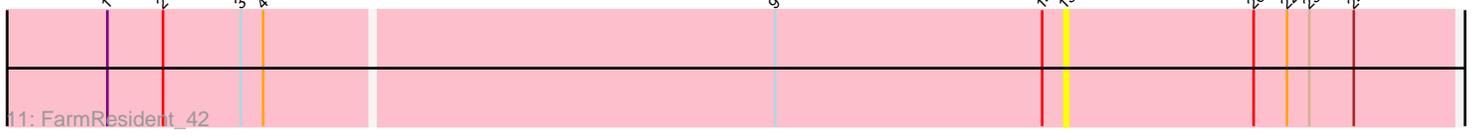
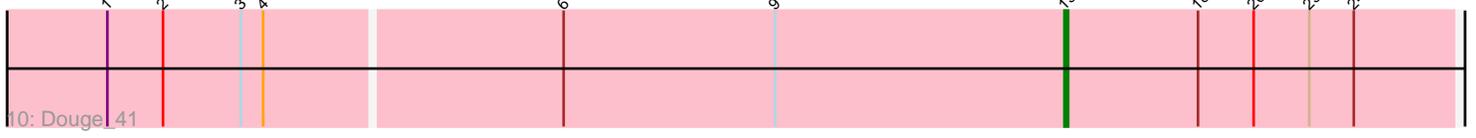
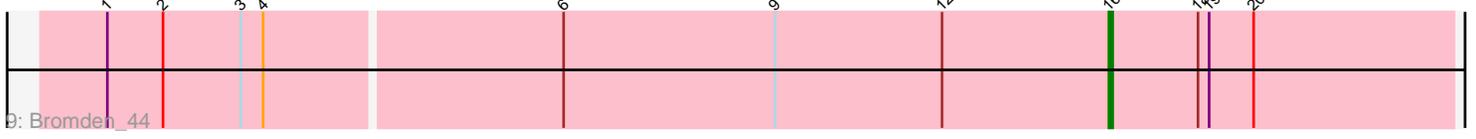
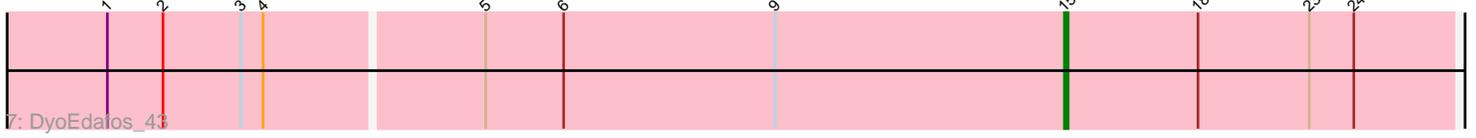
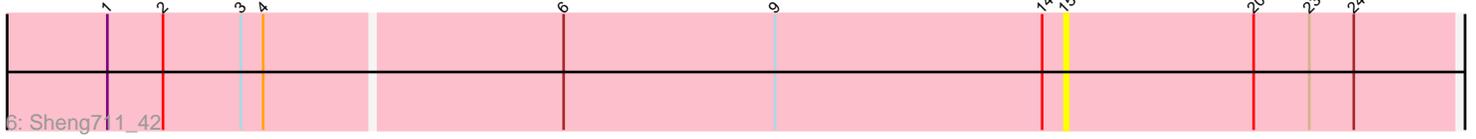
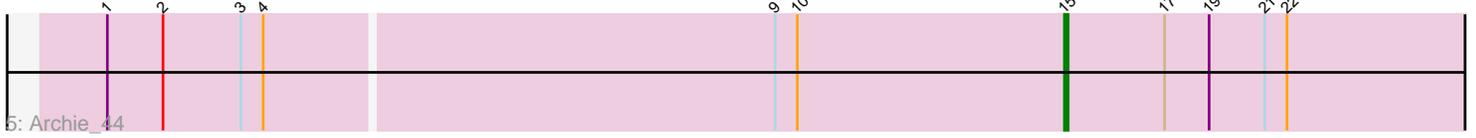
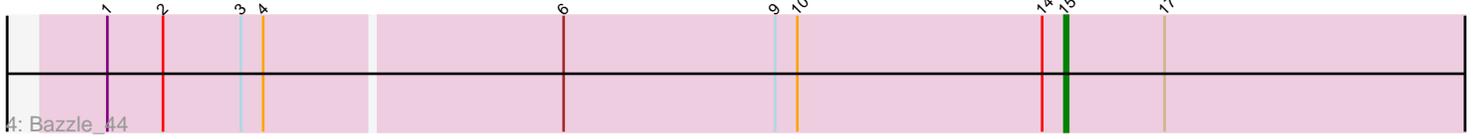
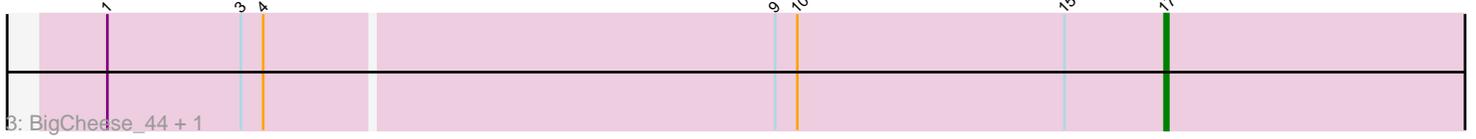
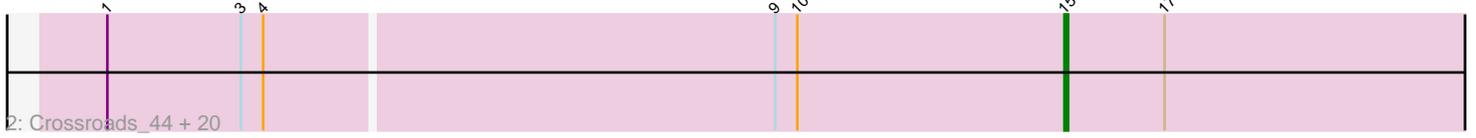
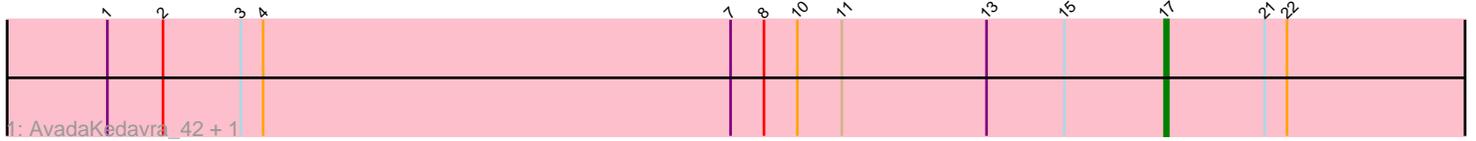


Pham 284025



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 284025 Report

This analysis was run 02/23/26 on database version 636.

Pham number 284025 has 34 members, 3 are drafts.

Phages represented in each track:

- Track 1 : AvadaKedavra\_42, Acquire49\_42
- Track 2 : Crossroads\_44, Vetrix\_44, Lewan\_44, Finemlucis\_44, BobsGarage\_44, Gardann\_44, Nicholasp3\_44, Wilder\_44, Faith1\_44, Breezona\_44, Miley16\_44, Gabriela\_44, Wigglewiggles\_44, Kahlid\_44, Underpass\_44, Zakai\_44, Rumpelstiltskin\_44, LilDestine\_44, Itos\_43, Winky\_44, DrSeegs\_44
- Track 3 : BigCheese\_44, Netyap\_44
- Track 4 : Bazzle\_44
- Track 5 : Archie\_44
- Track 6 : Sheng711\_42
- Track 7 : DyoEdafos\_43
- Track 8 : Quby\_42, Chaser\_41
- Track 9 : Bromden\_44
- Track 10 : Douge\_41
- Track 11 : FarmResident\_42

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

The start number called the most often in the published annotations is 15, it was called in 26 of the 31 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Archie\_44, Bazzle\_44, BobsGarage\_44, Breezona\_44, Chaser\_41, Crossroads\_44, Douge\_41, DrSeegs\_44, DyoEdafos\_43, Faith1\_44, FarmResident\_42, Finemlucis\_44, Gabriela\_44, Gardann\_44, Itos\_43, Kahlid\_44, Lewan\_44, LilDestine\_44, Miley16\_44, Nicholasp3\_44, Quby\_42, Rumpelstiltskin\_44, Sheng711\_42, Underpass\_44, Vetrix\_44, Wigglewiggles\_44, Wilder\_44, Winky\_44, Zakai\_44,

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

- Acquire49\_42, AvadaKedavra\_42, BigCheese\_44, Netyap\_44,

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

- Bromden\_44,

## Summary by start number:

### Start 15:

- Found in 33 of 34 ( 97.1% ) of genes in pham
- Manual Annotations of this start: 26 of 31
- Called 87.9% of time when present
- Phage (with cluster) where this start called: Archie\_44 (L2), Bazzle\_44 (L2), BobsGarage\_44 (L2), Breezona\_44 (L2), Chaser\_41 (L4), Crossroads\_44 (L2), Douge\_41 (L4), DrSeegs\_44 (L2), DyoEdafos\_43 (L4), Faith1\_44 (L2), FarmResident\_42 (L4), Finemlucis\_44 (L2), Gabriela\_44 (L2), Gardann\_44 (L2), Itos\_43 (L2), Kahlid\_44 (L2), Lewan\_44 (L2), LilDestine\_44 (L2), Miley16\_44 (L2), Nicholasp3\_44 (L2), Quby\_42 (L4), Rumpelstiltskin\_44 (L2), Sheng711\_42 (L4), Underpass\_44 (L2), Vetrix\_44 (L2), Wigglewiggle\_44 (L2), Wilder\_44 (L2), Winky\_44 (L2), Zakai\_44 (L2),

### Start 16:

- Found in 1 of 34 ( 2.9% ) of genes in pham
- Manual Annotations of this start: 1 of 31
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bromden\_44 (L4),

### Start 17:

- Found in 27 of 34 ( 79.4% ) of genes in pham
- Manual Annotations of this start: 4 of 31
- Called 14.8% of time when present
- Phage (with cluster) where this start called: Acquire49\_42 (L1), AvadaKedavra\_42 (L1), BigCheese\_44 (L2), Netyap\_44 (L2),

## Summary by clusters:

There are 3 clusters represented in this pham: L4, L2, L1,

### Info for manual annotations of cluster L1:

- Start number 17 was manually annotated 2 times for cluster L1.

### Info for manual annotations of cluster L2:

- Start number 15 was manually annotated 23 times for cluster L2.
- Start number 17 was manually annotated 2 times for cluster L2.

### Info for manual annotations of cluster L4:

- Start number 15 was manually annotated 3 times for cluster L4.
- Start number 16 was manually annotated 1 time for cluster L4.

## Gene Information:

Gene: Acquire49\_42 Start: 33945, Stop: 34028, Start Num: 17

Candidate Starts for Acquire49\_42:

(1, 33660), (2, 33675), (3, 33696), (4, 33702), (7, 33828), (8, 33837), (10, 33846), (11, 33858), (13, 33897), (Start: 15 @33918 has 26 MA's), (Start: 17 @33945 has 4 MA's), (21, 33972), (22, 33978),

Gene: Archie\_44 Start: 35453, Stop: 35563, Start Num: 15

Candidate Starts for Archie\_44:

(1, 35198), (2, 35213), (3, 35234), (4, 35240), (9, 35375), (10, 35381), (Start: 15 @35453 has 26 MA's), (Start: 17 @35480 has 4 MA's), (19, 35492), (21, 35507), (22, 35513),

Gene: AvadaKedavra\_42 Start: 33954, Stop: 34037, Start Num: 17

Candidate Starts for AvadaKedavra\_42:

(1, 33669), (2, 33684), (3, 33705), (4, 33711), (7, 33837), (8, 33846), (10, 33855), (11, 33867), (13, 33906), (Start: 15 @33927 has 26 MA's), (Start: 17 @33954 has 4 MA's), (21, 33981), (22, 33987),

Gene: Bazzle\_44 Start: 35485, Stop: 35595, Start Num: 15

Candidate Starts for Bazzle\_44:

(1, 35230), (2, 35245), (3, 35266), (4, 35272), (6, 35350), (9, 35407), (10, 35413), (14, 35479), (Start: 15 @35485 has 26 MA's), (Start: 17 @35512 has 4 MA's),

Gene: BigCheese\_44 Start: 35276, Stop: 35359, Start Num: 17

Candidate Starts for BigCheese\_44:

(1, 34994), (3, 35030), (4, 35036), (9, 35171), (10, 35177), (Start: 15 @35249 has 26 MA's), (Start: 17 @35276 has 4 MA's),

Gene: BobsGarage\_44 Start: 35249, Stop: 35359, Start Num: 15

Candidate Starts for BobsGarage\_44:

(1, 34994), (3, 35030), (4, 35036), (9, 35171), (10, 35177), (Start: 15 @35249 has 26 MA's), (Start: 17 @35276 has 4 MA's),

Gene: Breezona\_44 Start: 35249, Stop: 35359, Start Num: 15

Candidate Starts for Breezona\_44:

(1, 34994), (3, 35030), (4, 35036), (9, 35171), (10, 35177), (Start: 15 @35249 has 26 MA's), (Start: 17 @35276 has 4 MA's),

Gene: Bromden\_44 Start: 35017, Stop: 35109, Start Num: 16

Candidate Starts for Bromden\_44:

(1, 34750), (2, 34765), (3, 34786), (4, 34792), (6, 34870), (9, 34927), (12, 34972), (Start: 16 @35017 has 1 MA's), (18, 35041), (19, 35044), (20, 35056),

Gene: Chaser\_41 Start: 33996, Stop: 34100, Start Num: 15

Candidate Starts for Chaser\_41:

(1, 33741), (2, 33756), (3, 33777), (4, 33783), (6, 33861), (9, 33918), (14, 33990), (Start: 15 @33996 has 26 MA's), (18, 34032), (20, 34047), (23, 34062), (24, 34074),

Gene: Crossroads\_44 Start: 35251, Stop: 35361, Start Num: 15

Candidate Starts for Crossroads\_44:

(1, 34996), (3, 35032), (4, 35038), (9, 35173), (10, 35179), (Start: 15 @35251 has 26 MA's), (Start: 17 @35278 has 4 MA's),

Gene: Douge\_41 Start: 33934, Stop: 34038, Start Num: 15

Candidate Starts for Douge\_41:

(1, 33679), (2, 33694), (3, 33715), (4, 33721), (6, 33799), (9, 33856), (Start: 15 @33934 has 26 MA's), (18, 33970), (20, 33985), (23, 34000), (24, 34012),

Gene: DrSeegs\_44 Start: 35249, Stop: 35359, Start Num: 15

Candidate Starts for DrSeegs\_44:

(1, 34994), (3, 35030), (4, 35036), (9, 35171), (10, 35177), (Start: 15 @35249 has 26 MA's), (Start: 17 @35276 has 4 MA's),

Gene: DyoEdafos\_43 Start: 34256, Stop: 34360, Start Num: 15

Candidate Starts for DyoEdafos\_43:

(1, 34001), (2, 34016), (3, 34037), (4, 34043), (5, 34100), (6, 34121), (9, 34178), (Start: 15 @34256 has 26 MA's), (18, 34292), (23, 34322), (24, 34334),

Gene: Faith1\_44 Start: 35249, Stop: 35359, Start Num: 15

Candidate Starts for Faith1\_44:

(1, 34994), (3, 35030), (4, 35036), (9, 35171), (10, 35177), (Start: 15 @35249 has 26 MA's), (Start: 17 @35276 has 4 MA's),

Gene: FarmResident\_42 Start: 33978, Stop: 34082, Start Num: 15

Candidate Starts for FarmResident\_42:

(1, 33723), (2, 33738), (3, 33759), (4, 33765), (9, 33900), (14, 33972), (Start: 15 @33978 has 26 MA's), (20, 34029), (22, 34038), (23, 34044), (24, 34056),

Gene: Finemlucis\_44 Start: 35525, Stop: 35635, Start Num: 15

Candidate Starts for Finemlucis\_44:

(1, 35270), (3, 35306), (4, 35312), (9, 35447), (10, 35453), (Start: 15 @35525 has 26 MA's), (Start: 17 @35552 has 4 MA's),

Gene: Gabriela\_44 Start: 35511, Stop: 35621, Start Num: 15

Candidate Starts for Gabriela\_44:

(1, 35256), (3, 35292), (4, 35298), (9, 35433), (10, 35439), (Start: 15 @35511 has 26 MA's), (Start: 17 @35538 has 4 MA's),

Gene: Gardann\_44 Start: 35250, Stop: 35360, Start Num: 15

Candidate Starts for Gardann\_44:

(1, 34995), (3, 35031), (4, 35037), (9, 35172), (10, 35178), (Start: 15 @35250 has 26 MA's), (Start: 17 @35277 has 4 MA's),

Gene: Itos\_43 Start: 34155, Stop: 34265, Start Num: 15

Candidate Starts for Itos\_43:

(1, 33900), (3, 33936), (4, 33942), (9, 34077), (10, 34083), (Start: 15 @34155 has 26 MA's), (Start: 17 @34182 has 4 MA's),

Gene: Kahlid\_44 Start: 35255, Stop: 35365, Start Num: 15

Candidate Starts for Kahlid\_44:

(1, 35000), (3, 35036), (4, 35042), (9, 35177), (10, 35183), (Start: 15 @35255 has 26 MA's), (Start: 17 @35282 has 4 MA's),

Gene: Lewan\_44 Start: 35242, Stop: 35352, Start Num: 15

Candidate Starts for Lewan\_44:

(1, 34987), (3, 35023), (4, 35029), (9, 35164), (10, 35170), (Start: 15 @35242 has 26 MA's), (Start: 17 @35269 has 4 MA's),

Gene: LilDestine\_44 Start: 35247, Stop: 35357, Start Num: 15

Candidate Starts for LilDestine\_44:

(1, 34992), (3, 35028), (4, 35034), (9, 35169), (10, 35175), (Start: 15 @35247 has 26 MA's), (Start: 17 @35274 has 4 MA's),

Gene: Miley16\_44 Start: 35249, Stop: 35359, Start Num: 15

Candidate Starts for Miley16\_44:

(1, 34994), (3, 35030), (4, 35036), (9, 35171), (10, 35177), (Start: 15 @35249 has 26 MA's), (Start: 17 @35276 has 4 MA's),

Gene: Netyap\_44 Start: 35276, Stop: 35359, Start Num: 17

Candidate Starts for Netyap\_44:

(1, 34994), (3, 35030), (4, 35036), (9, 35171), (10, 35177), (Start: 15 @35249 has 26 MA's), (Start: 17 @35276 has 4 MA's),

Gene: Nicholasp3\_44 Start: 35250, Stop: 35360, Start Num: 15

Candidate Starts for Nicholasp3\_44:

(1, 34995), (3, 35031), (4, 35037), (9, 35172), (10, 35178), (Start: 15 @35250 has 26 MA's), (Start: 17 @35277 has 4 MA's),

Gene: Quby\_42 Start: 33934, Stop: 34038, Start Num: 15

Candidate Starts for Quby\_42:

(1, 33679), (2, 33694), (3, 33715), (4, 33721), (6, 33799), (9, 33856), (14, 33928), (Start: 15 @33934 has 26 MA's), (18, 33970), (20, 33985), (23, 34000), (24, 34012),

Gene: Rumpelstiltskin\_44 Start: 35516, Stop: 35626, Start Num: 15

Candidate Starts for Rumpelstiltskin\_44:

(1, 35261), (3, 35297), (4, 35303), (9, 35438), (10, 35444), (Start: 15 @35516 has 26 MA's), (Start: 17 @35543 has 4 MA's),

Gene: Sheng711\_42 Start: 34040, Stop: 34144, Start Num: 15

Candidate Starts for Sheng711\_42:

(1, 33785), (2, 33800), (3, 33821), (4, 33827), (6, 33905), (9, 33962), (14, 34034), (Start: 15 @34040 has 26 MA's), (20, 34091), (23, 34106), (24, 34118),

Gene: Underpass\_44 Start: 35250, Stop: 35360, Start Num: 15

Candidate Starts for Underpass\_44:

(1, 34995), (3, 35031), (4, 35037), (9, 35172), (10, 35178), (Start: 15 @35250 has 26 MA's), (Start: 17 @35277 has 4 MA's),

Gene: Vetrix\_44 Start: 35256, Stop: 35366, Start Num: 15

Candidate Starts for Vetrix\_44:

(1, 35001), (3, 35037), (4, 35043), (9, 35178), (10, 35184), (Start: 15 @35256 has 26 MA's), (Start: 17 @35283 has 4 MA's),

Gene: Wigglewiggles\_44 Start: 35282, Stop: 35392, Start Num: 15

Candidate Starts for Wigglewiggles\_44:

(1, 35027), (3, 35063), (4, 35069), (9, 35204), (10, 35210), (Start: 15 @35282 has 26 MA's), (Start: 17 @35309 has 4 MA's),

Gene: Wilder\_44 Start: 35255, Stop: 35365, Start Num: 15

Candidate Starts for Wilder\_44:

(1, 35000), (3, 35036), (4, 35042), (9, 35177), (10, 35183), (Start: 15 @35255 has 26 MA's), (Start: 17 @35282 has 4 MA's),

Gene: Winky\_44 Start: 35249, Stop: 35359, Start Num: 15

Candidate Starts for Winky\_44:

(1, 34994), (3, 35030), (4, 35036), (9, 35171), (10, 35177), (Start: 15 @35249 has 26 MA's), (Start: 17 @35276 has 4 MA's),

Gene: Zakai\_44 Start: 35507, Stop: 35617, Start Num: 15

Candidate Starts for Zakai\_44:

(1, 35252), (3, 35288), (4, 35294), (9, 35429), (10, 35435), (Start: 15 @35507 has 26 MA's), (Start: 17 @35534 has 4 MA's),