



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 287251 Report

This analysis was run 03/28/26 on database version 641.

Pham number 287251 has 7 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Hendrix\_158
- Track 2 : Dewdrop\_159, Leaf\_159
- Track 3 : Rasputia\_156
- Track 4 : Stellammi\_121
- Track 5 : Gaia\_103, Nebkiss\_103

### ***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 3 of the 6 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Dewdrop\_159, Leaf\_159, Rasputia\_156,

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

- 

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

- Gaia\_103, Hendrix\_158, Nebkiss\_103, Stellammi\_121,

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

Start 6:

- Found in 3 of 7 ( 42.9% ) of genes in pham
- Manual Annotations of this start: 3 of 6
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Dewdrop\_159 (GC), Leaf\_159 (GC), Rasputia\_156 (GC),

Start 8:

- Found in 2 of 7 ( 28.6% ) of genes in pham
- Manual Annotations of this start: 2 of 6
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gaia\_103 (X), Nebkiss\_103 (X),

Start 9:

- Found in 3 of 7 ( 42.9% ) of genes in pham
- No Manual Annotations of this start.
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Stellammi\_121 (UNK),

Start 15:

- Found in 1 of 7 ( 14.3% ) of genes in pham
- Manual Annotations of this start: 1 of 6
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Hendrix\_158 (GC),

**Summary by clusters:**

There are 3 clusters represented in this pham: X, UNK, GC,

Info for manual annotations of cluster GC:

- Start number 6 was manually annotated 3 times for cluster GC.
- Start number 15 was manually annotated 1 time for cluster GC.

Info for manual annotations of cluster X:

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

**Gene Information:**

Gene: Dewdrop\_159 Start: 93986, Stop: 95401, Start Num: 6

Candidate Starts for Dewdrop\_159:

(Start: 6 @93986 has 3 MA's), (7, 93995), (10, 94046), (12, 94106), (29, 94250), (31, 94262), (34, 94292), (36, 94331), (40, 94367), (41, 94385), (50, 94565), (52, 94598), (62, 94709), (63, 94745), (65, 94754), (74, 94832), (79, 94919), (84, 94949), (85, 94982), (91, 95036), (95, 95117), (103, 95231), (106, 95246), (109, 95273), (110, 95312), (113, 95390), (114, 95396),

Gene: Gaia\_103 Start: 59268, Stop: 60608, Start Num: 8

Candidate Starts for Gaia\_103:

(Start: 8 @59268 has 2 MA's), (9, 59280), (20, 59427), (23, 59436), (27, 59478), (28, 59502), (29, 59517), (30, 59526), (31, 59529), (36, 59595), (37, 59610), (44, 59661), (46, 59724), (49, 59790), (51, 59838), (53, 59856), (58, 59907), (67, 60024), (68, 60030), (71, 60045), (74, 60072), (75, 60081), (76, 60096), (80, 60159), (86, 60222), (89, 60243), (98, 60393), (99, 60402), (100, 60405), (101, 60429), (104, 60456),

Gene: Hendrix\_158 Start: 96461, Stop: 97753, Start Num: 15

Candidate Starts for Hendrix\_158:

(14, 96452), (Start: 15 @96461 has 1 MA's), (22, 96497), (28, 96587), (29, 96602), (31, 96614), (32, 96620), (39, 96716), (45, 96767), (48, 96878), (50, 96923), (52, 96956), (55, 96986), (62, 97067), (63, 97103), (70, 97157), (73, 97187), (74, 97190), (77, 97223), (79, 97277), (83, 97301), (84, 97307), (87, 97358), (91, 97394), (92, 97412), (94, 97436), (102, 97580), (103, 97592), (107, 97619), (108, 97631),

Gene: Leaf\_159 Start: 93917, Stop: 95332, Start Num: 6

Candidate Starts for Leaf\_159:

(Start: 6 @93917 has 3 MA's), (7, 93926), (10, 93977), (12, 94037), (29, 94181), (31, 94193), (34, 94223), (36, 94262), (40, 94298), (41, 94316), (50, 94496), (52, 94529), (62, 94640), (63, 94676), (65, 94685), (74, 94763), (79, 94850), (84, 94880), (85, 94913), (91, 94967), (95, 95048), (103, 95162), (106, 95177), (109, 95204), (110, 95243), (113, 95321), (114, 95327),

Gene: Nebkiss\_103 Start: 58194, Stop: 59534, Start Num: 8

Candidate Starts for Nebkiss\_103:

(Start: 8 @58194 has 2 MA's), (9, 58206), (20, 58353), (23, 58362), (27, 58404), (28, 58428), (29, 58443), (30, 58452), (31, 58455), (36, 58521), (37, 58536), (44, 58587), (46, 58650), (49, 58716), (51, 58764), (53, 58782), (58, 58833), (67, 58950), (68, 58956), (71, 58971), (74, 58998), (75, 59007), (76, 59022), (80, 59085), (86, 59148), (89, 59169), (98, 59319), (99, 59328), (100, 59331), (101, 59355), (104, 59382),

Gene: Rasputia\_156 Start: 95687, Stop: 97096, Start Num: 6

Candidate Starts for Rasputia\_156:

(1, 95201), (2, 95411), (3, 95423), (4, 95519), (5, 95597), (Start: 6 @95687 has 3 MA's), (7, 95696), (21, 95855), (28, 95930), (31, 95957), (36, 96026), (38, 96056), (40, 96062), (41, 96080), (47, 96209), (50, 96260), (52, 96293), (55, 96323), (59, 96368), (60, 96374), (61, 96389), (62, 96404), (63, 96440), (74, 96527), (79, 96614), (82, 96629), (84, 96644), (85, 96677), (91, 96731), (95, 96812), (103, 96926), (106, 96941), (109, 96968), (110, 97007), (112, 97079), (113, 97085),

Gene: Stellammi\_121 Start: 55638, Stop: 56909, Start Num: 9

Candidate Starts for Stellammi\_121:

(9, 55638), (11, 55674), (13, 55731), (16, 55761), (17, 55764), (18, 55767), (19, 55776), (24, 55809), (25, 55815), (26, 55818), (27, 55824), (29, 55863), (30, 55872), (33, 55893), (35, 55923), (36, 55941), (42, 55992), (43, 55998), (45, 56016), (46, 56064), (53, 56196), (54, 56199), (56, 56229), (57, 56238), (64, 56337), (66, 56352), (69, 56373), (72, 56409), (78, 56463), (81, 56511), (88, 56586), (90, 56613), (92, 56634), (93, 56646), (96, 56727), (97, 56736), (105, 56811), (106, 56817), (107, 56826), (111, 56877),