



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 200661 Report

This analysis was run 01/18/25 on database version 583.

Pham number 200661 has 18 members, 4 are drafts.

Phages represented in each track:

- Track 1 : Cucurbita\_114, PhinkBoden\_113
- Track 2 : Engineer\_114, Miskis\_112, ClubL\_114, Smoothie\_114, Lozinak\_113, Bachita\_115
- Track 3 : Dusty\_110, Geeche\_112
- Track 4 : Toniann\_113
- Track 5 : CandC\_79, Fregley\_82
- Track 6 : Kelcole\_80, OneinaGillian\_79
- Track 7 : RobinRose\_84, Romm\_84, Tempo\_82

### ***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 14 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Bachita\_115, ClubL\_114, Cucurbita\_114, Dusty\_110, Engineer\_114, Geeche\_112, Lozinak\_113, Miskis\_112, PhinkBoden\_113, Smoothie\_114, Toniann\_113,

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

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

- CandC\_79, Fregley\_82, Kelcole\_80, OneinaGillian\_79, RobinRose\_84, Romm\_84, Tempo\_82,

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

Start 3:

- Found in 7 of 18 ( 38.9% ) of genes in pham
- Manual Annotations of this start: 6 of 14
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CandC\_79 (EG), Fregley\_82 (EG), Kelcole\_80 (EG), OneinaGillian\_79 (EG), RobinRose\_84 (EG), Romm\_84 (EG), Tempo\_82 (EG),

Start 4:

- Found in 11 of 18 ( 61.1% ) of genes in pham
- Manual Annotations of this start: 8 of 14
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bachita\_115 (CQ1), ClubL\_114 (CQ1), Cucurbita\_114 (CQ1), Dusty\_110 (CQ1), Engineer\_114 (CQ1), Geeche\_112 (CQ1), Lozinak\_113 (CQ1), Miskis\_112 (CQ1), PhinkBoden\_113 (CQ1), Smoothie\_114 (CQ1), Toniann\_113 (CQ1),

**Summary by clusters:**

There are 2 clusters represented in this pham: CQ1, EG,

Info for manual annotations of cluster CQ1:

- Start number 4 was manually annotated 8 times for cluster CQ1.

Info for manual annotations of cluster EG:

- Start number 3 was manually annotated 6 times for cluster EG.

**Gene Information:**

Gene: Bachita\_115 Start: 66556, Stop: 66804, Start Num: 4

Candidate Starts for Bachita\_115:

(1, 66364), (Start: 4 @66556 has 8 MA's), (8, 66613), (9, 66616), (14, 66781),

Gene: CandC\_79 Start: 51412, Stop: 51134, Start Num: 3

Candidate Starts for CandC\_79:

(2, 51499), (Start: 3 @51412 has 6 MA's), (6, 51346), (7, 51340), (9, 51334), (10, 51319),

Gene: ClubL\_114 Start: 65486, Stop: 65734, Start Num: 4

Candidate Starts for ClubL\_114:

(1, 65294), (Start: 4 @65486 has 8 MA's), (8, 65543), (9, 65546), (14, 65711),

Gene: Cucurbita\_114 Start: 67051, Stop: 67299, Start Num: 4

Candidate Starts for Cucurbita\_114:

(1, 66859), (Start: 4 @67051 has 8 MA's), (8, 67108), (9, 67111), (14, 67276),

Gene: Dusty\_110 Start: 65392, Stop: 65640, Start Num: 4

Candidate Starts for Dusty\_110:

(1, 65200), (Start: 4 @65392 has 8 MA's), (8, 65449), (9, 65452), (14, 65617),

Gene: Engineer\_114 Start: 66529, Stop: 66777, Start Num: 4

Candidate Starts for Engineer\_114:

(1, 66337), (Start: 4 @66529 has 8 MA's), (8, 66586), (9, 66589), (14, 66754),

Gene: Fregley\_82 Start: 51761, Stop: 51483, Start Num: 3

Candidate Starts for Fregley\_82:

(2, 51848), (Start: 3 @51761 has 6 MA's), (6, 51695), (7, 51689), (9, 51683), (10, 51668),

Gene: Geeche\_112 Start: 65615, Stop: 65863, Start Num: 4

Candidate Starts for Geeche\_112:

(1, 65423), (Start: 4 @65615 has 8 MA's), (8, 65672), (9, 65675), (14, 65840),

Gene: Kelcole\_80 Start: 51984, Stop: 51706, Start Num: 3

Candidate Starts for Kelcole\_80:

(2, 52071), (Start: 3 @51984 has 6 MA's), (5, 51945), (6, 51918), (7, 51912), (9, 51906), (10, 51891), (13, 51765),

Gene: Lozinak\_113 Start: 66367, Stop: 66615, Start Num: 4

Candidate Starts for Lozinak\_113:

(1, 66175), (Start: 4 @66367 has 8 MA's), (8, 66424), (9, 66427), (14, 66592),

Gene: Miskis\_112 Start: 65318, Stop: 65566, Start Num: 4

Candidate Starts for Miskis\_112:

(1, 65126), (Start: 4 @65318 has 8 MA's), (8, 65375), (9, 65378), (14, 65543),

Gene: OneinaGillian\_79 Start: 51305, Stop: 51027, Start Num: 3

Candidate Starts for OneinaGillian\_79:

(2, 51392), (Start: 3 @51305 has 6 MA's), (5, 51266), (6, 51239), (7, 51233), (9, 51227), (10, 51212), (13, 51086),

Gene: PhinkBoden\_113 Start: 66656, Stop: 66904, Start Num: 4

Candidate Starts for PhinkBoden\_113:

(1, 66464), (Start: 4 @66656 has 8 MA's), (8, 66713), (9, 66716), (14, 66881),

Gene: RobinRose\_84 Start: 52413, Stop: 52138, Start Num: 3

Candidate Starts for RobinRose\_84:

(2, 52500), (Start: 3 @52413 has 6 MA's), (6, 52347), (9, 52335), (11, 52290), (13, 52197),

Gene: Romm\_84 Start: 52410, Stop: 52135, Start Num: 3

Candidate Starts for Romm\_84:

(2, 52497), (Start: 3 @52410 has 6 MA's), (6, 52344), (9, 52332), (11, 52287), (13, 52194),

Gene: Smoothie\_114 Start: 66367, Stop: 66615, Start Num: 4

Candidate Starts for Smoothie\_114:

(1, 66175), (Start: 4 @66367 has 8 MA's), (8, 66424), (9, 66427), (14, 66592),

Gene: Tempo\_82 Start: 52105, Stop: 51830, Start Num: 3

Candidate Starts for Tempo\_82:

(2, 52192), (Start: 3 @52105 has 6 MA's), (6, 52039), (9, 52027), (11, 51982), (13, 51889),

Gene: Toniann\_113 Start: 65757, Stop: 66005, Start Num: 4

Candidate Starts for Toniann\_113:

(1, 65565), (Start: 4 @65757 has 8 MA's), (8, 65814), (9, 65817), (12, 65931), (14, 65982),