

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 164077 Report

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

Pham number 164077 has 11 members, 1 are drafts.

Phages represented in each track:

Track 1 : Clark\_60, Samman98\_61

• Track 2 : Beenie 55

Track 3: MichaelScott 62

Track 4 : Faith5x5\_54

Track 5 : Morkie\_60

Track 6 : Malisha\_80

• Track 7 : Spooky 81

Track 8 : Squiddly\_80

Track 9 : Gudmit 52

• Track 10 : REQ2\_66

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

The start number called the most often in the published annotations is 11, it was called in 10 of the 10 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Beenie\_55, Clark\_60, Faith5x5\_54, Gudmit\_52, Malisha\_80, MichaelScott\_62, Morkie\_60, REQ2\_66, Samman98\_61, Spooky\_81, Squiddly\_80,

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:

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# Summary by start number:

#### Start 11:

- Found in 11 of 11 (100.0%) of genes in pham
- Manual Annotations of this start: 10 of 10
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Beenie\_55 (CZ4), Clark\_60 (CZ4), Faith5x5\_54 (CZ6), Gudmit\_52 (singleton), Malisha\_80 (DN), MichaelScott\_62 (CZ4),

Morkie 60 (DH), REQ2 66 (singleton), Samman98 61 (CZ4), Spooky 81 (DN2), Squiddly\_80 (DN2),

### Summary by clusters:

There are 6 clusters represented in this pham: DN, singleton, DH, CZ6, CZ4, DN2,

Info for manual annotations of cluster CZ4:

•Start number 11 was manually annotated 4 times for cluster CZ4.

Info for manual annotations of cluster CZ6:

Start number 11 was manually annotated 1 time for cluster CZ6.

Info for manual annotations of cluster DH:

•Start number 11 was manually annotated 1 time for cluster DH.

Info for manual annotations of cluster DN:

•Start number 11 was manually annotated 1 time for cluster DN.

Info for manual annotations of cluster DN2:

•Start number 11 was manually annotated 2 times for cluster DN2.

#### Gene Information:

Gene: Beenie 55 Start: 40138, Stop: 40506, Start Num: 11

Candidate Starts for Beenie 55:

(Start: 11 @40138 has 10 MA's), (12, 40177), (17, 40240),

Gene: Clark\_60 Start: 39935, Stop: 40306, Start Num: 11

Candidate Starts for Clark 60:

(Start: 11 @39935 has 10 MA's), (19, 40049), (21, 40073), (25, 40169), (29, 40226),

Gene: Faith5x5 54 Start: 34585, Stop: 35022, Start Num: 11

Candidate Starts for Faith5x5 54:

(3, 34498), (6, 34507), (7, 34543), (Start: 11 @34585 has 10 MA's), (20, 34756), (22, 34765), (24,

34846), (28, 34924),

Gene: Gudmit 52 Start: 32678, Stop: 33130, Start Num: 11

Candidate Starts for Gudmit 52:

(Start: 11 @32678 has 10 MA's), (21, 32816), (22, 32822),

Gene: Malisha 80 Start: 48865, Stop: 49314, Start Num: 11

Candidate Starts for Malisha 80:

(Start: 11 @48865 has 10 MA's), (13, 48910), (14, 48916), (15, 48919), (20, 48997), (31, 49225),

Gene: MichaelScott 62 Start: 41372, Stop: 41779, Start Num: 11

Candidate Starts for MichaelScott 62:

(10, 41369), (Start: 11 @41372 has 10 MA's), (16, 41477), (19, 41501), (20, 41525), (26, 41648), (27,

41660),

Gene: Morkie\_60 Start: 36373, Stop: 36831, Start Num: 11

Candidate Starts for Morkie\_60:

(1, 36250), (2, 36268), (4, 36289), (5, 36295), (Start: 11 @36373 has 10 MA's), (31, 36754), (32, 36805),

Gene: REQ2\_66 Start: 42263, Stop: 42595, Start Num: 11

Candidate Starts for REQ2 66:

(Start: 11 @42263 has 10 MA's), (20, 42368), (21, 42371), (23, 42404), (26, 42473), (30, 42569),

Gene: Samman98\_61 Start: 40038, Stop: 40409, Start Num: 11

Candidate Starts for Samman98\_61:

(Start: 11 @40038 has 10 MA's), (19, 40152), (21, 40176), (25, 40272), (29, 40329),

Gene: Spooky\_81 Start: 46355, Stop: 46723, Start Num: 11

Candidate Starts for Spooky\_81:

(8, 46328), (9, 46343), (Start: 11 @46355 has 10 MA's), (13, 46400), (14, 46406), (15, 46409), (18, 46463), (21, 46490), (22, 46496), (29, 46643),

Gene: Squiddly\_80 Start: 48754, Stop: 49113, Start Num: 11

Candidate Starts for Squiddly\_80:

(Start: 11 @48754 has 10 MA's), (13, 48799), (14, 48805), (15, 48808), (20, 48886),