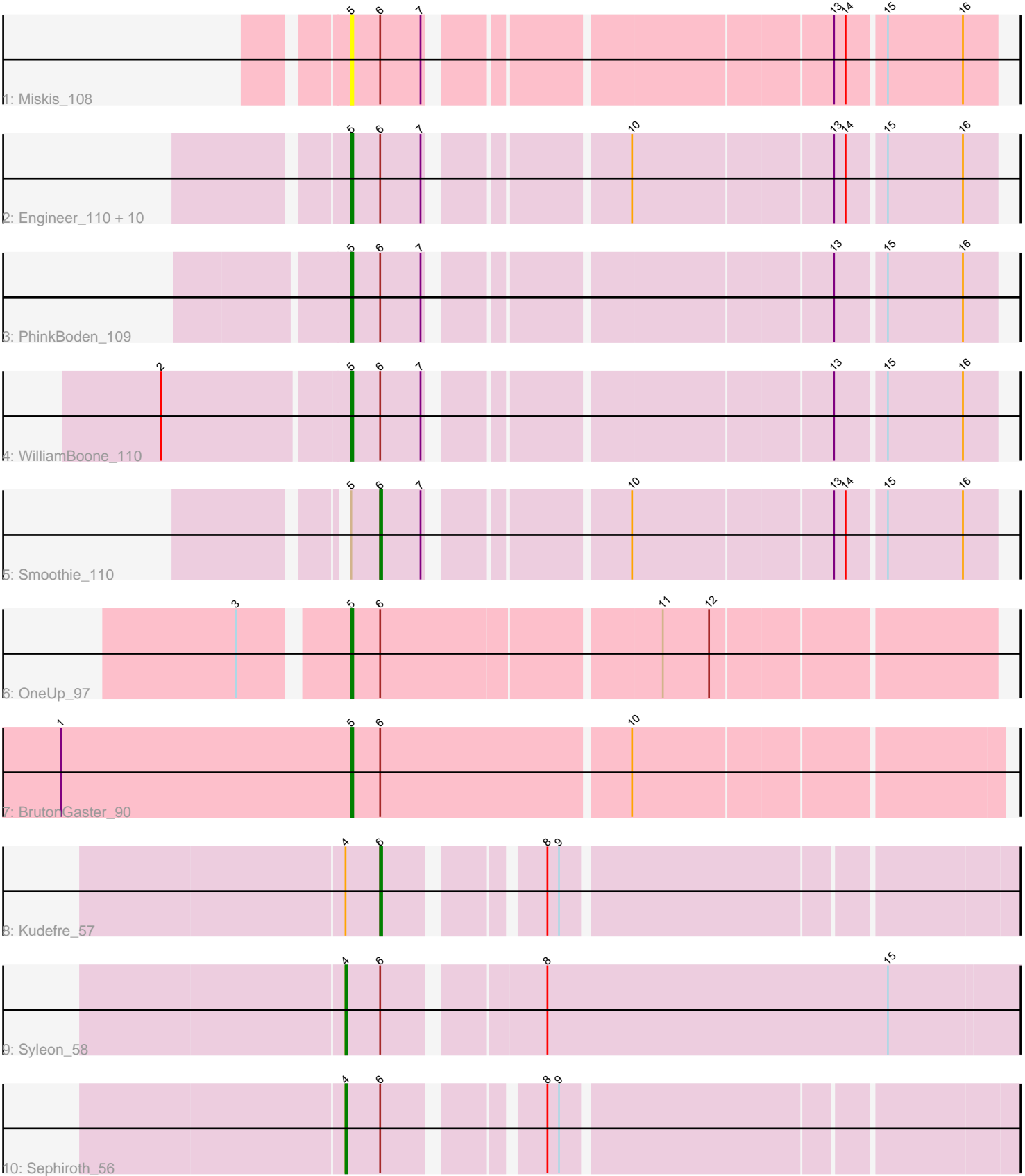


Pham 4229



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 4229 Report

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

Pham number 4229 has 20 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Miskis\_108
- Track 2 : Engineer\_110, ClubL\_110, Bachita\_111, Culver\_109, Cucurbita\_110, Aphelion\_110, Toniann\_109, Abscondus\_108, Norvs\_111, Dusty\_106, Lozinak\_109
- Track 3 : PhinkBoden\_109
- Track 4 : WilliamBoone\_110
- Track 5 : Smoothie\_110
- Track 6 : OneUp\_97
- Track 7 : BrutonGaster\_90
- Track 8 : Kudefre\_57
- Track 9 : Syleon\_58
- Track 10 : Sephiroth\_56

### ***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 13 of the 17 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abscondus\_108, Aphelion\_110, Bachita\_111, BrutonGaster\_90, ClubL\_110, Cucurbita\_110, Culver\_109, Dusty\_106, Engineer\_110, Lozinak\_109, Miskis\_108, Norvs\_111, OneUp\_97, PhinkBoden\_109, Toniann\_109, WilliamBoone\_110,

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

- Smoothie\_110,

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

- Kudefre\_57, Sephiroth\_56, Syleon\_58,

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

Start 4:

- Found in 3 of 20 ( 15.0% ) of genes in pham
- Manual Annotations of this start: 2 of 17
- Called 66.7% of time when present

- Phage (with cluster) where this start called: Sephiroth\_56 (DU1), Syleon\_58 (DU1),

Start 5:

- Found in 17 of 20 ( 85.0% ) of genes in pham
- Manual Annotations of this start: 13 of 17
- Called 94.1% of time when present
- Phage (with cluster) where this start called: Abscondus\_108 (CQ), Aphelion\_110 (CQ1), Bachita\_111 (CQ1), BrutonGaster\_90 (CQ2), ClubL\_110 (CQ1), Cucurbita\_110 (CQ1), Culver\_109 (CQ1), Dusty\_106 (CQ), Engineer\_110 (CQ1), Lozinak\_109 (CQ1), Miskis\_108 (CQ), Norvs\_111 (CQ), OneUp\_97 (CQ2), PhinkBoden\_109 (CQ1), Toniann\_109 (CQ1), WilliamBoone\_110 (CQ1),

Start 6:

- Found in 20 of 20 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 2 of 17
- Called 10.0% of time when present
- Phage (with cluster) where this start called: Kudrefre\_57 (DU1), Smoothie\_110 (CQ1),

### **Summary by clusters:**

There are 4 clusters represented in this pham: DU1, CQ1, CQ, CQ2,

Info for manual annotations of cluster CQ:

- Start number 5 was manually annotated 1 time for cluster CQ.

Info for manual annotations of cluster CQ1:

- Start number 5 was manually annotated 10 times for cluster CQ1.
- Start number 6 was manually annotated 1 time for cluster CQ1.

Info for manual annotations of cluster CQ2:

- Start number 5 was manually annotated 2 times for cluster CQ2.

Info for manual annotations of cluster DU1:

- Start number 4 was manually annotated 2 times for cluster DU1.
- Start number 6 was manually annotated 1 time for cluster DU1.

### **Gene Information:**

Gene: Abscondus\_108 Start: 63873, Stop: 64178, Start Num: 5

Candidate Starts for Abscondus\_108:

(Start: 5 @63873 has 13 MA's), (Start: 6 @63888 has 2 MA's), (7, 63909), (10, 63999), (13, 64098), (14, 64104), (15, 64122), (16, 64161),

Gene: Aphelion\_110 Start: 65426, Stop: 65731, Start Num: 5

Candidate Starts for Aphelion\_110:

(Start: 5 @65426 has 13 MA's), (Start: 6 @65441 has 2 MA's), (7, 65462), (10, 65552), (13, 65651), (14, 65657), (15, 65675), (16, 65714),

Gene: Bachita\_111 Start: 65084, Stop: 65389, Start Num: 5

Candidate Starts for Bachita\_111:

(Start: 5 @65084 has 13 MA's), (Start: 6 @65099 has 2 MA's), (7, 65120), (10, 65210), (13, 65309), (14, 65315), (15, 65333), (16, 65372),

Gene: BrutonGaster\_90 Start: 59266, Stop: 59589, Start Num: 5

Candidate Starts for BrutonGaster\_90:

(1, 59116), (Start: 5 @59266 has 13 MA's), (Start: 6 @59281 has 2 MA's), (10, 59407),

Gene: ClubL\_110 Start: 64014, Stop: 64319, Start Num: 5

Candidate Starts for ClubL\_110:

(Start: 5 @64014 has 13 MA's), (Start: 6 @64029 has 2 MA's), (7, 64050), (10, 64140), (13, 64239), (14, 64245), (15, 64263), (16, 64302),

Gene: Cucurbita\_110 Start: 65591, Stop: 65896, Start Num: 5

Candidate Starts for Cucurbita\_110:

(Start: 5 @65591 has 13 MA's), (Start: 6 @65606 has 2 MA's), (7, 65627), (10, 65717), (13, 65816), (14, 65822), (15, 65840), (16, 65879),

Gene: Culver\_109 Start: 63345, Stop: 63650, Start Num: 5

Candidate Starts for Culver\_109:

(Start: 5 @63345 has 13 MA's), (Start: 6 @63360 has 2 MA's), (7, 63381), (10, 63471), (13, 63570), (14, 63576), (15, 63594), (16, 63633),

Gene: Dusty\_106 Start: 63932, Stop: 64237, Start Num: 5

Candidate Starts for Dusty\_106:

(Start: 5 @63932 has 13 MA's), (Start: 6 @63947 has 2 MA's), (7, 63968), (10, 64058), (13, 64157), (14, 64163), (15, 64181), (16, 64220),

Gene: Engineer\_110 Start: 65057, Stop: 65362, Start Num: 5

Candidate Starts for Engineer\_110:

(Start: 5 @65057 has 13 MA's), (Start: 6 @65072 has 2 MA's), (7, 65093), (10, 65183), (13, 65282), (14, 65288), (15, 65306), (16, 65345),

Gene: Kudfre\_57 Start: 38678, Stop: 38980, Start Num: 6

Candidate Starts for Kudfre\_57:

(Start: 4 @38660 has 2 MA's), (Start: 6 @38678 has 2 MA's), (8, 38747), (9, 38753),

Gene: Lozinak\_109 Start: 64895, Stop: 65200, Start Num: 5

Candidate Starts for Lozinak\_109:

(Start: 5 @64895 has 13 MA's), (Start: 6 @64910 has 2 MA's), (7, 64931), (10, 65021), (13, 65120), (14, 65126), (15, 65144), (16, 65183),

Gene: Miskis\_108 Start: 63858, Stop: 64163, Start Num: 5

Candidate Starts for Miskis\_108:

(Start: 5 @63858 has 13 MA's), (Start: 6 @63873 has 2 MA's), (7, 63894), (13, 64083), (14, 64089), (15, 64107), (16, 64146),

Gene: Norvs\_111 Start: 64922, Stop: 65227, Start Num: 5

Candidate Starts for Norvs\_111:

(Start: 5 @64922 has 13 MA's), (Start: 6 @64937 has 2 MA's), (7, 64958), (10, 65048), (13, 65147), (14, 65153), (15, 65171), (16, 65210),

Gene: OneUp\_97 Start: 61473, Stop: 61790, Start Num: 5

Candidate Starts for OneUp\_97:

(3, 61431), (Start: 5 @61473 has 13 MA's), (Start: 6 @61488 has 2 MA's), (11, 61626), (12, 61650),

Gene: PhinkBoden\_109 Start: 65196, Stop: 65501, Start Num: 5

Candidate Starts for PhinkBoden\_109:

(Start: 5 @65196 has 13 MA's), (Start: 6 @65211 has 2 MA's), (7, 65232), (13, 65421), (15, 65445), (16, 65484),

Gene: Sephiroth\_56 Start: 38829, Stop: 39149, Start Num: 4

Candidate Starts for Sephiroth\_56:

(Start: 4 @38829 has 2 MA's), (Start: 6 @38847 has 2 MA's), (8, 38916), (9, 38922),

Gene: Smoothie\_110 Start: 64910, Stop: 65200, Start Num: 6

Candidate Starts for Smoothie\_110:

(Start: 5 @64895 has 13 MA's), (Start: 6 @64910 has 2 MA's), (7, 64931), (10, 65021), (13, 65120), (14, 65126), (15, 65144), (16, 65183),

Gene: Syleon\_58 Start: 38753, Stop: 39094, Start Num: 4

Candidate Starts for Syleon\_58:

(Start: 4 @38753 has 2 MA's), (Start: 6 @38771 has 2 MA's), (8, 38846), (15, 39023),

Gene: Toniann\_109 Start: 64297, Stop: 64602, Start Num: 5

Candidate Starts for Toniann\_109:

(Start: 5 @64297 has 13 MA's), (Start: 6 @64312 has 2 MA's), (7, 64333), (10, 64423), (13, 64522), (14, 64528), (15, 64546), (16, 64585),

Gene: WilliamBoone\_110 Start: 63308, Stop: 63613, Start Num: 5

Candidate Starts for WilliamBoone\_110:

(2, 63221), (Start: 5 @63308 has 13 MA's), (Start: 6 @63323 has 2 MA's), (7, 63344), (13, 63533), (15, 63557), (16, 63596),