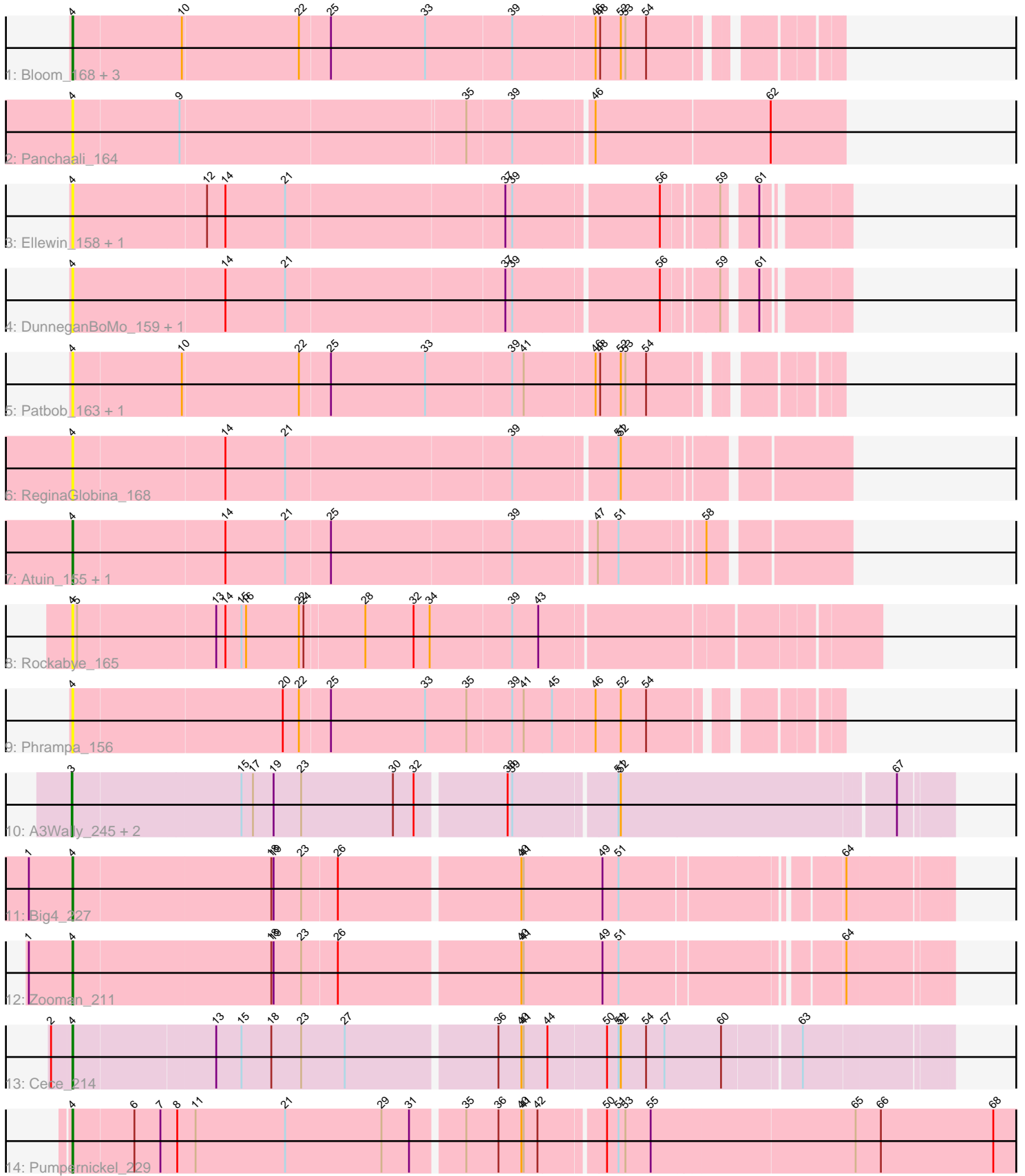


Pham 214616



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 214616 Report

This analysis was run 02/22/25 on database version 588.

Pham number 214616 has 23 members, 13 are drafts.

Phages represented in each track:

- Track 1 : Bloom\_168, Talia1610\_165, Racecar\_166, Mimi\_165
- Track 2 : Panchaali\_164
- Track 3 : Ellewin\_158, WaddleDee\_158
- Track 4 : DunneganBoMo\_159, KSunshine22\_157
- Track 5 : Patbob\_163, GoldenEssence\_151
- Track 6 : ReginaGlobina\_168
- Track 7 : Atuin\_155, LeoJr\_165
- Track 8 : Rockabye\_165
- Track 9 : Phrampa\_156
- Track 10 : A3Wally\_245, PauloDiaboli\_245, Dodo\_243
- Track 11 : Big4\_227
- Track 12 : Zooman\_211
- Track 13 : Cece\_214
- Track 14 : Pumpernickel\_229

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

The start number called the most often in the published annotations is 4, it was called in 8 of the 10 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Atuin\_155, Big4\_227, Bloom\_168, Cece\_214, DunneganBoMo\_159, Ellewin\_158, GoldenEssence\_151, KSunshine22\_157, LeoJr\_165, Mimi\_165, Panchaali\_164, Patbob\_163, Phrampa\_156, Pumpernickel\_229, Racecar\_166, ReginaGlobina\_168, Rockabye\_165, Talia1610\_165, WaddleDee\_158, Zooman\_211,

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

- 

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

- A3Wally\_245, Dodo\_243, PauloDiaboli\_245,

### **Summary by start number:**

#### Start 3:

- Found in 3 of 23 ( 13.0% ) of genes in pham
- Manual Annotations of this start: 2 of 10
- Called 100.0% of time when present
- Phage (with cluster) where this start called: A3Wally\_245 (GD1), Dodo\_243 (GD1), PauloDiaboli\_245 (GD1),

#### Start 4:

- Found in 20 of 23 ( 87.0% ) of genes in pham
- Manual Annotations of this start: 8 of 10
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Atuin\_155 (FC), Big4\_227 (GD2), Bloom\_168 (FC), Cece\_214 (GD3), DunneganBoMo\_159 (FC), Ellewin\_158 (FC), GoldenEssence\_151 (FC), KSunshine22\_157 (FC), LeoJr\_165 (FC), Mimi\_165 (FC), Panchaali\_164 (FC), Patbob\_163 (FC), Phrampa\_156 (FC), Pumpernickel\_229 (GD4), Racecar\_166 (FC), ReginaGlobina\_168 (FC), Rockabye\_165 (FC), Talia1610\_165 (FC), WaddleDee\_158 (FC), Zooman\_211 (GD2),

#### Summary by clusters:

There are 5 clusters represented in this pham: GD3, GD1, GD2, FC, GD4,

Info for manual annotations of cluster FC:

- Start number 4 was manually annotated 4 times for cluster FC.

Info for manual annotations of cluster GD1:

- Start number 3 was manually annotated 2 times for cluster GD1.

Info for manual annotations of cluster GD2:

- Start number 4 was manually annotated 2 times for cluster GD2.

Info for manual annotations of cluster GD3:

- Start number 4 was manually annotated 1 time for cluster GD3.

Info for manual annotations of cluster GD4:

- Start number 4 was manually annotated 1 time for cluster GD4.

#### **Gene Information:**

Gene: A3Wally\_245 Start: 136573, Stop: 137667, Start Num: 3

Candidate Starts for A3Wally\_245:

(Start: 3 @136573 has 2 MA's), (15, 136786), (17, 136801), (19, 136828), (23, 136864), (30, 136984), (32, 137011), (38, 137122), (39, 137128), (51, 137254), (52, 137257), (67, 137602),

Gene: Atuin\_155 Start: 109227, Stop: 110180, Start Num: 4

Candidate Starts for Atuin\_155:

(Start: 4 @109227 has 8 MA's), (14, 109419), (21, 109497), (25, 109554), (39, 109785), (47, 109884), (51, 109911), (58, 110013),

Gene: Big4\_227 Start: 130843, Stop: 131916, Start Num: 4

Candidate Starts for Big4\_227:

(1, 130786), (Start: 4 @130843 has 8 MA's), (18, 131098), (19, 131101), (23, 131137), (26, 131182), (40, 131410), (41, 131413), (49, 131515), (51, 131536), (64, 131791),

Gene: Bloom\_168 Start: 110490, Stop: 111422, Start Num: 4

Candidate Starts for Bloom\_168:

(Start: 4 @110490 has 8 MA's), (10, 110628), (22, 110778), (25, 110817), (33, 110940), (39, 111051), (46, 111156), (48, 111162), (52, 111189), (53, 111195), (54, 111222),

Gene: Cece\_214 Start: 131006, Stop: 132100, Start Num: 4

Candidate Starts for Cece\_214:

(2, 130982), (Start: 4 @131006 has 8 MA's), (13, 131186), (15, 131219), (18, 131258), (23, 131297), (27, 131354), (36, 131543), (40, 131573), (41, 131576), (44, 131606), (50, 131681), (51, 131696), (52, 131699), (54, 131732), (57, 131756), (60, 131828), (63, 131921),

Gene: Dodo\_243 Start: 136257, Stop: 137351, Start Num: 3

Candidate Starts for Dodo\_243:

(Start: 3 @136257 has 2 MA's), (15, 136470), (17, 136485), (19, 136512), (23, 136548), (30, 136668), (32, 136695), (38, 136806), (39, 136812), (51, 136938), (52, 136941), (67, 137286),

Gene: DunneganBoMo\_159 Start: 106136, Stop: 107074, Start Num: 4

Candidate Starts for DunneganBoMo\_159:

(Start: 4 @106136 has 8 MA's), (14, 106331), (21, 106409), (37, 106688), (39, 106697), (56, 106877), (59, 106943), (61, 106979),

Gene: Ellewin\_158 Start: 106240, Stop: 107178, Start Num: 4

Candidate Starts for Ellewin\_158:

(Start: 4 @106240 has 8 MA's), (12, 106411), (14, 106435), (21, 106513), (37, 106792), (39, 106801), (56, 106981), (59, 107047), (61, 107083),

Gene: GoldenEssence\_151 Start: 103906, Stop: 104838, Start Num: 4

Candidate Starts for GoldenEssence\_151:

(Start: 4 @103906 has 8 MA's), (10, 104044), (22, 104194), (25, 104233), (33, 104356), (39, 104467), (41, 104482), (46, 104572), (48, 104578), (52, 104605), (53, 104611), (54, 104638),

Gene: KSunshine22\_157 Start: 107199, Stop: 108137, Start Num: 4

Candidate Starts for KSunshine22\_157:

(Start: 4 @107199 has 8 MA's), (14, 107394), (21, 107472), (37, 107751), (39, 107760), (56, 107940), (59, 108006), (61, 108042),

Gene: LeoJr\_165 Start: 109835, Stop: 110788, Start Num: 4

Candidate Starts for LeoJr\_165:

(Start: 4 @109835 has 8 MA's), (14, 110027), (21, 110105), (25, 110162), (39, 110393), (47, 110492), (51, 110519), (58, 110621),

Gene: Mimi\_165 Start: 110115, Stop: 111047, Start Num: 4

Candidate Starts for Mimi\_165:

(Start: 4 @110115 has 8 MA's), (10, 110253), (22, 110403), (25, 110442), (33, 110565), (39, 110676), (46, 110781), (48, 110787), (52, 110814), (53, 110820), (54, 110847),

Gene: Panchaali\_164 Start: 106936, Stop: 107907, Start Num: 4

Candidate Starts for Panchaali\_164:

(Start: 4 @106936 has 8 MA's), (9, 107071), (35, 107434), (39, 107491), (46, 107587), (62, 107812),

Gene: Patbob\_163 Start: 110620, Stop: 111552, Start Num: 4

Candidate Starts for Patbob\_163:

(Start: 4 @110620 has 8 MA's), (10, 110758), (22, 110908), (25, 110947), (33, 111070), (39, 111181), (41, 111196), (46, 111286), (48, 111292), (52, 111319), (53, 111325), (54, 111352),

Gene: PauloDiaboli\_245 Start: 133773, Stop: 134867, Start Num: 3

Candidate Starts for PauloDiaboli\_245:

(Start: 3 @133773 has 2 MA's), (15, 133986), (17, 134001), (19, 134028), (23, 134064), (30, 134184), (32, 134211), (38, 134322), (39, 134328), (51, 134454), (52, 134457), (67, 134802),

Gene: Phrampa\_156 Start: 111690, Stop: 112622, Start Num: 4

Candidate Starts for Phrampa\_156:

(Start: 4 @111690 has 8 MA's), (20, 111957), (22, 111978), (25, 112017), (33, 112140), (35, 112194), (39, 112251), (41, 112266), (45, 112302), (46, 112356), (52, 112389), (54, 112422),

Gene: Pumpernickel\_229 Start: 135524, Stop: 136747, Start Num: 4

Candidate Starts for Pumpernickel\_229:

(Start: 4 @135524 has 8 MA's), (6, 135602), (7, 135635), (8, 135656), (11, 135680), (21, 135797), (29, 135923), (31, 135959), (35, 136022), (36, 136064), (40, 136094), (41, 136097), (42, 136115), (50, 136193), (51, 136208), (53, 136217), (55, 136250), (65, 136508), (66, 136541), (68, 136688),

Gene: Racecar\_166 Start: 111081, Stop: 112013, Start Num: 4

Candidate Starts for Racecar\_166:

(Start: 4 @111081 has 8 MA's), (10, 111219), (22, 111369), (25, 111408), (33, 111531), (39, 111642), (46, 111747), (48, 111753), (52, 111780), (53, 111786), (54, 111813),

Gene: ReginaGlobina\_168 Start: 111109, Stop: 112062, Start Num: 4

Candidate Starts for ReginaGlobina\_168:

(Start: 4 @111109 has 8 MA's), (14, 111301), (21, 111379), (39, 111667), (51, 111793), (52, 111796),

Gene: Rockabye\_165 Start: 101877, Stop: 102878, Start Num: 4

Candidate Starts for Rockabye\_165:

(Start: 4 @101877 has 8 MA's), (5, 101883), (13, 102057), (14, 102069), (15, 102090), (16, 102096), (22, 102165), (24, 102171), (28, 102246), (32, 102309), (34, 102330), (39, 102435), (43, 102468),

Gene: Talia1610\_165 Start: 110492, Stop: 111424, Start Num: 4

Candidate Starts for Talia1610\_165:

(Start: 4 @110492 has 8 MA's), (10, 110630), (22, 110780), (25, 110819), (33, 110942), (39, 111053), (46, 111158), (48, 111164), (52, 111191), (53, 111197), (54, 111224),

Gene: WaddleDee\_158 Start: 105322, Stop: 106260, Start Num: 4

Candidate Starts for WaddleDee\_158:

(Start: 4 @105322 has 8 MA's), (12, 105493), (14, 105517), (21, 105595), (37, 105874), (39, 105883), (56, 106063), (59, 106129), (61, 106165),

Gene: Zooman\_211 Start: 129709, Stop: 130782, Start Num: 4

Candidate Starts for Zooman\_211:

(1, 129652), (Start: 4 @129709 has 8 MA's), (18, 129964), (19, 129967), (23, 130003), (26, 130048), (40, 130276), (41, 130279), (49, 130381), (51, 130402), (64, 130657),