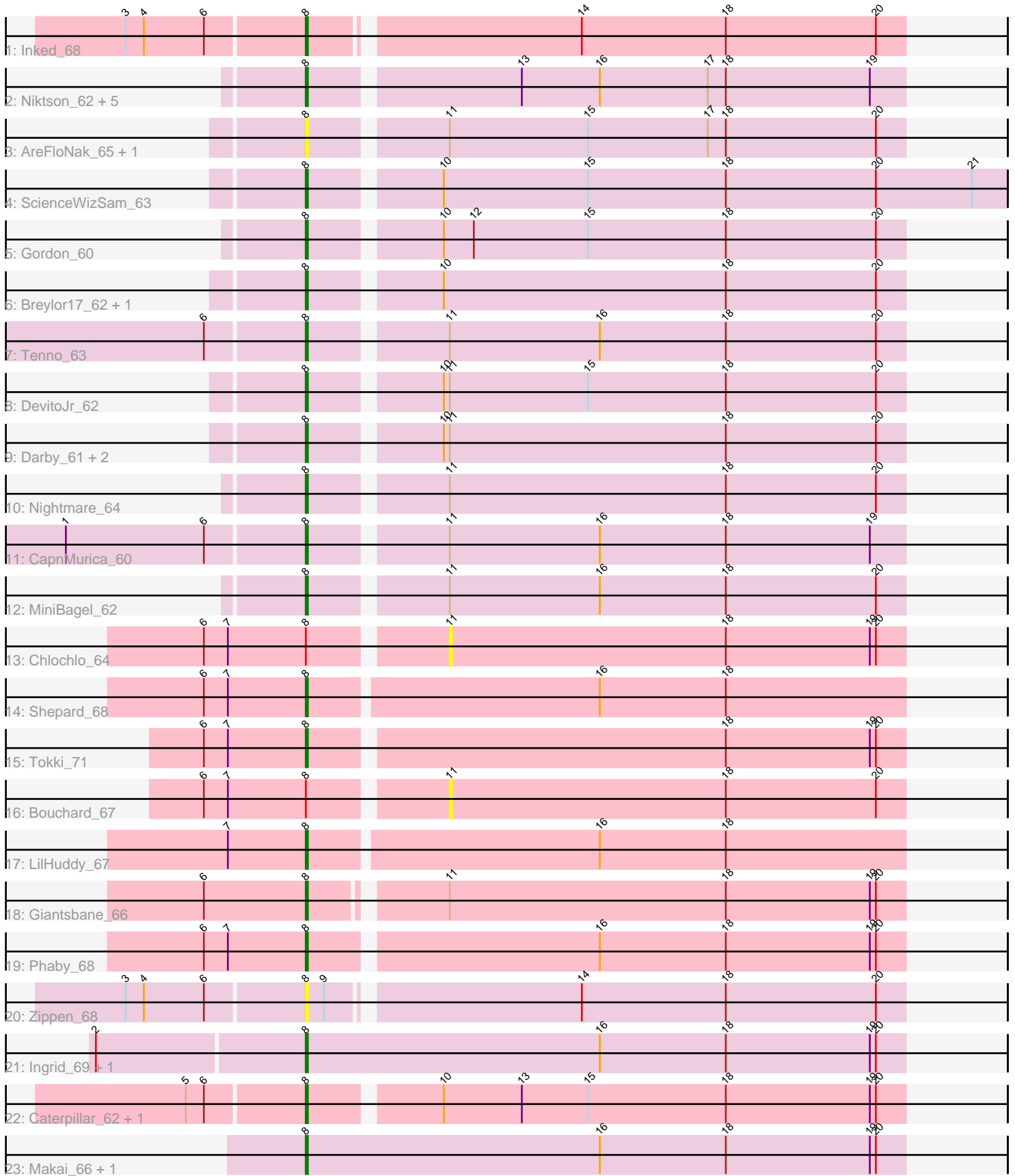


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Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. 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 218139 Report

This analysis was run 03/28/25 on database version 593.

Pham number 218139 has 35 members, 7 are drafts.

Phages represented in each track:

- Track 1 : Inked\_68
- Track 2 : Niktson\_62, Brunswick\_63, Acai\_62, Teacup\_63, LucySwiss\_63, ElephantMan\_62
- Track 3 : AreFloNak\_65, Nivinsha\_64
- Track 4 : ScienceWizSam\_63
- Track 5 : Gordon\_60
- Track 6 : Breylor17\_62, CastorTray\_66
- Track 7 : Tenno\_63
- Track 8 : DevitoJr\_62
- Track 9 : Darby\_61, Synepsis\_61, Trustiboi\_62
- Track 10 : Nightmare\_64
- Track 11 : CapnMurica\_60
- Track 12 : MiniBagel\_62
- Track 13 : Chlochlo\_64
- Track 14 : Shepard\_68
- Track 15 : Tokki\_71
- Track 16 : Bouchard\_67
- Track 17 : LilHuddy\_67
- Track 18 : Giantsbane\_66
- Track 19 : Phaby\_68
- Track 20 : Zippen\_68
- Track 21 : Ingrid\_69, Loretta\_66
- Track 22 : Caterpillar\_62, MediumFry\_63
- Track 23 : Makai\_66, Truckee\_64

### ***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 28 of the 28 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Acai\_62, AreFloNak\_65, Breylor17\_62, Brunswick\_63, CapnMurica\_60, CastorTray\_66, Caterpillar\_62, Darby\_61, DevitoJr\_62, ElephantMan\_62, Giantsbane\_66, Gordon\_60, Ingrid\_69, Inked\_68, LilHuddy\_67, Loretta\_66,

LucySwiss\_63, Makai\_66, MediumFry\_63, MiniBagel\_62, Nightmare\_64, Niktson\_62, Nivinsha\_64, Phaby\_68, ScienceWizSam\_63, Shepard\_68, Synepsis\_61, Teacup\_63, Tenno\_63, Tokki\_71, Truckee\_64, Trustiboi\_62, Zippen\_68,

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

- Bouchard\_67, Chlochlo\_64,

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

- 

### Summary by start number:

Start 8:

- Found in 35 of 35 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 28 of 28
- Called 94.3% of time when present
- Phage (with cluster) where this start called: Acai\_62 (AU1), AreFloNak\_65 (AU1), Breylor17\_62 (AU1), Brunswick\_63 (AU1), CapnMurica\_60 (AU1), CastorTray\_66 (AU1), Caterpillar\_62 (AU4), Darby\_61 (AU1), DevitoJr\_62 (AU1), ElephantMan\_62 (AU1), Giantsbane\_66 (AU2), Gordon\_60 (AU1), Ingrid\_69 (AU3), Inked\_68 (AU), LilHuddy\_67 (AU2), Loretta\_66 (AU3), LucySwiss\_63 (AU1), Makai\_66 (AU5), MediumFry\_63 (AU4), MiniBagel\_62 (AU1), Nightmare\_64 (AU1), Niktson\_62 (AU1), Nivinsha\_64 (AU1), Phaby\_68 (AU2), ScienceWizSam\_63 (AU1), Shepard\_68 (AU2), Synepsis\_61 (AU1), Teacup\_63 (AU1), Tenno\_63 (AU1), Tokki\_71 (AU2), Truckee\_64 (AU5), Trustiboi\_62 (AU1), Zippen\_68 (AU3),

Start 11:

- Found in 13 of 35 ( 37.1% ) of genes in pham
- No Manual Annotations of this start.
- Called 15.4% of time when present
- Phage (with cluster) where this start called: Bouchard\_67 (AU2), Chlochlo\_64 (AU2),

### Summary by clusters:

There are 6 clusters represented in this pham: AU1, AU3, AU2, AU, AU4, AU5,

Info for manual annotations of cluster AU:

- Start number 8 was manually annotated 1 time for cluster AU.

Info for manual annotations of cluster AU1:

- Start number 8 was manually annotated 16 times for cluster AU1.

Info for manual annotations of cluster AU2:

- Start number 8 was manually annotated 5 times for cluster AU2.

Info for manual annotations of cluster AU3:

- Start number 8 was manually annotated 2 times for cluster AU3.

Info for manual annotations of cluster AU4:

- Start number 8 was manually annotated 2 times for cluster AU4.

Info for manual annotations of cluster AU5:

- Start number 8 was manually annotated 2 times for cluster AU5.

**Gene Information:**

Gene: Acai\_62 Start: 44324, Stop: 44614, Start Num: 8

Candidate Starts for Acai\_62:

(Start: 8 @44324 has 28 MA's), (13, 44423), (16, 44462), (17, 44516), (18, 44525), (19, 44597),

Gene: AreFloNak\_65 Start: 44289, Stop: 44579, Start Num: 8

Candidate Starts for AreFloNak\_65:

(Start: 8 @44289 has 28 MA's), (11, 44352), (15, 44421), (17, 44481), (18, 44490), (20, 44565),

Gene: Bouchard\_67 Start: 45006, Stop: 45233, Start Num: 11

Candidate Starts for Bouchard\_67:

(6, 44892), (7, 44904), (Start: 8 @44943 has 28 MA's), (11, 45006), (18, 45144), (20, 45219),

Gene: Breylor17\_62 Start: 44864, Stop: 45154, Start Num: 8

Candidate Starts for Breylor17\_62:

(Start: 8 @44864 has 28 MA's), (10, 44924), (18, 45065), (20, 45140),

Gene: Brunswick\_63 Start: 44167, Stop: 44457, Start Num: 8

Candidate Starts for Brunswick\_63:

(Start: 8 @44167 has 28 MA's), (13, 44266), (16, 44305), (17, 44359), (18, 44368), (19, 44440),

Gene: CapnMurica\_60 Start: 45050, Stop: 45340, Start Num: 8

Candidate Starts for CapnMurica\_60:

(1, 44933), (6, 45002), (Start: 8 @45050 has 28 MA's), (11, 45113), (16, 45188), (18, 45251), (19, 45323),

Gene: CastorTray\_66 Start: 45053, Stop: 45343, Start Num: 8

Candidate Starts for CastorTray\_66:

(Start: 8 @45053 has 28 MA's), (10, 45113), (18, 45254), (20, 45329),

Gene: Caterpillar\_62 Start: 43978, Stop: 44268, Start Num: 8

Candidate Starts for Caterpillar\_62:

(5, 43921), (6, 43930), (Start: 8 @43978 has 28 MA's), (10, 44038), (13, 44077), (15, 44110), (18, 44179), (19, 44251), (20, 44254),

Gene: Chlochlo\_64 Start: 44532, Stop: 44759, Start Num: 11

Candidate Starts for Chlochlo\_64:

(6, 44418), (7, 44430), (Start: 8 @44469 has 28 MA's), (11, 44532), (18, 44670), (19, 44742), (20, 44745),

Gene: Darby\_61 Start: 44099, Stop: 44389, Start Num: 8

Candidate Starts for Darby\_61:

(Start: 8 @44099 has 28 MA's), (10, 44159), (11, 44162), (18, 44300), (20, 44375),

Gene: DevitoJr\_62 Start: 44485, Stop: 44775, Start Num: 8

Candidate Starts for DevitoJr\_62:

(Start: 8 @44485 has 28 MA's), (10, 44545), (11, 44548), (15, 44617), (18, 44686), (20, 44761),

Gene: ElephantMan\_62 Start: 44797, Stop: 45087, Start Num: 8

Candidate Starts for ElephantMan\_62:

(Start: 8 @44797 has 28 MA's), (13, 44896), (16, 44935), (17, 44989), (18, 44998), (19, 45070),

Gene: Giantsbane\_66 Start: 43674, Stop: 43961, Start Num: 8

Candidate Starts for Giantsbane\_66:

(6, 43623), (Start: 8 @43674 has 28 MA's), (11, 43734), (18, 43872), (19, 43944), (20, 43947),

Gene: Gordon\_60 Start: 44977, Stop: 45267, Start Num: 8

Candidate Starts for Gordon\_60:

(Start: 8 @44977 has 28 MA's), (10, 45037), (12, 45052), (15, 45109), (18, 45178), (20, 45253),

Gene: Ingrid\_69 Start: 44855, Stop: 45154, Start Num: 8

Candidate Starts for Ingrid\_69:

(2, 44753), (Start: 8 @44855 has 28 MA's), (16, 45002), (18, 45065), (19, 45137), (20, 45140),

Gene: Inked\_68 Start: 45528, Stop: 45815, Start Num: 8

Candidate Starts for Inked\_68:

(3, 45441), (4, 45450), (6, 45480), (Start: 8 @45528 has 28 MA's), (14, 45654), (18, 45726), (20, 45801),

Gene: LilHuddy\_67 Start: 44781, Stop: 45074, Start Num: 8

Candidate Starts for LilHuddy\_67:

(7, 44742), (Start: 8 @44781 has 28 MA's), (16, 44922), (18, 44985),

Gene: Loretta\_66 Start: 44855, Stop: 45154, Start Num: 8

Candidate Starts for Loretta\_66:

(2, 44753), (Start: 8 @44855 has 28 MA's), (16, 45002), (18, 45065), (19, 45137), (20, 45140),

Gene: LucySwiss\_63 Start: 43948, Stop: 44238, Start Num: 8

Candidate Starts for LucySwiss\_63:

(Start: 8 @43948 has 28 MA's), (13, 44047), (16, 44086), (17, 44140), (18, 44149), (19, 44221),

Gene: Makai\_66 Start: 44929, Stop: 45228, Start Num: 8

Candidate Starts for Makai\_66:

(Start: 8 @44929 has 28 MA's), (16, 45076), (18, 45139), (19, 45211), (20, 45214),

Gene: MediumFry\_63 Start: 44274, Stop: 44564, Start Num: 8

Candidate Starts for MediumFry\_63:

(5, 44217), (6, 44226), (Start: 8 @44274 has 28 MA's), (10, 44334), (13, 44373), (15, 44406), (18, 44475), (19, 44547), (20, 44550),

Gene: MiniBagel\_62 Start: 45041, Stop: 45331, Start Num: 8

Candidate Starts for MiniBagel\_62:

(Start: 8 @45041 has 28 MA's), (11, 45104), (16, 45179), (18, 45242), (20, 45317),

Gene: Nightmare\_64 Start: 45339, Stop: 45629, Start Num: 8

Candidate Starts for Nightmare\_64:

(Start: 8 @45339 has 28 MA's), (11, 45402), (18, 45540), (20, 45615),

Gene: Niktson\_62 Start: 44797, Stop: 45087, Start Num: 8

Candidate Starts for Niktson\_62:

(Start: 8 @44797 has 28 MA's), (13, 44896), (16, 44935), (17, 44989), (18, 44998), (19, 45070),

Gene: Nivinsha\_64 Start: 44289, Stop: 44579, Start Num: 8  
Candidate Starts for Nivinsha\_64:  
(Start: 8 @44289 has 28 MA's), (11, 44352), (15, 44421), (17, 44481), (18, 44490), (20, 44565),

Gene: Phaby\_68 Start: 45345, Stop: 45635, Start Num: 8  
Candidate Starts for Phaby\_68:  
(6, 45294), (7, 45306), (Start: 8 @45345 has 28 MA's), (16, 45483), (18, 45546), (19, 45618), (20, 45621),

Gene: ScienceWizSam\_63 Start: 44451, Stop: 44792, Start Num: 8  
Candidate Starts for ScienceWizSam\_63:  
(Start: 8 @44451 has 28 MA's), (10, 44511), (15, 44583), (18, 44652), (20, 44727), (21, 44775),

Gene: Shepard\_68 Start: 44640, Stop: 44933, Start Num: 8  
Candidate Starts for Shepard\_68:  
(6, 44589), (7, 44601), (Start: 8 @44640 has 28 MA's), (16, 44781), (18, 44844),

Gene: Synopsis\_61 Start: 44455, Stop: 44742, Start Num: 8  
Candidate Starts for Synopsis\_61:  
(Start: 8 @44455 has 28 MA's), (10, 44512), (11, 44515), (18, 44653), (20, 44728),

Gene: Teacup\_63 Start: 44876, Stop: 45166, Start Num: 8  
Candidate Starts for Teacup\_63:  
(Start: 8 @44876 has 28 MA's), (13, 44975), (16, 45014), (17, 45068), (18, 45077), (19, 45149),

Gene: Tenno\_63 Start: 45105, Stop: 45395, Start Num: 8  
Candidate Starts for Tenno\_63:  
(6, 45057), (Start: 8 @45105 has 28 MA's), (11, 45168), (16, 45243), (18, 45306), (20, 45381),

Gene: Tokki\_71 Start: 44994, Stop: 45284, Start Num: 8  
Candidate Starts for Tokki\_71:  
(6, 44943), (7, 44955), (Start: 8 @44994 has 28 MA's), (18, 45195), (19, 45267), (20, 45270),

Gene: Truckee\_64 Start: 44713, Stop: 45012, Start Num: 8  
Candidate Starts for Truckee\_64:  
(Start: 8 @44713 has 28 MA's), (16, 44860), (18, 44923), (19, 44995), (20, 44998),

Gene: Trustiboi\_62 Start: 44710, Stop: 44997, Start Num: 8  
Candidate Starts for Trustiboi\_62:  
(Start: 8 @44710 has 28 MA's), (10, 44767), (11, 44770), (18, 44908), (20, 44983),

Gene: Zippen\_68 Start: 45396, Stop: 45683, Start Num: 8  
Candidate Starts for Zippen\_68:  
(3, 45309), (4, 45318), (6, 45348), (Start: 8 @45396 has 28 MA's), (9, 45405), (14, 45522), (18, 45594), (20, 45669),