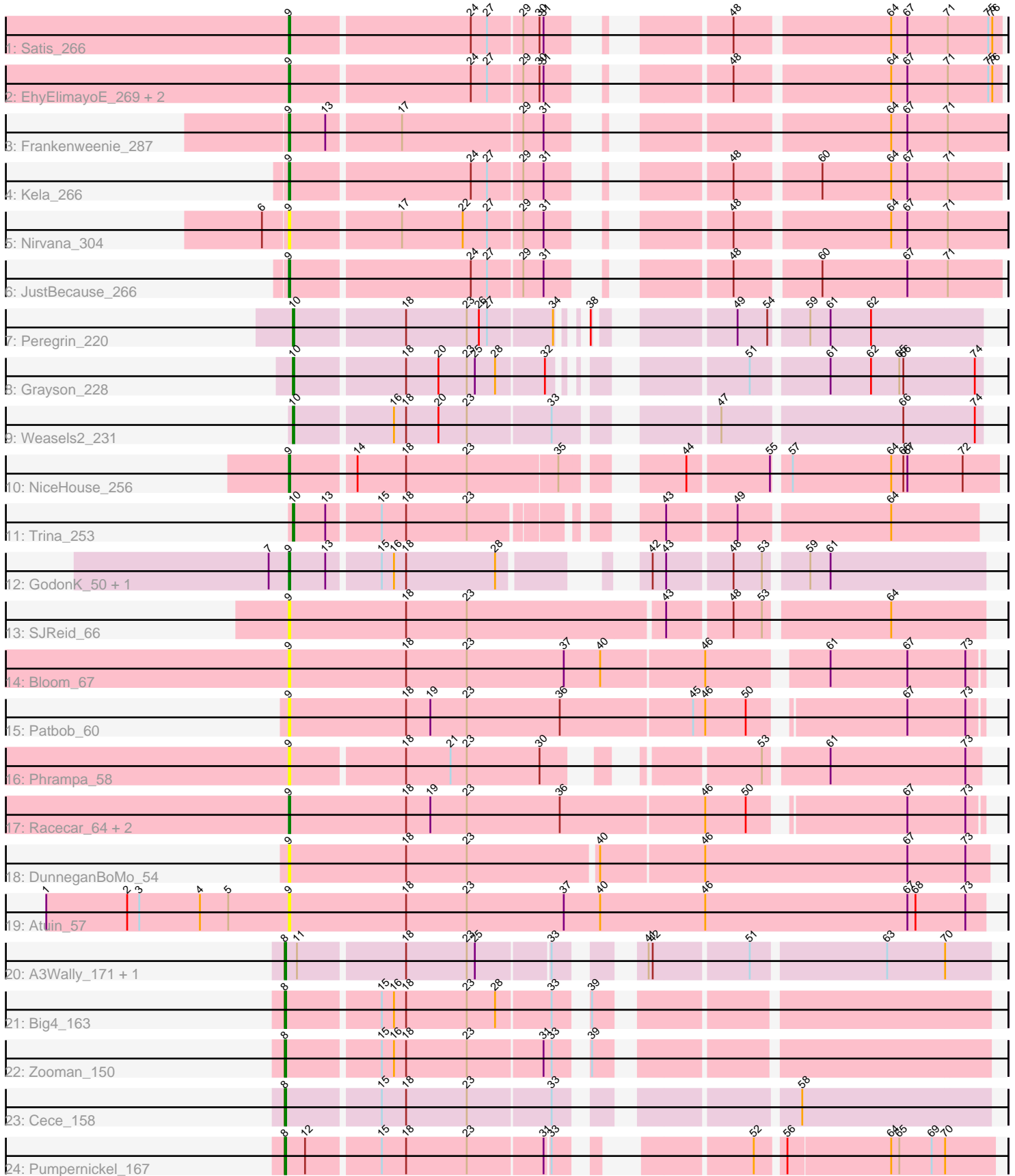


Pham 196724



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 196724 Report

This analysis was run 12/09/24 on database version 580.

Pham number 196724 has 30 members, 8 are drafts.

Phages represented in each track:

- Track 1 : Satis\_266
- Track 2 : EhyElimayoE\_269, Kradal\_266, Quantum\_264
- Track 3 : Frankenweenie\_287
- Track 4 : Kela\_266
- Track 5 : Nirvana\_304
- Track 6 : JustBecause\_266
- Track 7 : Peregrin\_220
- Track 8 : Grayson\_228
- Track 9 : Weasels2\_231
- Track 10 : NiceHouse\_256
- Track 11 : Trina\_253
- Track 12 : GodonK\_50, Phendrix\_50
- Track 13 : SJReid\_66
- Track 14 : Bloom\_67
- Track 15 : Patbob\_60
- Track 16 : Phrampa\_58
- Track 17 : Racecar\_64, Talia1610\_63, Mimi\_69
- Track 18 : DunneganBoMo\_54
- Track 19 : Atuin\_57
- Track 20 : A3Wally\_171, PauloDiaboli\_171
- Track 21 : Big4\_163
- Track 22 : Zooman\_150
- Track 23 : Cece\_158
- Track 24 : Pumpnickel\_167

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

The start number called the most often in the published annotations is 9, it was called in 12 of the 22 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Atuin\_57, Bloom\_67, DunneganBoMo\_54, EhyElimayoE\_269, Frankenweenie\_287, GodonK\_50, JustBecause\_266, Kela\_266, Kradal\_266, Mimi\_69, NiceHouse\_256, Nirvana\_304, Patbob\_60, Phendrix\_50, Phrampa\_58, Quantum\_264, Racecar\_64,

SJReid\_66, Satis\_266, Talia1610\_63,

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

- 

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

- A3Wally\_171, Big4\_163, Cece\_158, Grayson\_228, PauloDiaboli\_171, Peregrin\_220, Pumpernickel\_167, Trina\_253, Weasels2\_231, Zooman\_150,

### Summary by start number:

Start 8:

- Found in 6 of 30 ( 20.0% ) of genes in pham
- Manual Annotations of this start: 6 of 22
- Called 100.0% of time when present
- Phage (with cluster) where this start called: A3Wally\_171 (GD1), Big4\_163 (GD2), Cece\_158 (GD3), PauloDiaboli\_171 (GD1), Pumpernickel\_167 (GD4), Zooman\_150 (GD2),

Start 9:

- Found in 20 of 30 ( 66.7% ) of genes in pham
- Manual Annotations of this start: 12 of 22
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Atuin\_57 (FC), Bloom\_67 (FC), DunneganBoMo\_54 (FC), EhyElimayoE\_269 (BM), Frankenweenie\_287 (BM), GodonK\_50 (DK), JustBecause\_266 (BM), Kela\_266 (BM), Kradal\_266 (BM), Mimi\_69 (FC), NiceHouse\_256 (CE), Nirvana\_304 (BM), Patbob\_60 (FC), Phendrix\_50 (DK), Phrampa\_58 (FC), Quantum\_264 (BM), Racecar\_64 (FC), SJReid\_66 (FC), Satis\_266 (BM), Talia1610\_63 (FC),

Start 10:

- Found in 4 of 30 ( 13.3% ) of genes in pham
- Manual Annotations of this start: 4 of 22
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Grayson\_228 (CB), Peregrin\_220 (CB), Trina\_253 (CE), Weasels2\_231 (CB),

### Summary by clusters:

There are 9 clusters represented in this pham: GD1, GD2, GD3, GD4, DK, BM, CE, FC, CB,

Info for manual annotations of cluster BM:

- Start number 9 was manually annotated 7 times for cluster BM.

Info for manual annotations of cluster CB:

- Start number 10 was manually annotated 3 times for cluster CB.

Info for manual annotations of cluster CE:

- Start number 9 was manually annotated 1 time for cluster CE.
- Start number 10 was manually annotated 1 time for cluster CE.

Info for manual annotations of cluster DK:

- Start number 9 was manually annotated 2 times for cluster DK.

Info for manual annotations of cluster FC:

- Start number 9 was manually annotated 2 times for cluster FC.

Info for manual annotations of cluster GD1:

- Start number 8 was manually annotated 2 times for cluster GD1.

Info for manual annotations of cluster GD2:

- Start number 8 was manually annotated 2 times for cluster GD2.

Info for manual annotations of cluster GD3:

- Start number 8 was manually annotated 1 time for cluster GD3.

Info for manual annotations of cluster GD4:

- Start number 8 was manually annotated 1 time for cluster GD4.

### **Gene Information:**

Gene: A3Wally\_171 Start: 96202, Stop: 96663, Start Num: 8

Candidate Starts for A3Wally\_171:

(Start: 8 @96202 has 6 MA's), (11, 96211), (18, 96286), (23, 96331), (25, 96337), (33, 96388), (41, 96427), (42, 96430), (51, 96496), (63, 96589), (70, 96631),

Gene: Atuin\_57 Start: 22728, Stop: 23243, Start Num: 9

Candidate Starts for Atuin\_57:

(1, 22548), (2, 22608), (3, 22617), (4, 22662), (5, 22683), (Start: 9 @22728 has 12 MA's), (18, 22815), (23, 22860), (37, 22932), (40, 22959), (46, 23037), (67, 23187), (68, 23193), (73, 23229),

Gene: Big4\_163 Start: 93329, Stop: 93793, Start Num: 8

Candidate Starts for Big4\_163:

(Start: 8 @93329 has 6 MA's), (15, 93395), (16, 93404), (18, 93413), (23, 93458), (28, 93479), (33, 93518), (39, 93533),

Gene: Bloom\_67 Start: 26741, Stop: 27235, Start Num: 9

Candidate Starts for Bloom\_67:

(Start: 9 @26741 has 12 MA's), (18, 26828), (23, 26873), (37, 26945), (40, 26972), (46, 27047), (61, 27125), (67, 27182), (73, 27224),

Gene: Cece\_158 Start: 98749, Stop: 99213, Start Num: 8

Candidate Starts for Cece\_158:

(Start: 8 @98749 has 6 MA's), (15, 98815), (18, 98833), (23, 98878), (33, 98938), (58, 99076),

Gene: DunneganBoMo\_54 Start: 20816, Stop: 21325, Start Num: 9

Candidate Starts for DunneganBoMo\_54:

(Start: 9 @20816 has 12 MA's), (18, 20903), (23, 20948), (40, 21041), (46, 21116), (67, 21266), (73, 21308),

Gene: EhyElimayoE\_269 Start: 153102, Stop: 152647, Start Num: 9

Candidate Starts for EhyElimayoE\_269:

(Start: 9 @153102 has 12 MA's), (24, 152973), (27, 152961), (29, 152937), (30, 152925), (31, 152922), (48, 152835), (64, 152727), (67, 152715), (71, 152685), (75, 152655), (76, 152652),

Gene: Frankenweenie\_287 Start: 164243, Stop: 163782, Start Num: 9

Candidate Starts for Frankenweenie\_287:

(Start: 9 @164243 has 12 MA's), (13, 164216), (17, 164165), (29, 164078), (31, 164063), (64, 163868), (67, 163856), (71, 163826),

Gene: GodonK\_50 Start: 16803, Stop: 17243, Start Num: 9

Candidate Starts for GodonK\_50:

(7, 16788), (Start: 9 @16803 has 12 MA's), (13, 16830), (15, 16866), (16, 16875), (18, 16884), (28, 16950), (42, 17013), (43, 17022), (48, 17067), (53, 17088), (59, 17115), (61, 17130),

Gene: Grayson\_228 Start: 111586, Stop: 112026, Start Num: 10

Candidate Starts for Grayson\_228:

(Start: 10 @111586 has 4 MA's), (18, 111664), (20, 111688), (23, 111709), (25, 111715), (28, 111730), (32, 111763), (51, 111865), (61, 111916), (62, 111946), (65, 111967), (66, 111970), (74, 112021),

Gene: JustBecause\_266 Start: 149782, Stop: 149327, Start Num: 9

Candidate Starts for JustBecause\_266:

(Start: 9 @149782 has 12 MA's), (24, 149653), (27, 149641), (29, 149617), (31, 149602), (48, 149515), (60, 149458), (67, 149395), (71, 149365),

Gene: Kela\_266 Start: 151386, Stop: 150931, Start Num: 9

Candidate Starts for Kela\_266:

(Start: 9 @151386 has 12 MA's), (24, 151257), (27, 151245), (29, 151221), (31, 151206), (48, 151119), (60, 151062), (64, 151011), (67, 150999), (71, 150969),

Gene: Kradal\_266 Start: 153099, Stop: 152644, Start Num: 9

Candidate Starts for Kradal\_266:

(Start: 9 @153099 has 12 MA's), (24, 152970), (27, 152958), (29, 152934), (30, 152922), (31, 152919), (48, 152832), (64, 152724), (67, 152712), (71, 152682), (75, 152652), (76, 152649),

Gene: Mimi\_69 Start: 26091, Stop: 26582, Start Num: 9

Candidate Starts for Mimi\_69:

(Start: 9 @26091 has 12 MA's), (18, 26178), (19, 26196), (23, 26223), (36, 26292), (46, 26397), (50, 26427), (67, 26529), (73, 26571),

Gene: NiceHouse\_256 Start: 128727, Stop: 129197, Start Num: 9

Candidate Starts for NiceHouse\_256:

(Start: 9 @128727 has 12 MA's), (14, 128772), (18, 128808), (23, 128853), (35, 128919), (44, 128982), (55, 129039), (57, 129048), (64, 129120), (66, 129129), (67, 129132), (72, 129171),

Gene: Nirvana\_304 Start: 164957, Stop: 164496, Start Num: 9

Candidate Starts for Nirvana\_304:

(6, 164975), (Start: 9 @164957 has 12 MA's), (17, 164879), (22, 164834), (27, 164816), (29, 164792), (31, 164777), (48, 164690), (64, 164582), (67, 164570), (71, 164540),

Gene: Patbob\_60 Start: 25547, Stop: 26038, Start Num: 9

Candidate Starts for Patbob\_60:

(Start: 9 @25547 has 12 MA's), (18, 25634), (19, 25652), (23, 25679), (36, 25748), (45, 25844), (46, 25853), (50, 25883), (67, 25985), (73, 26027),

Gene: PauloDiaboli\_171 Start: 94249, Stop: 94710, Start Num: 8

Candidate Starts for PauloDiaboli\_171:

(Start: 8 @94249 has 6 MA's), (11, 94258), (18, 94333), (23, 94378), (25, 94384), (33, 94435), (41, 94474), (42, 94477), (51, 94543), (63, 94636), (70, 94678),

Gene: Peregrin\_220 Start: 110987, Stop: 111421, Start Num: 10

Candidate Starts for Peregrin\_220:

(Start: 10 @110987 has 4 MA's), (18, 111065), (23, 111110), (26, 111119), (27, 111125), (34, 111170), (38, 111176), (49, 111251), (54, 111272), (59, 111296), (61, 111311), (62, 111341),

Gene: Phendrix\_50 Start: 16816, Stop: 17256, Start Num: 9

Candidate Starts for Phendrix\_50:

(7, 16801), (Start: 9 @16816 has 12 MA's), (13, 16843), (15, 16879), (16, 16888), (18, 16897), (28, 16963), (42, 17026), (43, 17035), (48, 17080), (53, 17101), (59, 17128), (61, 17143),

Gene: Phrampa\_58 Start: 23330, Stop: 23773, Start Num: 9

Candidate Starts for Phrampa\_58:

(Start: 9 @23330 has 12 MA's), (18, 23411), (21, 23444), (23, 23456), (30, 23510), (53, 23621), (61, 23663), (73, 23762),

Gene: Pumpernickel\_167 Start: 96347, Stop: 96799, Start Num: 8

Candidate Starts for Pumpernickel\_167:

(Start: 8 @96347 has 6 MA's), (12, 96362), (15, 96413), (18, 96431), (23, 96476), (31, 96530), (33, 96533), (52, 96632), (56, 96650), (64, 96725), (65, 96731), (69, 96755), (70, 96764),

Gene: Quantum\_264 Start: 153093, Stop: 152638, Start Num: 9

Candidate Starts for Quantum\_264:

(Start: 9 @153093 has 12 MA's), (24, 152964), (27, 152952), (29, 152928), (30, 152916), (31, 152913), (48, 152826), (64, 152718), (67, 152706), (71, 152676), (75, 152646), (76, 152643),

Gene: Racecar\_64 Start: 26744, Stop: 27235, Start Num: 9

Candidate Starts for Racecar\_64:

(Start: 9 @26744 has 12 MA's), (18, 26831), (19, 26849), (23, 26876), (36, 26945), (46, 27050), (50, 27080), (67, 27182), (73, 27224),

Gene: SJReid\_66 Start: 26527, Stop: 27021, Start Num: 9

Candidate Starts for SJReid\_66:

(Start: 9 @26527 has 12 MA's), (18, 26614), (23, 26659), (43, 26800), (48, 26845), (53, 26866), (64, 26953),

Gene: Satis\_266 Start: 153436, Stop: 152981, Start Num: 9

Candidate Starts for Satis\_266:

(Start: 9 @153436 has 12 MA's), (24, 153307), (27, 153295), (29, 153271), (30, 153259), (31, 153256), (48, 153169), (64, 153061), (67, 153049), (71, 153019), (75, 152989), (76, 152986),

Gene: Talia1610\_63 Start: 26109, Stop: 26600, Start Num: 9

Candidate Starts for Talia1610\_63:

(Start: 9 @26109 has 12 MA's), (18, 26196), (19, 26214), (23, 26241), (36, 26310), (46, 26415), (50, 26445), (67, 26547), (73, 26589),

Gene: Trina\_253 Start: 127069, Stop: 127509, Start Num: 10

Candidate Starts for Trina\_253:

(Start: 10 @127069 has 4 MA's), (13, 127093), (15, 127129), (18, 127147), (23, 127192), (43, 127294), (49, 127342), (64, 127447),

Gene: Weasels2\_231 Start: 113792, Stop: 114247, Start Num: 10

Candidate Starts for Weasels2\_231:

(Start: 10 @113792 has 4 MA's), (16, 113861), (18, 113870), (20, 113894), (23, 113915), (33, 113975), (47, 114065), (66, 114191), (74, 114242),

Gene: Zooman\_150 Start: 90927, Stop: 91391, Start Num: 8

Candidate Starts for Zooman\_150:

(Start: 8 @90927 has 6 MA's), (15, 90993), (16, 91002), (18, 91011), (23, 91056), (31, 91110), (33, 91116), (39, 91131),