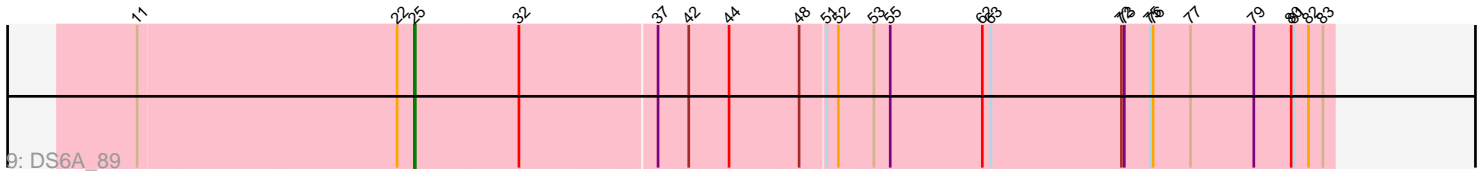
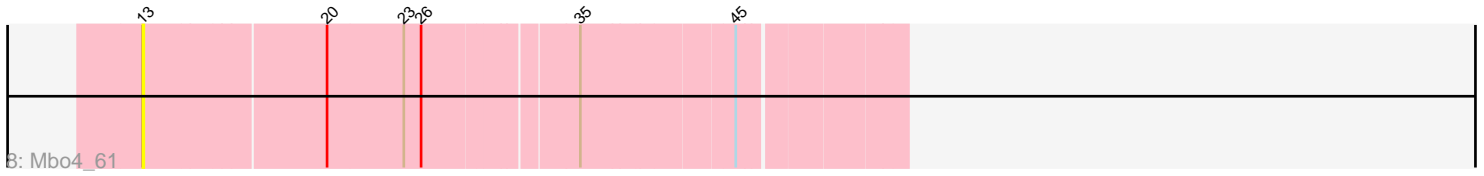
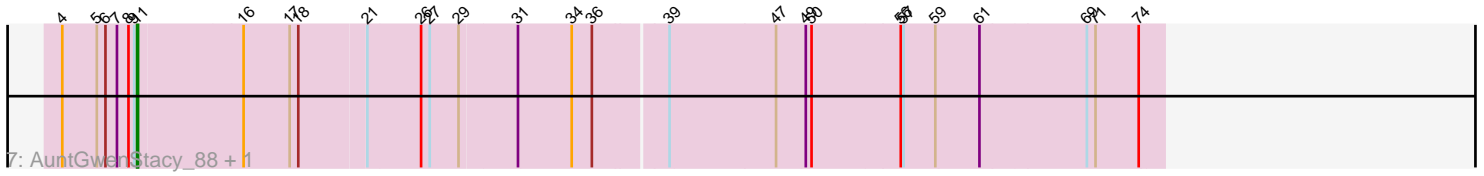
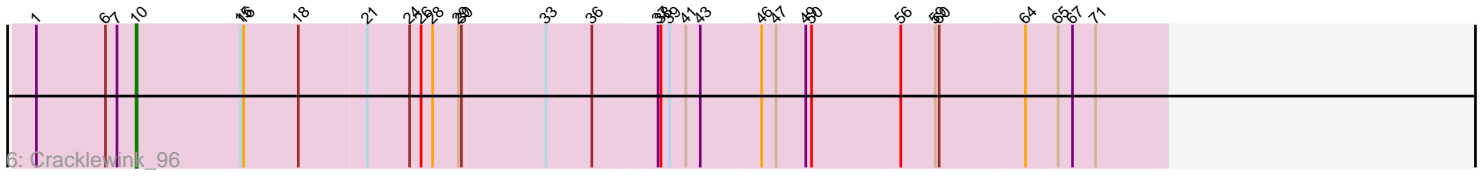
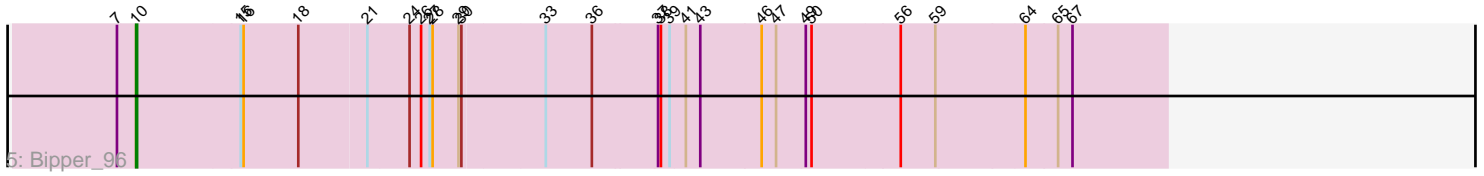
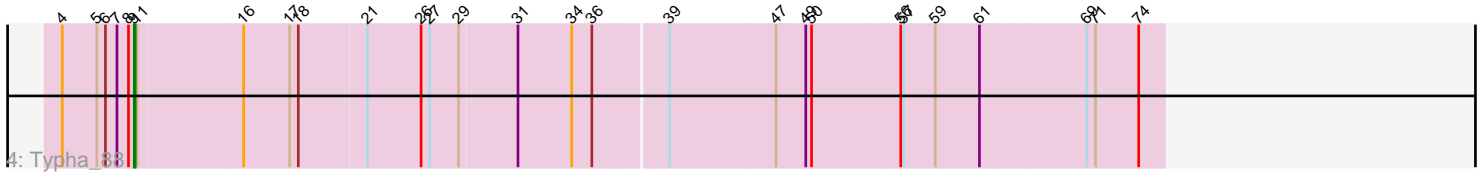
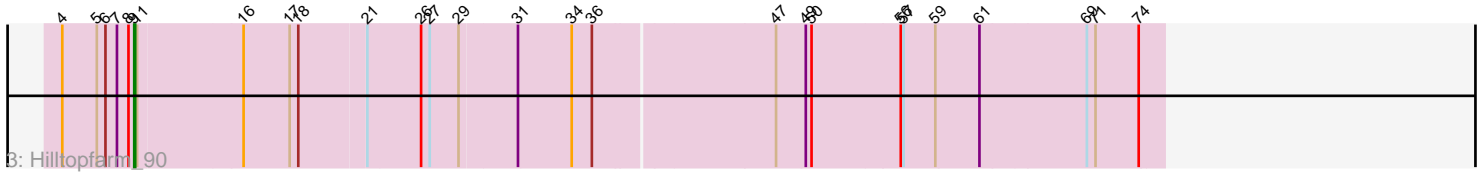
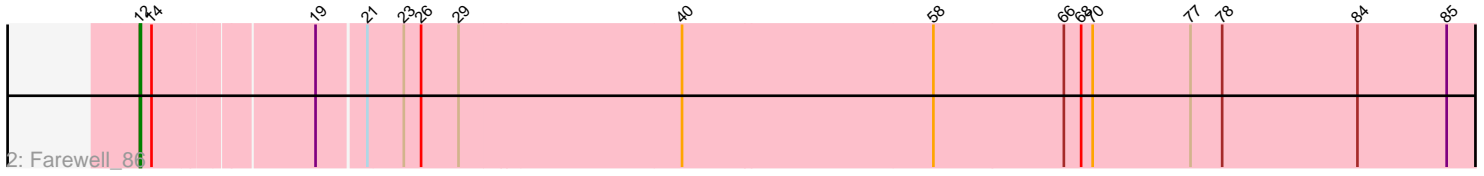
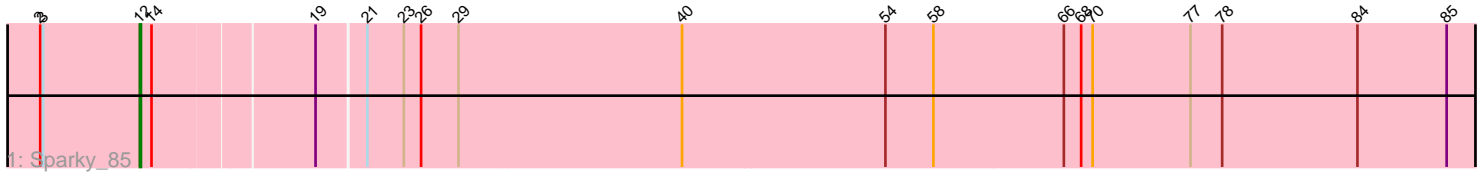


# Pham 295301



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 295301 Report

This analysis was run 04/18/26 on database version 643.

Pham number 295301 has 10 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Sparky\_85
- Track 2 : Farewell\_86
- Track 3 : Hilltopfarm\_90
- Track 4 : Typha\_88
- Track 5 : Bipper\_96
- Track 6 : Cracklewink\_96
- Track 7 : AuntGwenStacy\_88, Faiyaz\_90
- Track 8 : Mbo4\_61
- Track 9 : DS6A\_89

### ***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 2 of the 8 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Hilltopfarm\_90, Typha\_88,

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

- AuntGwenStacy\_88, Faiyaz\_90,

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

- Bipper\_96, Cracklewink\_96, DS6A\_89, Farewell\_86, Mbo4\_61, Sparky\_85,

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

Start 9:

- Found in 4 of 10 ( 40.0% ) of genes in pham
- Manual Annotations of this start: 2 of 8
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Hilltopfarm\_90 (Y), Typha\_88 (Y),

Start 10:

- Found in 2 of 10 ( 20.0% ) of genes in pham

- Manual Annotations of this start: 2 of 8
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bipper\_96 (Y), Cracklewink\_96 (Y),

Start 11:

- Found in 5 of 10 ( 50.0% ) of genes in pham
- Manual Annotations of this start: 1 of 8
- Called 40.0% of time when present
- Phage (with cluster) where this start called: AuntGwenStacy\_88 (Y), Faiyaz\_90 (Y),

Start 12:

- Found in 2 of 10 ( 20.0% ) of genes in pham
- Manual Annotations of this start: 2 of 8
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Farewell\_86 (AF), Sparky\_85 (AF),

Start 13:

- Found in 1 of 10 ( 10.0% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Mbo4\_61 (singleton),

Start 25:

- Found in 1 of 10 ( 10.0% ) of genes in pham
- Manual Annotations of this start: 1 of 8
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DS6A\_89 (singleton),

### **Summary by clusters:**

There are 3 clusters represented in this pham: Y, singleton, AF,

Info for manual annotations of cluster AF:

- Start number 12 was manually annotated 2 times for cluster AF.

Info for manual annotations of cluster Y:

- Start number 9 was manually annotated 2 times for cluster Y.
- Start number 10 was manually annotated 2 times for cluster Y.
- Start number 11 was manually annotated 1 time for cluster Y.

### **Gene Information:**

Gene: AuntGwenStacy\_88 Start: 57849, Stop: 58874, Start Num: 11

Candidate Starts for AuntGwenStacy\_88:

(4, 57771), (5, 57807), (6, 57816), (7, 57828), (8, 57840), (Start: 9 @57846 has 2 MA's), (Start: 11 @57849 has 1 MA's), (16, 57954), (17, 58002), (18, 58011), (21, 58077), (26, 58131), (27, 58140), (29, 58170), (31, 58227), (34, 58281), (36, 58302), (39, 58374), (47, 58482), (49, 58512), (50, 58518), (56, 58608), (57, 58611), (59, 58644), (61, 58689), (69, 58797), (71, 58806), (74, 58851),

Gene: Bipper\_96 Start: 60606, Stop: 61649, Start Num: 10

Candidate Starts for Bipper\_96:

(7, 60588), (Start: 10 @60606 has 2 MA's), (15, 60711), (16, 60714), (18, 60771), (21, 60840), (24, 60882), (26, 60894), (27, 60903), (28, 60906), (29, 60933), (30, 60936), (33, 61017), (36, 61065), (37, 61131), (38, 61134), (39, 61143), (41, 61158), (43, 61173), (46, 61236), (47, 61251), (49, 61281), (50, 61287), (56, 61377), (59, 61413), (64, 61503), (65, 61536), (67, 61551),

Gene: Cracklewink\_96 Start: 59841, Stop: 60884, Start Num: 10

Candidate Starts for Cracklewink\_96:

(1, 59739), (6, 59811), (7, 59823), (Start: 10 @59841 has 2 MA's), (15, 59946), (16, 59949), (18, 60006), (21, 60075), (24, 60117), (26, 60129), (28, 60141), (29, 60168), (30, 60171), (33, 60252), (36, 60300), (37, 60366), (38, 60369), (39, 60378), (41, 60393), (43, 60408), (46, 60471), (47, 60486), (49, 60516), (50, 60522), (56, 60612), (59, 60648), (60, 60651), (64, 60738), (65, 60771), (67, 60786), (71, 60810),

Gene: DS6A\_89 Start: 56826, Stop: 57761, Start Num: 25

Candidate Starts for DS6A\_89:

(Start: 11 @56544 has 1 MA's), (22, 56808), (Start: 25 @56826 has 1 MA's), (32, 56934), (37, 57069), (42, 57099), (44, 57141), (48, 57213), (51, 57237), (52, 57249), (53, 57285), (55, 57300), (62, 57396), (63, 57405), (72, 57540), (73, 57543), (75, 57570), (76, 57573), (77, 57612), (79, 57678), (80, 57717), (81, 57720), (82, 57735), (83, 57750),

Gene: Faiyaz\_90 Start: 57855, Stop: 58880, Start Num: 11

Candidate Starts for Faiyaz\_90:

(4, 57777), (5, 57813), (6, 57822), (7, 57834), (8, 57846), (Start: 9 @57852 has 2 MA's), (Start: 11 @57855 has 1 MA's), (16, 57960), (17, 58008), (18, 58017), (21, 58083), (26, 58137), (27, 58146), (29, 58176), (31, 58233), (34, 58287), (36, 58308), (39, 58380), (47, 58488), (49, 58518), (50, 58524), (56, 58614), (57, 58617), (59, 58650), (61, 58695), (69, 58803), (71, 58812), (74, 58857),

Gene: Farewell\_86 Start: 55341, Stop: 56711, Start Num: 12

Candidate Starts for Farewell\_86:

(Start: 12 @55341 has 2 MA's), (14, 55353), (19, 55506), (21, 55554), (23, 55590), (26, 55608), (29, 55647), (40, 55872), (58, 56130), (66, 56265), (68, 56283), (70, 56295), (77, 56397), (78, 56430), (84, 56571), (85, 56664),

Gene: Hilltopfarm\_90 Start: 58232, Stop: 59260, Start Num: 9

Candidate Starts for Hilltopfarm\_90:

(4, 58157), (5, 58193), (6, 58202), (7, 58214), (8, 58226), (Start: 9 @58232 has 2 MA's), (Start: 11 @58235 has 1 MA's), (16, 58340), (17, 58388), (18, 58397), (21, 58463), (26, 58517), (27, 58526), (29, 58556), (31, 58613), (34, 58667), (36, 58688), (47, 58868), (49, 58898), (50, 58904), (56, 58994), (57, 58997), (59, 59030), (61, 59075), (69, 59183), (71, 59192), (74, 59237),

Gene: Mbo4\_61 Start: 43171, Stop: 43899, Start Num: 13

Candidate Starts for Mbo4\_61:

(13, 43171), (20, 43351), (23, 43429), (26, 43447), (35, 43594), (45, 43741),

Gene: Sparky\_85 Start: 56935, Stop: 58305, Start Num: 12

Candidate Starts for Sparky\_85:

(2, 56833), (3, 56836), (Start: 12 @56935 has 2 MA's), (14, 56947), (19, 57100), (21, 57148), (23, 57184), (26, 57202), (29, 57241), (40, 57466), (54, 57676), (58, 57724), (66, 57859), (68, 57877), (70, 57889), (77, 57991), (78, 58024), (84, 58165), (85, 58258),

Gene: Typha\_88 Start: 57847, Stop: 58875, Start Num: 9

Candidate Starts for Typha\_88:

(4, 57772), (5, 57808), (6, 57817), (7, 57829), (8, 57841), (Start: 9 @57847 has 2 MA's), (Start: 11 @57850 has 1 MA's), (16, 57955), (17, 58003), (18, 58012), (21, 58078), (26, 58132), (27, 58141), (29, 58171), (31, 58228), (34, 58282), (36, 58303), (39, 58375), (47, 58483), (49, 58513), (50, 58519), (56, 58609), (57, 58612), (59, 58645), (61, 58690), (69, 58798), (71, 58807), (74, 58852),