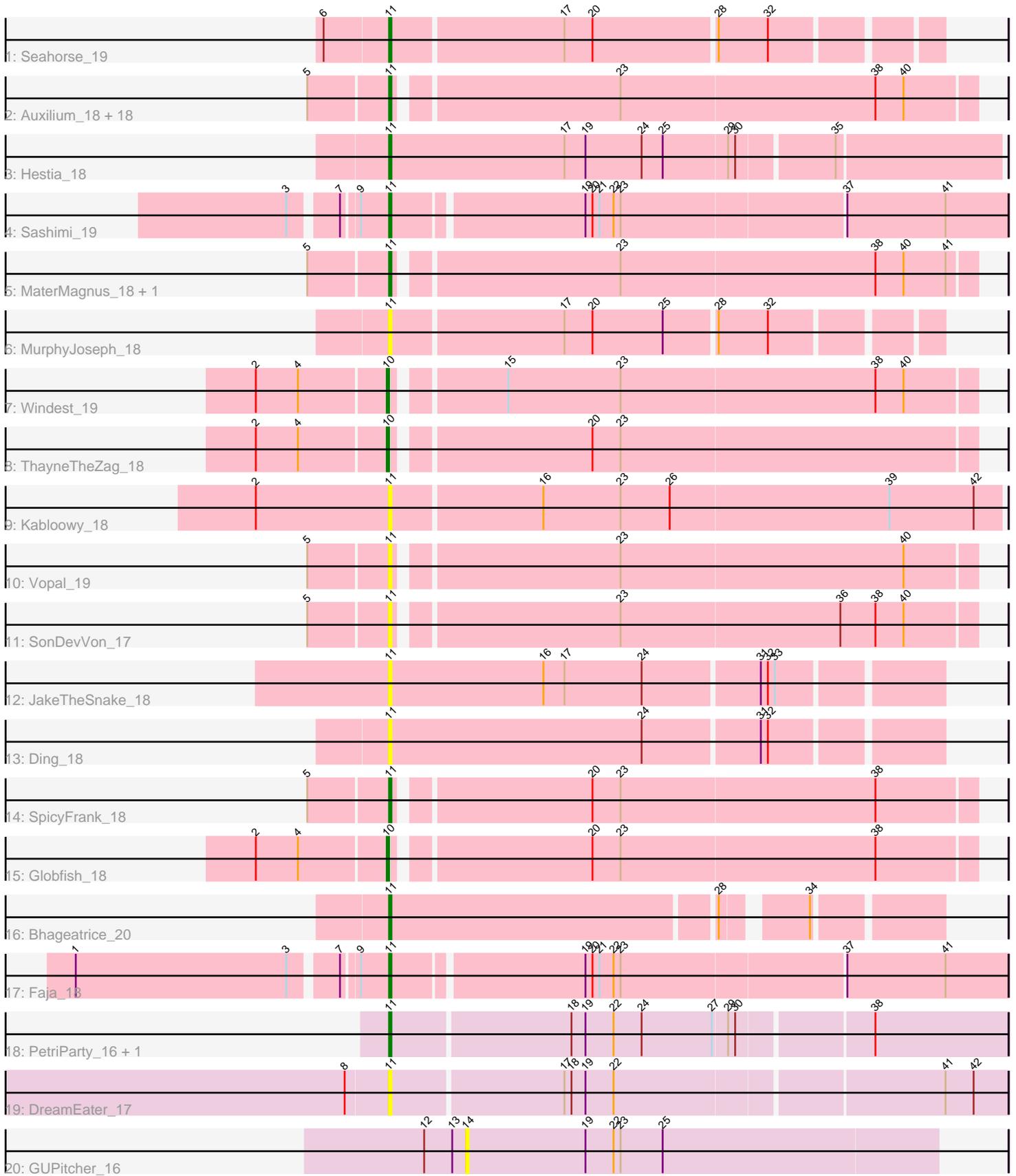


Pham 289545



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 289545 Report

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

Pham number 289545 has 40 members, 14 are drafts.

Phages represented in each track:

- Track 1 : Seahorse\_19
- Track 2 : Auxilium\_18, RadFad\_18, AdaS\_18, Lasker\_18, Hillester\_18, MUWow\_17, Sakai\_18, Raphaella\_18, CookieBear\_18, NewKitty\_19, JellyBread\_18, YoungHarleezy\_18, BlueShadow\_18, BenchScraper\_18, MidnightRain\_18, Sporco\_19, Richie\_18, BasketStar\_18, Gorpy\_18
- Track 3 : Hestia\_18
- Track 4 : Sashimi\_19
- Track 5 : MaterMagnus\_18, Aikyam\_18
- Track 6 : MurphyJoseph\_18
- Track 7 : Windest\_19
- Track 8 : ThayneTheZag\_18
- Track 9 : Kabloowy\_18
- Track 10 : Vopal\_19
- Track 11 : SonDevVon\_17
- Track 12 : JakeTheSnake\_18
- Track 13 : Ding\_18
- Track 14 : SpicyFrank\_18
- Track 15 : Globfish\_18
- Track 16 : Bhageatrice\_20
- Track 17 : Faja\_18
- Track 18 : PetriParty\_16, TripleJ\_17
- Track 19 : DreamEater\_17
- Track 20 : GUPitcher\_16

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

The start number called the most often in the published annotations is 11, it was called in 23 of the 26 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AdaS\_18, Aikyam\_18, Auxilium\_18, BasketStar\_18, BenchScraper\_18, Bhageatrice\_20, BlueShadow\_18, CookieBear\_18, Ding\_18, DreamEater\_17, Faja\_18, Gorpy\_18, Hestia\_18, Hillester\_18, JakeTheSnake\_18, JellyBread\_18, Kabloowy\_18, Lasker\_18, MUWow\_17, MaterMagnus\_18, MidnightRain\_18,

MurphyJoseph\_18, NewKitty\_19, PetriParty\_16, RadFad\_18, Raphaella\_18, Richie\_18, Sakai\_18, Sashimi\_19, Seahorse\_19, SonDevVon\_17, SpicyFrank\_18, Sporco\_19, TripleJ\_17, Vopal\_19, YoungHarleezy\_18,

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

- 

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

- GUPitcher\_16, Globfish\_18, ThayneTheZag\_18, Windest\_19,

### Summary by start number:

Start 10:

- Found in 3 of 40 ( 7.5% ) of genes in pham
- Manual Annotations of this start: 3 of 26
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Globfish\_18 (AY), ThayneTheZag\_18 (AY), Windest\_19 (AY),

Start 11:

- Found in 36 of 40 ( 90.0% ) of genes in pham
- Manual Annotations of this start: 23 of 26
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AdaS\_18 (AY), Aikyam\_18 (AY), Auxilium\_18 (AY), BasketStar\_18 (AY), BenchScraper\_18 (AY), Bhageatrice\_20 (AY), BlueShadow\_18 (AY), CookieBear\_18 (AY), Ding\_18 (AY), DreamEater\_17 (FJ), Faja\_18 (AY), Gorpy\_18 (AY), Hestia\_18 (AY), Hillester\_18 (AY), JakeTheSnake\_18 (AY), JellyBread\_18 (AY), Kabloowy\_18 (AY), Lasker\_18 (AY), MUWow\_17 (AY), MaterMagnus\_18 (AY), MidnightRain\_18 (AY), MurphyJoseph\_18 (AY), NewKitty\_19 (AY), PetriParty\_16 (FJ), RadFad\_18 (AY), Raphaella\_18 (AY), Richie\_18 (AY), Sakai\_18 (AY), Sashimi\_19 (AY), Seahorse\_19 (AY), SonDevVon\_17 (AY), SpicyFrank\_18 (AY), Sporco\_19 (AY), TripleJ\_17 (FJ), Vopal\_19 (AY), YoungHarleezy\_18 (AY),

Start 14:

- Found in 1 of 40 ( 2.5% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GUPitcher\_16 (FJ),

### Summary by clusters:

There are 2 clusters represented in this pham: AY, FJ,

Info for manual annotations of cluster AY:

- Start number 10 was manually annotated 3 times for cluster AY.
- Start number 11 was manually annotated 22 times for cluster AY.

Info for manual annotations of cluster FJ:

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

### **Gene Information:**

Gene: AdaS\_18 Start: 10770, Stop: 10531, Start Num: 11

Candidate Starts for AdaS\_18:

(5, 10803), (Start: 11 @10770 has 23 MA's), (23, 10680), (38, 10572), (40, 10560),

Gene: Aikyam\_18 Start: 10771, Stop: 10532, Start Num: 11

Candidate Starts for Aikyam\_18:

(5, 10804), (Start: 11 @10771 has 23 MA's), (23, 10681), (38, 10573), (40, 10561), (41, 10543),

Gene: Auxilium\_18 Start: 10770, Stop: 10531, Start Num: 11

Candidate Starts for Auxilium\_18:

(5, 10803), (Start: 11 @10770 has 23 MA's), (23, 10680), (38, 10572), (40, 10560),

Gene: BasketStar\_18 Start: 10824, Stop: 10585, Start Num: 11

Candidate Starts for BasketStar\_18:

(5, 10857), (Start: 11 @10824 has 23 MA's), (23, 10734), (38, 10626), (40, 10614),

Gene: BenchScraper\_18 Start: 10785, Stop: 10546, Start Num: 11

Candidate Starts for BenchScraper\_18:

(5, 10818), (Start: 11 @10785 has 23 MA's), (23, 10695), (38, 10587), (40, 10575),

Gene: Bhageatrice\_20 Start: 11974, Stop: 11759, Start Num: 11

Candidate Starts for Bhageatrice\_20:

(Start: 11 @11974 has 23 MA's), (28, 11839), (34, 11809),

Gene: BlueShadow\_18 Start: 10770, Stop: 10531, Start Num: 11

Candidate Starts for BlueShadow\_18:

(5, 10803), (Start: 11 @10770 has 23 MA's), (23, 10680), (38, 10572), (40, 10560),

Gene: CookieBear\_18 Start: 10770, Stop: 10531, Start Num: 11

Candidate Starts for CookieBear\_18:

(5, 10803), (Start: 11 @10770 has 23 MA's), (23, 10680), (38, 10572), (40, 10560),

Gene: Ding\_18 Start: 10764, Stop: 10537, Start Num: 11

Candidate Starts for Ding\_18:

(Start: 11 @10764 has 23 MA's), (24, 10656), (31, 10608), (32, 10605),

Gene: DreamEater\_17 Start: 11078, Stop: 10824, Start Num: 11

Candidate Starts for DreamEater\_17:

(8, 11096), (Start: 11 @11078 has 23 MA's), (17, 11006), (18, 11003), (19, 10997), (22, 10985), (41, 10850), (42, 10838),

Gene: Faja\_18 Start: 10960, Stop: 10706, Start Num: 11

Candidate Starts for Faja\_18:

(1, 11086), (3, 10996), (7, 10978), (9, 10972), (Start: 11 @10960 has 23 MA's), (19, 10882), (20, 10879), (21, 10876), (22, 10870), (23, 10867), (37, 10774), (41, 10732),

Gene: GUPitcher\_16 Start: 10396, Stop: 10196, Start Num: 14

Candidate Starts for GUPitcher\_16:

(12, 10414), (13, 10402), (14, 10396), (19, 10345), (22, 10333), (23, 10330), (25, 10312),

Gene: Globfish\_18 Start: 10844, Stop: 10605, Start Num: 10

Candidate Starts for Globfish\_18:

(2, 10898), (4, 10880), (Start: 10 @10844 has 3 MA's), (20, 10766), (23, 10754), (38, 10646),

Gene: Gorpy\_18 Start: 10779, Stop: 10540, Start Num: 11

Candidate Starts for Gorpy\_18:

(5, 10812), (Start: 11 @10779 has 23 MA's), (23, 10689), (38, 10581), (40, 10569),

Gene: Hestia\_18 Start: 10916, Stop: 10662, Start Num: 11

Candidate Starts for Hestia\_18:

(Start: 11 @10916 has 23 MA's), (17, 10841), (19, 10832), (24, 10808), (25, 10799), (29, 10772), (30, 10769), (35, 10730),

Gene: Hillester\_18 Start: 10770, Stop: 10531, Start Num: 11

Candidate Starts for Hillester\_18:

(5, 10803), (Start: 11 @10770 has 23 MA's), (23, 10680), (38, 10572), (40, 10560),

Gene: JakeTheSnake\_18 Start: 10776, Stop: 10549, Start Num: 11

Candidate Starts for JakeTheSnake\_18:

(Start: 11 @10776 has 23 MA's), (16, 10710), (17, 10701), (24, 10668), (31, 10620), (32, 10617), (33, 10614),

Gene: JellyBread\_18 Start: 10763, Stop: 10524, Start Num: 11

Candidate Starts for JellyBread\_18:

(5, 10796), (Start: 11 @10763 has 23 MA's), (23, 10673), (38, 10565), (40, 10553),

Gene: Kabloowy\_18 Start: 10894, Stop: 10637, Start Num: 11

Candidate Starts for Kabloowy\_18:

(2, 10951), (Start: 11 @10894 has 23 MA's), (16, 10831), (23, 10798), (26, 10777), (39, 10684), (42, 10648),

Gene: Lasker\_18 Start: 10778, Stop: 10539, Start Num: 11

Candidate Starts for Lasker\_18:

(5, 10811), (Start: 11 @10778 has 23 MA's), (23, 10688), (38, 10580), (40, 10568),

Gene: MUWow\_17 Start: 10863, Stop: 10624, Start Num: 11

Candidate Starts for MUWow\_17:

(5, 10896), (Start: 11 @10863 has 23 MA's), (23, 10773), (38, 10665), (40, 10653),

Gene: MaterMagnus\_18 Start: 10771, Stop: 10532, Start Num: 11

Candidate Starts for MaterMagnus\_18:

(5, 10804), (Start: 11 @10771 has 23 MA's), (23, 10681), (38, 10573), (40, 10561), (41, 10543),

Gene: MidnightRain\_18 Start: 10769, Stop: 10530, Start Num: 11

Candidate Starts for MidnightRain\_18:

(5, 10802), (Start: 11 @10769 has 23 MA's), (23, 10679), (38, 10571), (40, 10559),

Gene: MurphyJoseph\_18 Start: 10773, Stop: 10552, Start Num: 11

Candidate Starts for MurphyJoseph\_18:

(Start: 11 @10773 has 23 MA's), (17, 10701), (20, 10689), (25, 10659), (28, 10638), (32, 10617),

Gene: NewKitty\_19 Start: 11000, Stop: 10761, Start Num: 11

Candidate Starts for NewKitty\_19:

(5, 11033), (Start: 11 @11000 has 23 MA's), (23, 10910), (38, 10802), (40, 10790),

Gene: PetriParty\_16 Start: 11010, Stop: 10756, Start Num: 11

Candidate Starts for PetriParty\_16:

(Start: 11 @11010 has 23 MA's), (18, 10935), (19, 10929), (22, 10917), (24, 10905), (27, 10875), (29, 10869), (30, 10866), (38, 10812),

Gene: RadFad\_18 Start: 10770, Stop: 10531, Start Num: 11

Candidate Starts for RadFad\_18:

(5, 10803), (Start: 11 @10770 has 23 MA's), (23, 10680), (38, 10572), (40, 10560),

Gene: Raphaella\_18 Start: 10770, Stop: 10531, Start Num: 11

Candidate Starts for Raphaella\_18:

(5, 10803), (Start: 11 @10770 has 23 MA's), (23, 10680), (38, 10572), (40, 10560),

Gene: Richie\_18 Start: 10785, Stop: 10546, Start Num: 11

Candidate Starts for Richie\_18:

(5, 10818), (Start: 11 @10785 has 23 MA's), (23, 10695), (38, 10587), (40, 10575),

Gene: Sakai\_18 Start: 10779, Stop: 10540, Start Num: 11

Candidate Starts for Sakai\_18:

(5, 10812), (Start: 11 @10779 has 23 MA's), (23, 10689), (38, 10581), (40, 10569),

Gene: Sashimi\_19 Start: 11077, Stop: 10823, Start Num: 11

Candidate Starts for Sashimi\_19:

(3, 11113), (7, 11095), (9, 11089), (Start: 11 @11077 has 23 MA's), (19, 10999), (20, 10996), (21, 10993), (22, 10987), (23, 10984), (37, 10891), (41, 10849),

Gene: Seahorse\_19 Start: 11026, Stop: 10805, Start Num: 11

Candidate Starts for Seahorse\_19:

(6, 11053), (Start: 11 @11026 has 23 MA's), (17, 10954), (20, 10942), (28, 10891), (32, 10870),

Gene: SonDevVon\_17 Start: 10772, Stop: 10533, Start Num: 11

Candidate Starts for SonDevVon\_17:

(5, 10805), (Start: 11 @10772 has 23 MA's), (23, 10682), (36, 10589), (38, 10574), (40, 10562),

Gene: SpicyFrank\_18 Start: 10847, Stop: 10608, Start Num: 11

Candidate Starts for SpicyFrank\_18:

(5, 10880), (Start: 11 @10847 has 23 MA's), (20, 10769), (23, 10757), (38, 10649),

Gene: Sporco\_19 Start: 10827, Stop: 10588, Start Num: 11

Candidate Starts for Sporco\_19:

(5, 10860), (Start: 11 @10827 has 23 MA's), (23, 10737), (38, 10629), (40, 10617),

Gene: ThayneTheZag\_18 Start: 10845, Stop: 10606, Start Num: 10

Candidate Starts for ThayneTheZag\_18:

(2, 10899), (4, 10881), (Start: 10 @10845 has 3 MA's), (20, 10767), (23, 10755),

Gene: TripleJ\_17 Start: 11025, Stop: 10771, Start Num: 11

Candidate Starts for TripleJ\_17:

(Start: 11 @11025 has 23 MA's), (18, 10950), (19, 10944), (22, 10932), (24, 10920), (27, 10890), (29, 10884), (30, 10881), (38, 10827),

Gene: Vopal\_19 Start: 10842, Stop: 10603, Start Num: 11

Candidate Starts for Vopal\_19:

(5, 10875), (Start: 11 @10842 has 23 MA's), (23, 10752), (40, 10632),

Gene: Windest\_19 Start: 10827, Stop: 10588, Start Num: 10

Candidate Starts for Windest\_19:

(2, 10881), (4, 10863), (Start: 10 @10827 has 3 MA's), (15, 10785), (23, 10737), (38, 10629), (40, 10617),

Gene: YoungHarleezy\_18 Start: 10783, Stop: 10544, Start Num: 11

Candidate Starts for YoungHarleezy\_18:

(5, 10816), (Start: 11 @10783 has 23 MA's), (23, 10693), (38, 10585), (40, 10573),