



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 160759 Report

This analysis was run 04/28/24 on database version 559.

Pham number 160759 has 20 members, 4 are drafts.

Phages represented in each track:

- Track 1 : BadAgartude\_11, Koguma\_11, Phox\_11, CharlieB\_10, Halldule\_11, DTDevon\_14, BeanWater\_10, LRRHood\_11, Shaqnato\_11, FoxtrotP1\_12
- Track 2 : Sauce\_15
- Track 3 : LinStu\_15, Sebata\_15
- Track 4 : BigCity\_17, EggyFarm\_17, Grasshills\_17
- Track 5 : Cali\_11
- Track 6 : HyRo\_8
- Track 7 : Tonenili\_15
- Track 8 : Stubby\_10

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

The start number called the most often in the published annotations is 5, it was called in 11 of the 16 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- BadAgartude\_11, BeanWater\_10, CharlieB\_10, DTDevon\_14, FoxtrotP1\_12, Halldule\_11, HyRo\_8, Koguma\_11, LRRHood\_11, Phox\_11, Sauce\_15, Shaqnato\_11,

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

- Cali\_11,

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

- BigCity\_17, EggyFarm\_17, Grasshills\_17, LinStu\_15, Sebata\_15, Stubby\_10, Tonenili\_15,

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

Start 3:

- Found in 5 of 20 ( 25.0% ) of genes in pham
- Manual Annotations of this start: 2 of 16
- Called 100.0% of time when present

- Phage (with cluster) where this start called: BigCity\_17 (C1), EggyFarm\_17 (C1), Grasshills\_17 (C1), LinStu\_15 (C1), Sebata\_15 (C1),

Start 4:

- Found in 1 of 20 ( 5.0% ) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cali\_11 (C1),

Start 5:

- Found in 13 of 20 ( 65.0% ) of genes in pham
- Manual Annotations of this start: 11 of 16
- Called 92.3% of time when present
- Phage (with cluster) where this start called: BadAgartude\_11 (C1), BeanWater\_10 (C1), CharlieB\_10 (C1), DTDevon\_14 (C1), FoxtrotP1\_12 (C1), Halldule\_11 (C1), HyRo\_8 (C1), Koguma\_11 (C1), LRRHood\_11 (C1), Phox\_11 (C1), Sauce\_15 (C1), Shaqnato\_11 (C1),

Start 6:

- Found in 1 of 20 ( 5.0% ) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Stubby\_10 (C1),

Start 8:

- Found in 1 of 20 ( 5.0% ) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Tonenili\_15 (C1),

**Summary by clusters:**

There is one cluster represented in this pham: C1

Info for manual annotations of cluster C1:

- Start number 3 was manually annotated 2 times for cluster C1.
- Start number 4 was manually annotated 1 time for cluster C1.
- Start number 5 was manually annotated 11 times for cluster C1.
- Start number 6 was manually annotated 1 time for cluster C1.
- Start number 8 was manually annotated 1 time for cluster C1.

**Gene Information:**

Gene: BadAgartude\_11 Start: 3618, Stop: 4166, Start Num: 5

Candidate Starts for BadAgartude\_11:

(Start: 5 @3618 has 11 MA's), (10, 3672), (11, 3741), (13, 3786), (16, 3951), (18, 4038), (19, 4047),

Gene: BeanWater\_10 Start: 4425, Stop: 4973, Start Num: 5

Candidate Starts for BeanWater\_10:

(Start: 5 @4425 has 11 MA's), (10, 4479), (11, 4548), (13, 4593), (16, 4758), (18, 4845), (19, 4854),

Gene: BigCity\_17 Start: 6116, Stop: 6589, Start Num: 3

Candidate Starts for BigCity\_17:

(1, 6077), (Start: 3 @6116 has 2 MA's), (7, 6134), (9, 6179), (10, 6182), (12, 6269), (13, 6296), (15, 6437), (17, 6503), (19, 6509),

Gene: Cali\_11 Start: 4579, Stop: 5130, Start Num: 4

Candidate Starts for Cali\_11:

(Start: 4 @4579 has 1 MA's), (Start: 5 @4582 has 11 MA's), (10, 4636), (11, 4705), (13, 4750), (16, 4915), (18, 5002), (19, 5011),

Gene: CharlieB\_10 Start: 3443, Stop: 3991, Start Num: 5

Candidate Starts for CharlieB\_10:

(Start: 5 @3443 has 11 MA's), (10, 3497), (11, 3566), (13, 3611), (16, 3776), (18, 3863), (19, 3872),

Gene: DTDevon\_14 Start: 4459, Stop: 5028, Start Num: 5

Candidate Starts for DTDevon\_14:

(Start: 5 @4459 has 11 MA's), (10, 4513), (11, 4582), (13, 4627), (16, 4792), (18, 4879), (19, 4888),

Gene: EggyFarm\_17 Start: 6116, Stop: 6589, Start Num: 3

Candidate Starts for EggyFarm\_17:

(1, 6077), (Start: 3 @6116 has 2 MA's), (7, 6134), (9, 6179), (10, 6182), (12, 6269), (13, 6296), (15, 6437), (17, 6503), (19, 6509),

Gene: FoxtrotP1\_12 Start: 4489, Stop: 5037, Start Num: 5

Candidate Starts for FoxtrotP1\_12:

(Start: 5 @4489 has 11 MA's), (10, 4543), (11, 4612), (13, 4657), (16, 4822), (18, 4909), (19, 4918),

Gene: Grasshills\_17 Start: 6116, Stop: 6589, Start Num: 3

Candidate Starts for Grasshills\_17:

(1, 6077), (Start: 3 @6116 has 2 MA's), (7, 6134), (9, 6179), (10, 6182), (12, 6269), (13, 6296), (15, 6437), (17, 6503), (19, 6509),

Gene: Halldule\_11 Start: 3597, Stop: 4145, Start Num: 5

Candidate Starts for Halldule\_11:

(Start: 5 @3597 has 11 MA's), (10, 3651), (11, 3720), (13, 3765), (16, 3930), (18, 4017), (19, 4026),

Gene: HyRo\_8 Start: 3742, Stop: 4320, Start Num: 5

Candidate Starts for HyRo\_8:

(Start: 5 @3742 has 11 MA's), (10, 3796), (11, 3865), (13, 3910), (14, 4039), (16, 4105), (18, 4192), (19, 4201),

Gene: Koguma\_11 Start: 3597, Stop: 4145, Start Num: 5

Candidate Starts for Koguma\_11:

(Start: 5 @3597 has 11 MA's), (10, 3651), (11, 3720), (13, 3765), (16, 3930), (18, 4017), (19, 4026),

Gene: LRRHood\_11 Start: 4582, Stop: 5130, Start Num: 5

Candidate Starts for LRRHood\_11:

(Start: 5 @4582 has 11 MA's), (10, 4636), (11, 4705), (13, 4750), (16, 4915), (18, 5002), (19, 5011),

Gene: LinStu\_15 Start: 5242, Stop: 5715, Start Num: 3

Candidate Starts for LinStu\_15:

(Start: 3 @5242 has 2 MA's), (7, 5260), (9, 5305), (10, 5308), (12, 5395), (13, 5422), (15, 5563), (17, 5629), (19, 5635),

Gene: Phox\_11 Start: 4579, Stop: 5127, Start Num: 5

Candidate Starts for Phox\_11:

(Start: 5 @4579 has 11 MA's), (10, 4633), (11, 4702), (13, 4747), (16, 4912), (18, 4999), (19, 5008),

Gene: Sauce\_15 Start: 4833, Stop: 5342, Start Num: 5

Candidate Starts for Sauce\_15:

(Start: 5 @4833 has 11 MA's), (10, 4887), (11, 4956), (13, 5001), (16, 5166), (19, 5262),

Gene: Sebata\_15 Start: 5242, Stop: 5715, Start Num: 3

Candidate Starts for Sebata\_15:

(Start: 3 @5242 has 2 MA's), (7, 5260), (9, 5305), (10, 5308), (12, 5395), (13, 5422), (15, 5563), (17, 5629), (19, 5635),

Gene: Shaqnato\_11 Start: 3597, Stop: 4145, Start Num: 5

Candidate Starts for Shaqnato\_11:

(Start: 5 @3597 has 11 MA's), (10, 3651), (11, 3720), (13, 3765), (16, 3930), (18, 4017), (19, 4026),

Gene: Stubby\_10 Start: 4034, Stop: 4534, Start Num: 6

Candidate Starts for Stubby\_10:

(2, 3989), (Start: 6 @4034 has 1 MA's), (10, 4079), (11, 4148), (13, 4193), (16, 4358), (19, 4454),

Gene: Tonenili\_15 Start: 4513, Stop: 4962, Start Num: 8

Candidate Starts for Tonenili\_15:

(Start: 8 @4513 has 1 MA's), (9, 4552), (10, 4555), (12, 4642), (13, 4669), (15, 4810), (17, 4876), (19, 4882),