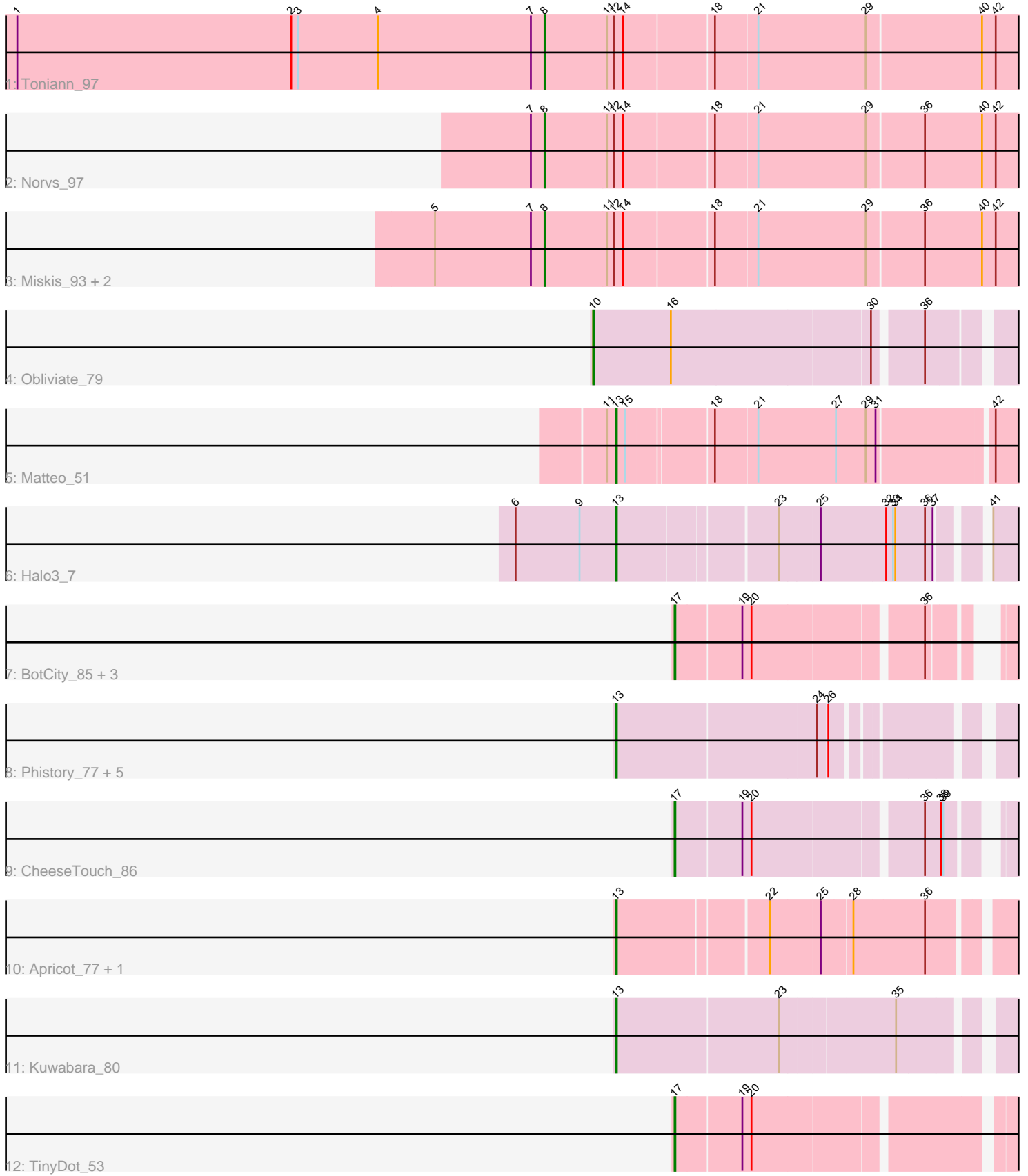


Pham 203279



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 203279 Report

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

Pham number 203279 has 23 members, 4 are drafts.

Phages represented in each track:

- Track 1 : Toniann\_97
- Track 2 : Norvs\_97
- Track 3 : Miskis\_93, Aphelion\_96, Dusty\_92
- Track 4 : Obliviate\_79
- Track 5 : Matteo\_51
- Track 6 : Halo3\_7
- Track 7 : BotCity\_85, Kenna\_77, Lutum\_83, BENtherdunthat\_82
- Track 8 : Phistory\_77, Crater\_78, Leroy\_79, Pepperoni\_56, Horus\_80, Ecliptus\_84
- Track 9 : CheeseTouch\_86
- Track 10 : Apricot\_77, Lton\_57
- Track 11 : Kuwabara\_80
- Track 12 : TinyDot\_53

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

The start number called the most often in the published annotations is 13, it was called in 10 of the 19 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Apricot\_77, Crater\_78, Ecliptus\_84, Halo3\_7, Horus\_80, Kuwabara\_80, Leroy\_79, Lton\_57, Matteo\_51, Pepperoni\_56, Phistory\_77,

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

- 

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

- Aphelion\_96, BENtherdunthat\_82, BotCity\_85, CheeseTouch\_86, Dusty\_92, Kenna\_77, Lutum\_83, Miskis\_93, Norvs\_97, Obliviate\_79, TinyDot\_53, Toniann\_97,

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

Start 8:

- Found in 5 of 23 ( 21.7% ) of genes in pham
- Manual Annotations of this start: 3 of 19

- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aphelion\_96 (CQ1), Dusty\_92 (CQ1), Miskis\_93 (CQ1), Norvs\_97 (CQ1), Toniann\_97 (CQ1),

Start 10:

- Found in 1 of 23 ( 4.3% ) of genes in pham
- Manual Annotations of this start: 1 of 19
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Obliviate\_79 (CV),

Start 13:

- Found in 11 of 23 ( 47.8% ) of genes in pham
- Manual Annotations of this start: 10 of 19
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Apricot\_77 (DN3), Crater\_78 (DN3), Ecliptus\_84 (DN), Halo3\_7 (DC1), Horus\_80 (DN1), Kuwabara\_80 (DN4), Leroy\_79 (DN1), Lton\_57 (CZ), Matteo\_51 (CZ2), Pepperoni\_56 (CZ), Phistory\_77 (DN1),

Start 17:

- Found in 6 of 23 ( 26.1% ) of genes in pham
- Manual Annotations of this start: 5 of 19
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BENtherdunthat\_82 (DN1), BotCity\_85 (DN), CheeseTouch\_86 (DN1), Kenna\_77 (DN1), Lutum\_83 (DN1), TinyDot\_53 (singleton),

### **Summary by clusters:**

There are 10 clusters represented in this pham: DN, singleton, DN4, CZ2, CZ, DN1, DN3, CQ1, CV, DC1,

Info for manual annotations of cluster CQ1:

- Start number 8 was manually annotated 3 times for cluster CQ1.

Info for manual annotations of cluster CV:

- Start number 10 was manually annotated 1 time for cluster CV.

Info for manual annotations of cluster CZ:

- Start number 13 was manually annotated 1 time for cluster CZ.

Info for manual annotations of cluster CZ2:

- Start number 13 was manually annotated 1 time for cluster CZ2.

Info for manual annotations of cluster DC1:

- Start number 13 was manually annotated 1 time for cluster DC1.

Info for manual annotations of cluster DN:

- Start number 13 was manually annotated 1 time for cluster DN.

Info for manual annotations of cluster DN1:

- Start number 13 was manually annotated 3 times for cluster DN1.
- Start number 17 was manually annotated 4 times for cluster DN1.

Info for manual annotations of cluster DN3:

- Start number 13 was manually annotated 2 times for cluster DN3.

Info for manual annotations of cluster DN4:

- Start number 13 was manually annotated 1 time for cluster DN4.

### **Gene Information:**

Gene: Aphelion\_96 Start: 59234, Stop: 59845, Start Num: 8

Candidate Starts for Aphelion\_96:

(5, 59090), (7, 59216), (Start: 8 @59234 has 3 MA's), (11, 59315), (12, 59324), (14, 59336), (18, 59450), (21, 59504), (29, 59645), (36, 59714), (40, 59789), (42, 59807),

Gene: Apricot\_77 Start: 44433, Stop: 44912, Start Num: 13

Candidate Starts for Apricot\_77:

(Start: 13 @44433 has 10 MA's), (22, 44619), (25, 44682), (28, 44721), (36, 44811),

Gene: BENtherdunthat\_82 Start: 46359, Stop: 46736, Start Num: 17

Candidate Starts for BENtherdunthat\_82:

(Start: 17 @46359 has 5 MA's), (19, 46440), (20, 46452), (36, 46659),

Gene: BotCity\_85 Start: 47888, Stop: 48265, Start Num: 17

Candidate Starts for BotCity\_85:

(Start: 17 @47888 has 5 MA's), (19, 47969), (20, 47981), (36, 48188),

Gene: CheeseTouch\_86 Start: 42950, Stop: 43342, Start Num: 17

Candidate Starts for CheeseTouch\_86:

(Start: 17 @42950 has 5 MA's), (19, 43031), (20, 43043), (36, 43250), (38, 43271), (39, 43274),

Gene: Crater\_78 Start: 45182, Stop: 45649, Start Num: 13

Candidate Starts for Crater\_78:

(Start: 13 @45182 has 10 MA's), (24, 45437), (26, 45449),

Gene: Dusty\_92 Start: 57740, Stop: 58351, Start Num: 8

Candidate Starts for Dusty\_92:

(5, 57596), (7, 57722), (Start: 8 @57740 has 3 MA's), (11, 57821), (12, 57830), (14, 57842), (18, 57956), (21, 58010), (29, 58151), (36, 58220), (40, 58295), (42, 58313),

Gene: Ecliptus\_84 Start: 48151, Stop: 48618, Start Num: 13

Candidate Starts for Ecliptus\_84:

(Start: 13 @48151 has 10 MA's), (24, 48406), (26, 48418),

Gene: Halo3\_7 Start: 3546, Stop: 4028, Start Num: 13

Candidate Starts for Halo3\_7:

(6, 3414), (9, 3498), (Start: 13 @3546 has 10 MA's), (23, 3744), (25, 3795), (32, 3879), (33, 3888), (34, 3891), (36, 3930), (37, 3939), (41, 3987),

Gene: Horus\_80 Start: 47249, Stop: 47716, Start Num: 13

Candidate Starts for Horus\_80:

(Start: 13 @47249 has 10 MA's), (24, 47504), (26, 47516),

Gene: Kenna\_77 Start: 45632, Stop: 46009, Start Num: 17  
Candidate Starts for Kenna\_77:  
(Start: 17 @45632 has 5 MA's), (19, 45713), (20, 45725), (36, 45932),

Gene: Kuwabara\_80 Start: 47595, Stop: 48080, Start Num: 13  
Candidate Starts for Kuwabara\_80:  
(Start: 13 @47595 has 10 MA's), (23, 47805), (35, 47946),

Gene: Leroy\_79 Start: 45444, Stop: 45911, Start Num: 13  
Candidate Starts for Leroy\_79:  
(Start: 13 @45444 has 10 MA's), (24, 45699), (26, 45711),

Gene: Lton\_57 Start: 34468, Stop: 34947, Start Num: 13  
Candidate Starts for Lton\_57:  
(Start: 13 @34468 has 10 MA's), (22, 34654), (25, 34717), (28, 34756), (36, 34846),

Gene: Lutum\_83 Start: 46794, Stop: 47171, Start Num: 17  
Candidate Starts for Lutum\_83:  
(Start: 17 @46794 has 5 MA's), (19, 46875), (20, 46887), (36, 47094),

Gene: Matteo\_51 Start: 35221, Stop: 35715, Start Num: 13  
Candidate Starts for Matteo\_51:  
(11, 35209), (Start: 13 @35221 has 10 MA's), (15, 35233), (18, 35335), (21, 35389), (27, 35491), (29, 35530), (31, 35542), (42, 35677),

Gene: Miskis\_93 Start: 57403, Stop: 58014, Start Num: 8  
Candidate Starts for Miskis\_93:  
(5, 57259), (7, 57385), (Start: 8 @57403 has 3 MA's), (11, 57484), (12, 57493), (14, 57505), (18, 57619), (21, 57673), (29, 57814), (36, 57883), (40, 57958), (42, 57976),

Gene: Norvs\_97 Start: 58732, Stop: 59343, Start Num: 8  
Candidate Starts for Norvs\_97:  
(7, 58714), (Start: 8 @58732 has 3 MA's), (11, 58813), (12, 58822), (14, 58834), (18, 58948), (21, 59002), (29, 59143), (36, 59212), (40, 59287), (42, 59305),

Gene: Obliviate\_79 Start: 48067, Stop: 48606, Start Num: 10  
Candidate Starts for Obliviate\_79:  
(Start: 10 @48067 has 1 MA's), (16, 48169), (30, 48421), (36, 48478),

Gene: Pepperoni\_56 Start: 35924, Stop: 36391, Start Num: 13  
Candidate Starts for Pepperoni\_56:  
(Start: 13 @35924 has 10 MA's), (24, 36179), (26, 36191),

Gene: Phistory\_77 Start: 44347, Stop: 44814, Start Num: 13  
Candidate Starts for Phistory\_77:  
(Start: 13 @44347 has 10 MA's), (24, 44602), (26, 44614),

Gene: TinyDot\_53 Start: 33756, Stop: 34190, Start Num: 17  
Candidate Starts for TinyDot\_53:  
(Start: 17 @33756 has 5 MA's), (19, 33837), (20, 33849),

Gene: Toniann\_97 Start: 58672, Stop: 59283, Start Num: 8  
Candidate Starts for Toniann\_97:

(1, 57979), (2, 58339), (3, 58348), (4, 58453), (7, 58654), (Start: 8 @58672 has 3 MA's), (11, 58753),  
(12, 58762), (14, 58774), (18, 58888), (21, 58942), (29, 59083), (40, 59227), (42, 59245),