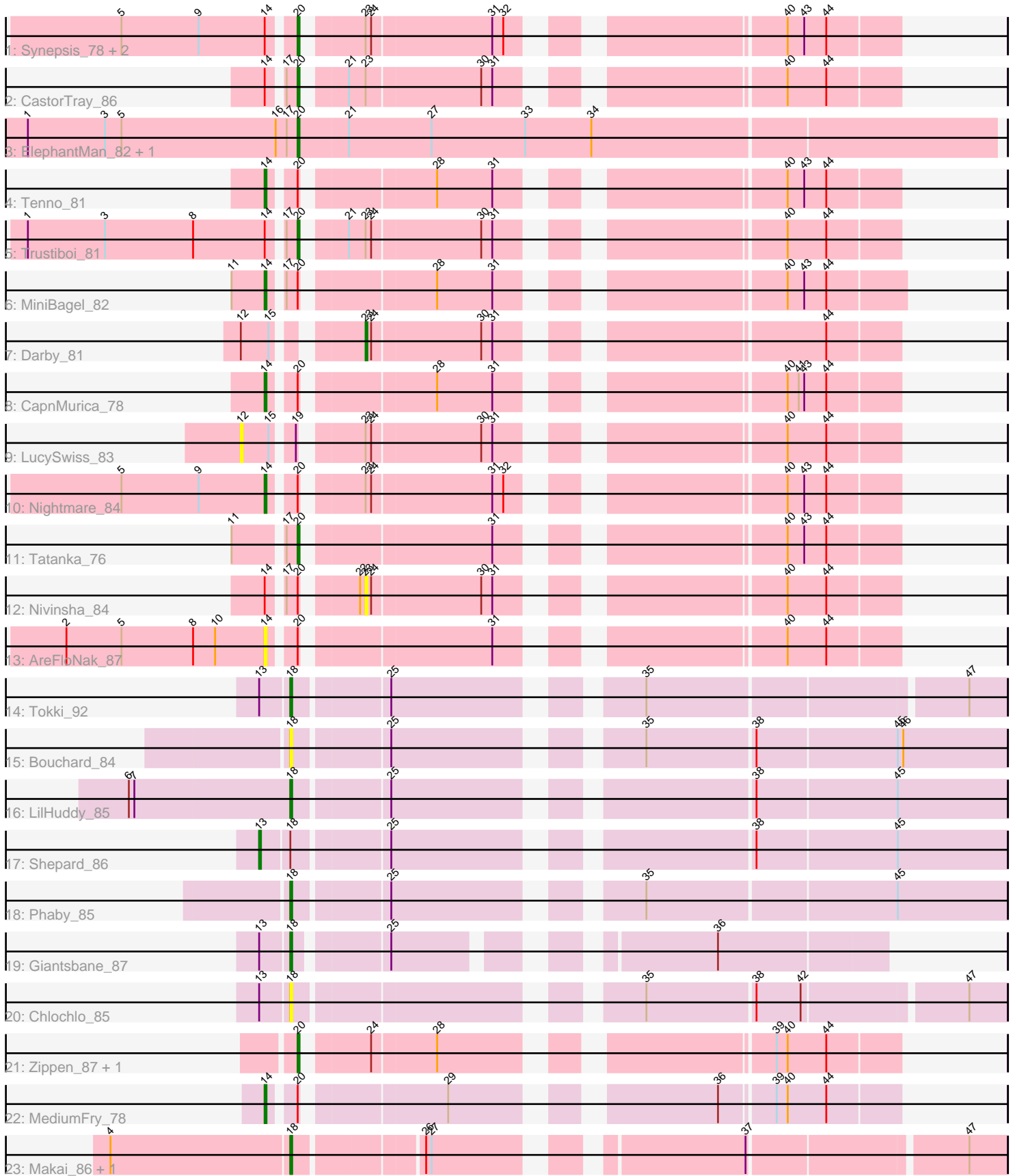


Pham 203216



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 203216 Report

This analysis was run 01/18/25 on database version 583.

Pham number 203216 has 28 members, 6 are drafts.

Phages represented in each track:

- Track 1 : Synopsis\_78, ScienceWizSam\_84, DevitoJr\_82
- Track 2 : CastorTray\_86
- Track 3 : ElephantMan\_82, Niktson\_82
- Track 4 : Tenno\_81
- Track 5 : Trustiboi\_81
- Track 6 : MiniBagel\_82
- Track 7 : Darby\_81
- Track 8 : CapnMurica\_78
- Track 9 : LucySwiss\_83
- Track 10 : Nightmare\_84
- Track 11 : Tatanka\_76
- Track 12 : Nivinsha\_84
- Track 13 : AreFloNak\_87
- Track 14 : Tokki\_92
- Track 15 : Bouchard\_84
- Track 16 : LilHuddy\_85
- Track 17 : Shepard\_86
- Track 18 : Phaby\_85
- Track 19 : Giantsbane\_87
- Track 20 : Chlochlo\_85
- Track 21 : Zippen\_87, Inked\_87
- Track 22 : MediumFry\_78
- Track 23 : Makai\_86, Truckee\_83

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

The start number called the most often in the published annotations is 20, it was called in 9 of the 22 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- CastorTray\_86, DevitoJr\_82, ElephantMan\_82, Inked\_87, Niktson\_82, ScienceWizSam\_84, Synopsis\_78, Tatanka\_76, Trustiboi\_81, Zippen\_87,

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

- AreFloNak\_87, CapnMurica\_78, MediumFry\_78, MiniBagel\_82, Nightmare\_84, Nivinsha\_84, Tenno\_81,

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

- Bouchard\_84, Chlochlo\_85, Darby\_81, Giantsbane\_87, LilHuddy\_85, LucySwiss\_83, Makai\_86, Phaby\_85, Shepard\_86, Tokki\_92, Truckee\_83,

### Summary by start number:

Start 12:

- Found in 2 of 28 ( 7.1% ) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: LucySwiss\_83 (AU1),

Start 13:

- Found in 4 of 28 ( 14.3% ) of genes in pham
- Manual Annotations of this start: 1 of 22
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Shepard\_86 (AU2),

Start 14:

- Found in 12 of 28 ( 42.9% ) of genes in pham
- Manual Annotations of this start: 5 of 22
- Called 50.0% of time when present
- Phage (with cluster) where this start called: AreFloNak\_87 (AU1), CapnMurica\_78 (AU1), MediumFry\_78 (AU4), MiniBagel\_82 (AU1), Nightmare\_84 (AU1), Tenno\_81 (AU1),

Start 18:

- Found in 9 of 28 ( 32.1% ) of genes in pham
- Manual Annotations of this start: 6 of 22
- Called 88.9% of time when present
- Phage (with cluster) where this start called: Bouchard\_84 (AU2), Chlochlo\_85 (AU2), Giantsbane\_87 (AU2), LilHuddy\_85 (AU2), Makai\_86 (AU5), Phaby\_85 (AU2), Tokki\_92 (AU2), Truckee\_83 (AU5),

Start 20:

- Found in 17 of 28 ( 60.7% ) of genes in pham
- Manual Annotations of this start: 9 of 22
- Called 58.8% of time when present
- Phage (with cluster) where this start called: CastorTray\_86 (AU1), DevitoJr\_82 (AU1), ElephantMan\_82 (AU1), Inked\_87 (AU), Niktson\_82 (AU1), ScienceWizSam\_84 (AU1), Synopsis\_78 (AU1), Tatanka\_76 (AU1), Trustiboi\_81 (AU1), Zippen\_87 (AU3),

Start 23:

- Found in 9 of 28 ( 32.1% ) of genes in pham
- Manual Annotations of this start: 1 of 22
- Called 22.2% of time when present
- Phage (with cluster) where this start called: Darby\_81 (AU1), Nivinsha\_84 (AU1),

### 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 20 was manually annotated 1 time for cluster AU.

Info for manual annotations of cluster AU1:

- Start number 14 was manually annotated 4 times for cluster AU1.
- Start number 20 was manually annotated 8 times for cluster AU1.
- Start number 23 was manually annotated 1 time for cluster AU1.

Info for manual annotations of cluster AU2:

- Start number 13 was manually annotated 1 time for cluster AU2.
- Start number 18 was manually annotated 4 times for cluster AU2.

Info for manual annotations of cluster AU4:

- Start number 14 was manually annotated 1 time for cluster AU4.

Info for manual annotations of cluster AU5:

- Start number 18 was manually annotated 2 times for cluster AU5.

### ***Gene Information:***

Gene: AreFloNak\_87 Start: 52158, Stop: 52448, Start Num: 14

Candidate Starts for AreFloNak\_87:

(2, 52050), (5, 52080), (8, 52119), (10, 52131), (Start: 14 @52158 has 5 MA's), (Start: 20 @52170 has 9 MA's), (31, 52263), (40, 52389), (44, 52410),

Gene: Bouchard\_84 Start: 52033, Stop: 52383, Start Num: 18

Candidate Starts for Bouchard\_84:

(Start: 18 @52033 has 6 MA's), (25, 52081), (35, 52192), (38, 52249), (45, 52324), (46, 52327),

Gene: CapnMurica\_78 Start: 52343, Stop: 52633, Start Num: 14

Candidate Starts for CapnMurica\_78:

(Start: 14 @52343 has 5 MA's), (Start: 20 @52355 has 9 MA's), (28, 52418), (31, 52448), (40, 52574), (41, 52580), (43, 52583), (44, 52595),

Gene: CastorTray\_86 Start: 52899, Stop: 53177, Start Num: 20

Candidate Starts for CastorTray\_86:

(Start: 14 @52887 has 5 MA's), (17, 52893), (Start: 20 @52899 has 9 MA's), (21, 52917), (Start: 23 @52926 has 1 MA's), (30, 52986), (31, 52992), (40, 53118), (44, 53139),

Gene: Chlochlo\_85 Start: 52195, Stop: 52539, Start Num: 18

Candidate Starts for Chlochlo\_85:

(Start: 13 @52180 has 1 MA's), (Start: 18 @52195 has 6 MA's), (35, 52354), (38, 52411), (42, 52435), (47, 52519),

Gene: Darby\_81 Start: 52415, Stop: 52666, Start Num: 23

Candidate Starts for Darby\_81:

(12, 52364), (15, 52379), (Start: 23 @52415 has 1 MA's), (24, 52418), (30, 52475), (31, 52481), (44, 52628),

Gene: DevitoJr\_82 Start: 52047, Stop: 52325, Start Num: 20

Candidate Starts for DevitoJr\_82:

(5, 51957), (9, 51999), (Start: 14 @52035 has 5 MA's), (Start: 20 @52047 has 9 MA's), (Start: 23 @52074 has 1 MA's), (24, 52077), (31, 52140), (32, 52146), (40, 52266), (43, 52275), (44, 52287),

Gene: ElephantMan\_82 Start: 52676, Stop: 53050, Start Num: 20

Candidate Starts for ElephantMan\_82:

(1, 52529), (3, 52571), (5, 52580), (16, 52664), (17, 52670), (Start: 20 @52676 has 9 MA's), (21, 52703), (27, 52748), (33, 52799), (34, 52835),

Gene: Giantsbane\_87 Start: 51659, Stop: 51931, Start Num: 18

Candidate Starts for Giantsbane\_87:

(Start: 13 @51644 has 1 MA's), (Start: 18 @51659 has 6 MA's), (25, 51704), (36, 51842),

Gene: Inked\_87 Start: 52710, Stop: 52988, Start Num: 20

Candidate Starts for Inked\_87:

(Start: 20 @52710 has 9 MA's), (24, 52740), (28, 52773), (39, 52923), (40, 52929), (44, 52950),

Gene: LilHuddy\_85 Start: 52109, Stop: 52459, Start Num: 18

Candidate Starts for LilHuddy\_85:

(6, 52022), (7, 52025), (Start: 18 @52109 has 6 MA's), (25, 52157), (38, 52325), (45, 52400),

Gene: LucySwiss\_83 Start: 52278, Stop: 52580, Start Num: 12

Candidate Starts for LucySwiss\_83:

(12, 52278), (15, 52293), (19, 52302), (Start: 23 @52329 has 1 MA's), (24, 52332), (30, 52389), (31, 52395), (40, 52521), (44, 52542),

Gene: Makai\_86 Start: 52779, Stop: 53117, Start Num: 18

Candidate Starts for Makai\_86:

(4, 52683), (Start: 18 @52779 has 6 MA's), (26, 52842), (27, 52845), (37, 52986), (47, 53097),

Gene: MediumFry\_78 Start: 51487, Stop: 51777, Start Num: 14

Candidate Starts for MediumFry\_78:

(Start: 14 @51487 has 5 MA's), (Start: 20 @51499 has 9 MA's), (29, 51568), (36, 51685), (39, 51712), (40, 51718), (44, 51739),

Gene: MiniBagel\_82 Start: 52344, Stop: 52637, Start Num: 14

Candidate Starts for MiniBagel\_82:

(11, 52326), (Start: 14 @52344 has 5 MA's), (17, 52350), (Start: 20 @52356 has 9 MA's), (28, 52419), (31, 52449), (40, 52575), (43, 52584), (44, 52596),

Gene: Nightmare\_84 Start: 52989, Stop: 53279, Start Num: 14

Candidate Starts for Nightmare\_84:

(5, 52911), (9, 52953), (Start: 14 @52989 has 5 MA's), (Start: 20 @53001 has 9 MA's), (Start: 23 @53028 has 1 MA's), (24, 53031), (31, 53094), (32, 53100), (40, 53220), (43, 53229), (44, 53241),

Gene: Niktson\_82 Start: 52676, Stop: 53050, Start Num: 20

Candidate Starts for Niktson\_82:

(1, 52529), (3, 52571), (5, 52580), (16, 52664), (17, 52670), (Start: 20 @52676 has 9 MA's), (21, 52703), (27, 52748), (33, 52799), (34, 52835),

Gene: Nivinsha\_84 Start: 52198, Stop: 52449, Start Num: 23

Candidate Starts for Nivinsha\_84:

(Start: 14 @52159 has 5 MA's), (17, 52165), (Start: 20 @52171 has 9 MA's), (22, 52195), (Start: 23 @52198 has 1 MA's), (24, 52201), (30, 52258), (31, 52264), (40, 52390), (44, 52411),

Gene: Phaby\_85 Start: 52012, Stop: 52362, Start Num: 18

Candidate Starts for Phaby\_85:

(Start: 18 @52012 has 6 MA's), (25, 52060), (35, 52171), (45, 52303),

Gene: ScienceWizSam\_84 Start: 52220, Stop: 52498, Start Num: 20

Candidate Starts for ScienceWizSam\_84:

(5, 52130), (9, 52172), (Start: 14 @52208 has 5 MA's), (Start: 20 @52220 has 9 MA's), (Start: 23 @52247 has 1 MA's), (24, 52250), (31, 52313), (32, 52319), (40, 52439), (43, 52448), (44, 52460),

Gene: Shepard\_86 Start: 52221, Stop: 52586, Start Num: 13

Candidate Starts for Shepard\_86:

(Start: 13 @52221 has 1 MA's), (Start: 18 @52236 has 6 MA's), (25, 52284), (38, 52452), (45, 52527),

Gene: Synopsis\_78 Start: 52058, Stop: 52336, Start Num: 20

Candidate Starts for Synopsis\_78:

(5, 51968), (9, 52010), (Start: 14 @52046 has 5 MA's), (Start: 20 @52058 has 9 MA's), (Start: 23 @52085 has 1 MA's), (24, 52088), (31, 52151), (32, 52157), (40, 52277), (43, 52286), (44, 52298),

Gene: Tatanka\_76 Start: 51974, Stop: 52252, Start Num: 20

Candidate Starts for Tatanka\_76:

(11, 51944), (17, 51968), (Start: 20 @51974 has 9 MA's), (31, 52067), (40, 52193), (43, 52202), (44, 52214),

Gene: Tenno\_81 Start: 52377, Stop: 52667, Start Num: 14

Candidate Starts for Tenno\_81:

(Start: 14 @52377 has 5 MA's), (Start: 20 @52389 has 9 MA's), (28, 52452), (31, 52482), (40, 52608), (43, 52617), (44, 52629),

Gene: Tokki\_92 Start: 52593, Stop: 52937, Start Num: 18

Candidate Starts for Tokki\_92:

(Start: 13 @52578 has 1 MA's), (Start: 18 @52593 has 6 MA's), (25, 52641), (35, 52752), (47, 52917),

Gene: Truckee\_83 Start: 52472, Stop: 52810, Start Num: 18

Candidate Starts for Truckee\_83:

(4, 52376), (Start: 18 @52472 has 6 MA's), (26, 52535), (27, 52538), (37, 52679), (47, 52790),

Gene: Trustiboi\_81 Start: 52407, Stop: 52685, Start Num: 20

Candidate Starts for Trustiboi\_81:

(1, 52266), (3, 52308), (8, 52356), (Start: 14 @52395 has 5 MA's), (17, 52401), (Start: 20 @52407 has 9 MA's), (21, 52425), (Start: 23 @52434 has 1 MA's), (24, 52437), (30, 52494), (31, 52500), (40, 52626), (44, 52647),

Gene: Zippen\_87 Start: 52752, Stop: 53030, Start Num: 20

Candidate Starts for Zippen\_87:

(Start: 20 @52752 has 9 MA's), (24, 52782), (28, 52815), (39, 52965), (40, 52971), (44, 52992),