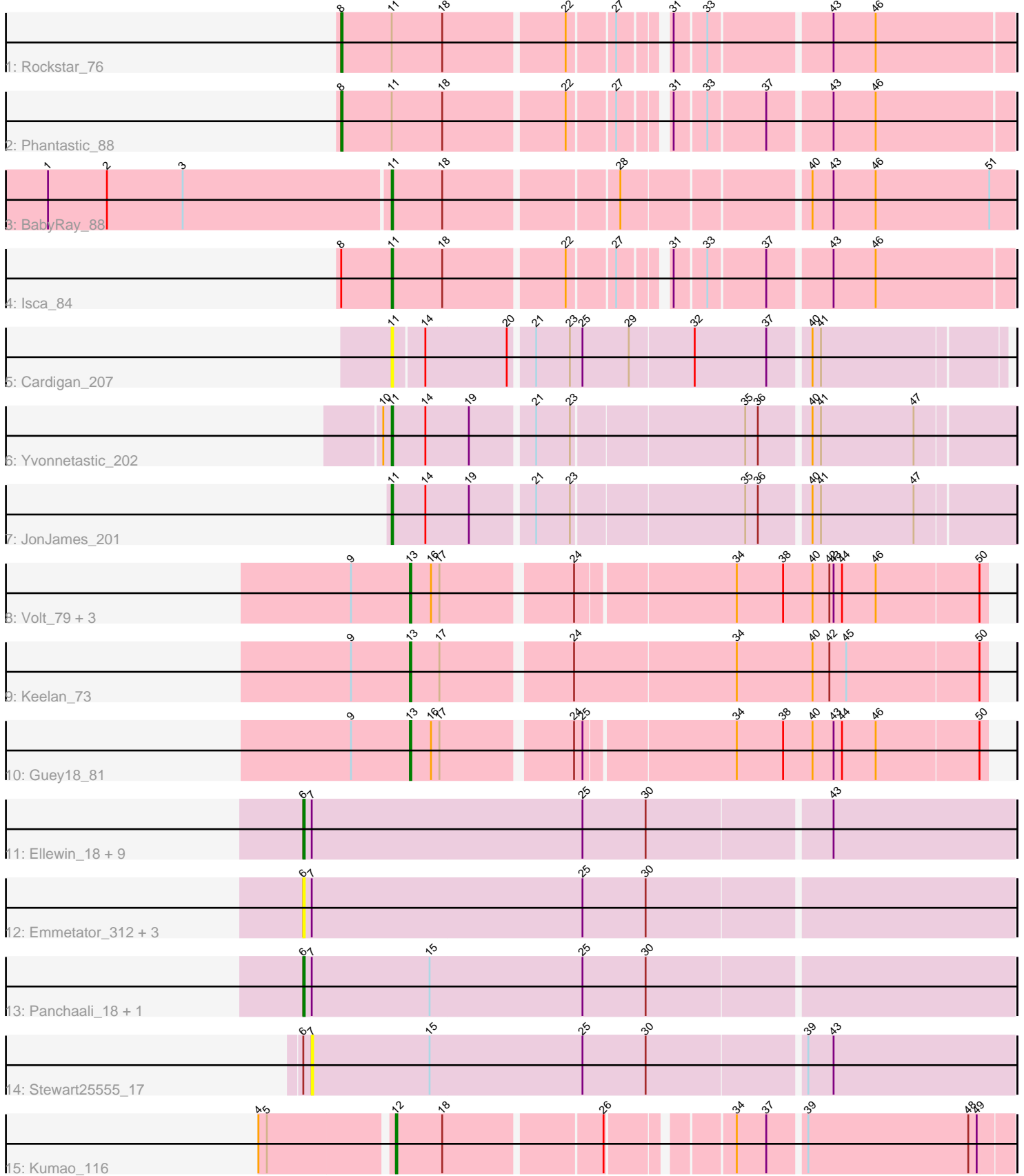


Pham 305214



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 305214 Report

This analysis was run 06/08/26 on database version 649.

Pham number 305214 has 31 members, 10 are drafts.

Phages represented in each track:

- Track 1 : Rockstar\_76
- Track 2 : Phantastic\_88
- Track 3 : BabyRay\_88
- Track 4 : Isca\_84
- Track 5 : Cardigan\_207
- Track 6 : Yvonnetastic\_202
- Track 7 : JonJames\_201
- Track 8 : Volt\_79, Ronaldo\_79, Ziko\_79, Fryberger\_75
- Track 9 : Keelan\_73
- Track 10 : Guey18\_81
- Track 11 : Ellewin\_18, KSunshine22\_311, Ellewin\_311, KSunshine22\_19, DunneganBoMo\_313, Artu\_19, WaddleDee\_308, Artu\_306, WaddleDee\_17, DunneganBoMo\_18
- Track 12 : Emmetator\_312, Emmetator\_18, BooTeria\_320, BooTeria\_21
- Track 13 : Panchaali\_18, Panchaali\_305
- Track 14 : Stewart25555\_17
- Track 15 : Kumao\_116

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

The start number called the most often in the published annotations is 6, it was called in 8 of the 21 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Artu\_19, Artu\_306, BooTeria\_21, BooTeria\_320, DunneganBoMo\_18, DunneganBoMo\_313, Ellewin\_18, Ellewin\_311, Emmetator\_18, Emmetator\_312, KSunshine22\_19, KSunshine22\_311, Panchaali\_18, Panchaali\_305, WaddleDee\_17, WaddleDee\_308,

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

- Stewart25555\_17,

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

- BabyRay\_88, Cardigan\_207, Fryberger\_75, Guey18\_81, Isca\_84, JonJames\_201, Keelan\_73, Kumao\_116, Phantastic\_88, Rockstar\_76, Ronaldo\_79, Volt\_79, Yvonnestic\_202, Ziko\_79,

### Summary by start number:

Start 6:

- Found in 17 of 31 ( 54.8% ) of genes in pham
- Manual Annotations of this start: 8 of 21
- Called 94.1% of time when present
- Phage (with cluster) where this start called: Artu\_19 (FC), Artu\_306 (FC), BooTeria\_21 (FC), BooTeria\_320 (FC), DunneganBoMo\_18 (FC), DunneganBoMo\_313 (FC), Ellewin\_18 (FC), Ellewin\_311 (FC), Emmetator\_18 (FC), Emmetator\_312 (FC), KSunshine22\_19 (FC), KSunshine22\_311 (FC), Panchaali\_18 (FC), Panchaali\_305 (FC), WaddleDee\_17 (FC), WaddleDee\_308 (FC),

Start 7:

- Found in 17 of 31 ( 54.8% ) of genes in pham
- No Manual Annotations of this start.
- Called 5.9% of time when present
- Phage (with cluster) where this start called: Stewart25555\_17 (FC),

Start 8:

- Found in 3 of 31 ( 9.7% ) of genes in pham
- Manual Annotations of this start: 2 of 21
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Phantastic\_88 (A3), Rockstar\_76 (A3),

Start 11:

- Found in 7 of 31 ( 22.6% ) of genes in pham
- Manual Annotations of this start: 4 of 21
- Called 71.4% of time when present
- Phage (with cluster) where this start called: BabyRay\_88 (A3), Cardigan\_207 (DD), Isca\_84 (A3), JonJames\_201 (DD), Yvonnestic\_202 (DD),

Start 12:

- Found in 1 of 31 ( 3.2% ) of genes in pham
- Manual Annotations of this start: 1 of 21
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kumao\_116 (singleton),

Start 13:

- Found in 6 of 31 ( 19.4% ) of genes in pham
- Manual Annotations of this start: 6 of 21
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Fryberger\_75 (DP), Guey18\_81 (DP), Keelan\_73 (DP), Ronaldo\_79 (DP), Volt\_79 (DP), Ziko\_79 (DP),

### Summary by clusters:

There are 5 clusters represented in this pham: DD, A3, FC, singleton, DP,

Info for manual annotations of cluster A3:

- Start number 8 was manually annotated 2 times for cluster A3.
- Start number 11 was manually annotated 2 times for cluster A3.

Info for manual annotations of cluster DD:

- Start number 11 was manually annotated 2 times for cluster DD.

Info for manual annotations of cluster DP:

- Start number 13 was manually annotated 6 times for cluster DP.

Info for manual annotations of cluster FC:

- Start number 6 was manually annotated 8 times for cluster FC.

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

Gene: Artu\_19 Start: 7846, Stop: 8343, Start Num: 6

Candidate Starts for Artu\_19:

(Start: 6 @7846 has 8 MA's), (7, 7852), (25, 8044), (30, 8089), (43, 8215),

Gene: Artu\_306 Start: 187000, Stop: 187497, Start Num: 6

Candidate Starts for Artu\_306:

(Start: 6 @187000 has 8 MA's), (7, 187006), (25, 187198), (30, 187243), (43, 187369),

Gene: BabyRay\_88 Start: 48407, Stop: 47991, Start Num: 11

Candidate Starts for BabyRay\_88:

(1, 48647), (2, 48605), (3, 48551), (Start: 11 @48407 has 4 MA's), (18, 48371), (28, 48257), (40, 48134), (43, 48119), (46, 48089), (51, 48008),

Gene: BooTeria\_320 Start: 187340, Stop: 187837, Start Num: 6

Candidate Starts for BooTeria\_320:

(Start: 6 @187340 has 8 MA's), (7, 187346), (25, 187538), (30, 187583),

Gene: BooTeria\_21 Start: 8431, Stop: 8928, Start Num: 6

Candidate Starts for BooTeria\_21:

(Start: 6 @8431 has 8 MA's), (7, 8437), (25, 8629), (30, 8674),

Gene: Cardigan\_207 Start: 98477, Stop: 98064, Start Num: 11

Candidate Starts for Cardigan\_207:

(Start: 11 @98477 has 4 MA's), (14, 98456), (20, 98399), (21, 98384), (23, 98360), (25, 98351), (29, 98318), (32, 98273), (37, 98222), (40, 98195), (41, 98189),

Gene: DunneganBoMo\_313 Start: 187774, Stop: 188271, Start Num: 6

Candidate Starts for DunneganBoMo\_313:

(Start: 6 @187774 has 8 MA's), (7, 187780), (25, 187972), (30, 188017), (43, 188143),

Gene: DunneganBoMo\_18 Start: 8362, Stop: 8859, Start Num: 6

Candidate Starts for DunneganBoMo\_18:

(Start: 6 @8362 has 8 MA's), (7, 8368), (25, 8560), (30, 8605), (43, 8731),

Gene: Ellewin\_18 Start: 8450, Stop: 8947, Start Num: 6

Candidate Starts for Ellewin\_18:

(Start: 6 @8450 has 8 MA's), (7, 8456), (25, 8648), (30, 8693), (43, 8819),

Gene: Ellewin\_311 Start: 187564, Stop: 188061, Start Num: 6  
Candidate Starts for Ellewin\_311:  
(Start: 6 @187564 has 8 MA's), (7, 187570), (25, 187762), (30, 187807), (43, 187933),

Gene: Emmetator\_312 Start: 186566, Stop: 187063, Start Num: 6  
Candidate Starts for Emmetator\_312:  
(Start: 6 @186566 has 8 MA's), (7, 186572), (25, 186764), (30, 186809),

Gene: Emmetator\_18 Start: 8266, Stop: 8763, Start Num: 6  
Candidate Starts for Emmetator\_18:  
(Start: 6 @8266 has 8 MA's), (7, 8272), (25, 8464), (30, 8509),

Gene: Fryberger\_75 Start: 40522, Stop: 40130, Start Num: 13  
Candidate Starts for Fryberger\_75:  
(9, 40564), (Start: 13 @40522 has 6 MA's), (16, 40507), (17, 40501), (24, 40414), (34, 40306), (38, 40273), (40, 40252), (42, 40240), (43, 40237), (44, 40231), (46, 40207), (50, 40135),

Gene: Guey18\_81 Start: 41893, Stop: 41501, Start Num: 13  
Candidate Starts for Guey18\_81:  
(9, 41935), (Start: 13 @41893 has 6 MA's), (16, 41878), (17, 41872), (24, 41785), (25, 41779), (34, 41677), (38, 41644), (40, 41623), (43, 41608), (44, 41602), (46, 41578), (50, 41506),

Gene: Isca\_84 Start: 47705, Stop: 47304, Start Num: 11  
Candidate Starts for Isca\_84:  
(Start: 8 @47741 has 2 MA's), (Start: 11 @47705 has 4 MA's), (18, 47669), (22, 47588), (27, 47558), (31, 47531), (33, 47510), (37, 47471), (43, 47429), (46, 47399),

Gene: JonJames\_201 Start: 99038, Stop: 98619, Start Num: 11  
Candidate Starts for JonJames\_201:  
(Start: 11 @99038 has 4 MA's), (14, 99014), (19, 98984), (21, 98942), (23, 98918), (35, 98801), (36, 98792), (40, 98759), (41, 98753), (47, 98687),

Gene: KSunshine22\_311 Start: 185876, Stop: 186373, Start Num: 6  
Candidate Starts for KSunshine22\_311:  
(Start: 6 @185876 has 8 MA's), (7, 185882), (25, 186074), (30, 186119), (43, 186245),

Gene: KSunshine22\_19 Start: 8975, Stop: 9472, Start Num: 6  
Candidate Starts for KSunshine22\_19:  
(Start: 6 @8975 has 8 MA's), (7, 8981), (25, 9173), (30, 9218), (43, 9344),

Gene: Keelan\_73 Start: 40361, Stop: 39963, Start Num: 13  
Candidate Starts for Keelan\_73:  
(9, 40403), (Start: 13 @40361 has 6 MA's), (17, 40340), (24, 40253), (34, 40139), (40, 40085), (42, 40073), (45, 40061), (50, 39968),

Gene: Kumao\_116 Start: 68785, Stop: 68384, Start Num: 12  
Candidate Starts for Kumao\_116:  
(4, 68875), (5, 68869), (Start: 12 @68785 has 1 MA's), (18, 68752), (26, 68647), (34, 68572), (37, 68551), (39, 68527), (48, 68413), (49, 68407),

Gene: Panchaali\_18 Start: 7794, Stop: 8291, Start Num: 6  
Candidate Starts for Panchaali\_18:

(Start: 6 @7794 has 8 MA's), (7, 7800), (15, 7884), (25, 7992), (30, 8037),

Gene: Panchaali\_305 Start: 186852, Stop: 187349, Start Num: 6

Candidate Starts for Panchaali\_305:

(Start: 6 @186852 has 8 MA's), (7, 186858), (15, 186942), (25, 187050), (30, 187095),

Gene: Phantastic\_88 Start: 47859, Stop: 47422, Start Num: 8

Candidate Starts for Phantastic\_88:

(Start: 8 @47859 has 2 MA's), (Start: 11 @47823 has 4 MA's), (18, 47787), (22, 47706), (27, 47676), (31, 47649), (33, 47628), (37, 47589), (43, 47547), (46, 47517),

Gene: Rockstar\_76 Start: 45549, Stop: 45112, Start Num: 8

Candidate Starts for Rockstar\_76:

(Start: 8 @45549 has 2 MA's), (Start: 11 @45513 has 4 MA's), (18, 45477), (22, 45396), (27, 45366), (31, 45339), (33, 45318), (43, 45237), (46, 45207),

Gene: Ronaldo\_79 Start: 41666, Stop: 41274, Start Num: 13

Candidate Starts for Ronaldo\_79:

(9, 41708), (Start: 13 @41666 has 6 MA's), (16, 41651), (17, 41645), (24, 41558), (34, 41450), (38, 41417), (40, 41396), (42, 41384), (43, 41381), (44, 41375), (46, 41351), (50, 41279),

Gene: Stewart25555\_17 Start: 8261, Stop: 8752, Start Num: 7

Candidate Starts for Stewart25555\_17:

(Start: 6 @8255 has 8 MA's), (7, 8261), (15, 8345), (25, 8453), (30, 8498), (39, 8606), (43, 8624),

Gene: Volt\_79 Start: 41830, Stop: 41438, Start Num: 13

Candidate Starts for Volt\_79:

(9, 41872), (Start: 13 @41830 has 6 MA's), (16, 41815), (17, 41809), (24, 41722), (34, 41614), (38, 41581), (40, 41560), (42, 41548), (43, 41545), (44, 41539), (46, 41515), (50, 41443),

Gene: WaddleDee\_308 Start: 186302, Stop: 186799, Start Num: 6

Candidate Starts for WaddleDee\_308:

(Start: 6 @186302 has 8 MA's), (7, 186308), (25, 186500), (30, 186545), (43, 186671),

Gene: WaddleDee\_17 Start: 8107, Stop: 8604, Start Num: 6

Candidate Starts for WaddleDee\_17:

(Start: 6 @8107 has 8 MA's), (7, 8113), (25, 8305), (30, 8350), (43, 8476),

Gene: Yvonnetastic\_202 Start: 96089, Stop: 95670, Start Num: 11

Candidate Starts for Yvonnetastic\_202:

(10, 96095), (Start: 11 @96089 has 4 MA's), (14, 96065), (19, 96035), (21, 95993), (23, 95969), (35, 95852), (36, 95843), (40, 95810), (41, 95804), (47, 95738),

Gene: Ziko\_79 Start: 41652, Stop: 41260, Start Num: 13

Candidate Starts for Ziko\_79:

(9, 41694), (Start: 13 @41652 has 6 MA's), (16, 41637), (17, 41631), (24, 41544), (34, 41436), (38, 41403), (40, 41382), (42, 41370), (43, 41367), (44, 41361), (46, 41337), (50, 41265),