

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 3067 Report

This analysis was run 04/05/24 on database version 557.

Pham number 3067 has 27 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Togo\_48, Savbucketdawg\_49, Evamon\_48, Mutzi\_49, RogerDodger\_52, Wizard\_48, Nubi\_49, Jambalaya\_49, SmokingBunny\_49, Salvador\_48
- Track 2 : PinkCoffee\_51, Barb\_51
- Track 3 : VanDeWege\_52
- Track 4 : Bakery\_55
- Track 5 : Portcullis\_51, Twister6\_51, Shinji\_49
- Track 6 : Gezellig 51, Halo3 50
- Track 7: ClamChowder\_51, KimmyK\_50, PullumCavea\_48, Phlop\_48, Fugax\_52
- Track 8 : Danyall 51
- Track 9 : Valary\_51
- Track 10 : Arri 52

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

The start number called the most often in the published annotations is 6, it was called in 18 of the 25 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Bakery\_55, ClamChowder\_51, Evamon\_48, Fugax\_52, Jambalaya\_49, KimmyK\_50, Mutzi\_49, Nubi\_49, Phlop\_48, Portcullis\_51, PullumCavea\_48, RogerDodger\_52, Salvador\_48, Savbucketdawg\_49, Shinji\_49, SmokingBunny\_49, Togo\_48, Twister6\_51, Wizard\_48,

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

• Arri\_52, Barb\_51, Danyall\_51, Gezellig\_51, Halo3\_50, PinkCoffee\_51, Valary\_51, VanDeWege\_52,

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

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## Summary by start number:

#### Start 3:

• Found in 27 of 27 (100.0%) of genes in pham

- Manual Annotations of this start: 3 of 25
- Called 11.1% of time when present
- Phage (with cluster) where this start called: Barb\_51 (DC1), PinkCoffee\_51 (DC1),
  Valary\_51 (DC1),

#### Start 4:

- Found in 23 of 27 (85.2%) of genes in pham
- Manual Annotations of this start: 1 of 25
- Called 4.3% of time when present
- Phage (with cluster) where this start called: VanDeWege\_52 (DC1),

#### Start 5:

- Found in 27 of 27 (100.0%) of genes in pham
- Manual Annotations of this start: 3 of 25
- Called 14.8% of time when present
- Phage (with cluster) where this start called: Arri\_52 (DC1), Danyall\_51 (DC1), Gezellig\_51 (DC1), Halo3\_50 (DC1),

### Start 6:

- Found in 27 of 27 (100.0%) of genes in pham
- Manual Annotations of this start: 18 of 25
- Called 70.4% of time when present
- Phage (with cluster) where this start called: Bakery\_55 (DC1), ClamChowder\_51 (DC1), Evamon\_48 (DC1), Fugax\_52 (DC1), Jambalaya\_49 (DC1), KimmyK\_50 (DC1), Mutzi\_49 (DC1), Nubi\_49 (DC1), Phlop\_48 (DC1), Portcullis\_51 (DC1), PullumCavea\_48 (DC1), RogerDodger\_52 (DC1), Salvador\_48 (DC1), Savbucketdawg\_49 (DC1), Shinji\_49 (DC1), SmokingBunny\_49 (DC1), Togo\_48 (DC1), Twister6\_51 (DC1), Wizard\_48 (DC1),

### **Summary by clusters:**

There is one cluster represented in this pham: DC1

Info for manual annotations of cluster DC1:

- •Start number 3 was manually annotated 3 times for cluster DC1.
- •Start number 4 was manually annotated 1 time for cluster DC1.
- •Start number 5 was manually annotated 3 times for cluster DC1.
- Start number 6 was manually annotated 18 times for cluster DC1.

#### Gene Information:

Gene: Arri\_52 Start: 40036, Stop: 40233, Start Num: 5

Candidate Starts for Arri\_52:

(Start: 3 @40006 has 3 MA's), (Start: 4 @40012 has 1 MA's), (Start: 5 @40036 has 3 MA's), (Start: 6 @40042 has 18 MA's), (8, 40174), (9, 40222),

Gene: Bakery 55 Start: 41183, Stop: 41374, Start Num: 6

Candidate Starts for Bakery 55:

(1, 41102), (2, 41120), (Start: 3 @41147 has 3 MA's), (Start: 4 @41153 has 1 MA's), (Start: 5 @41177 has 3 MA's), (Start: 6 @41183 has 18 MA's), (8, 41315), (9, 41363),

Gene: Barb\_51 Start: 40125, Stop: 40352, Start Num: 3

Candidate Starts for Barb\_51:

(Start: 3 @40125 has 3 MA's), (Start: 4 @40131 has 1 MA's), (Start: 5 @40155 has 3 MA's), (Start: 6 @40161 has 18 MA's), (7, 40275), (9, 40341),

Gene: ClamChowder\_51 Start: 40161, Stop: 40352, Start Num: 6

Candidate Starts for ClamChowder 51:

(Start: 3 @40125 has 3 MA's), (Start: 4 @40131 has 1 MA's), (Start: 5 @40155 has 3 MA's), (Start: 6 @40161 has 18 MA's), (7, 40275), (9, 40341),

Gene: Danyall 51 Start: 39856, Stop: 40053, Start Num: 5

Candidate Starts for Danyall 51:

(Start: 3 @39826 has 3 MA's), (Start: 5 @39856 has 3 MA's), (Start: 6 @39862 has 18 MA's), (9, 40042).

Gene: Evamon\_48 Start: 39881, Stop: 40072, Start Num: 6

Candidate Starts for Evamon 48:

(Start: 3 @39845 has 3 MA's), (Start: 4 @39851 has 1 MA's), (Start: 5 @39875 has 3 MA's), (Start: 6 @39881 has 18 MA's), (9, 40061),

Gene: Fugax\_52 Start: 40153, Stop: 40344, Start Num: 6

Candidate Starts for Fugax\_52:

(Start: 3 @ 40117 has 3 MA's), (Start: 4 @ 40123 has 1 MA's), (Start: 5 @ 40147 has 3 MA's), (Start: 6 @ 40153 has 18 MA's), (7, 40267), (9, 40333),

Gene: Gezellig\_51 Start: 40007, Stop: 40204, Start Num: 5

Candidate Starts for Gezellig\_51:

(Start: 3 @39977 has 3 MA's), (Start: 4 @39983 has 1 MA's), (Start: 5 @40007 has 3 MA's), (Start: 6 @40013 has 18 MA's), (9, 40193),

Gene: Halo3\_50 Start: 40592, Stop: 40789, Start Num: 5

Candidate Starts for Halo3 50:

(Start: 3 @40562 has 3 MA's), (Start: 4 @40568 has 1 MA's), (Start: 5 @40592 has 3 MA's), (Start: 6 @40598 has 18 MA's), (9, 40778),

Gene: Jambalaya\_49 Start: 39660, Stop: 39851, Start Num: 6

Candidate Starts for Jambalaya\_49:

(Start: 3 @39624 has 3 MA's), (Start: 4 @39630 has 1 MA's), (Start: 5 @39654 has 3 MA's), (Start: 6 @39660 has 18 MA's), (9, 39840),

Gene: KimmyK\_50 Start: 40595, Stop: 40786, Start Num: 6

Candidate Starts for KimmyK\_50:

(Start: 3 @ 40559 has 3 MA's), (Start: 4 @ 40565 has 1 MA's), (Start: 5 @ 40589 has 3 MA's), (Start: 6 @ 40595 has 18 MA's), (7, 40709), (9, 40775),

Gene: Mutzi\_49 Start: 40989, Stop: 41180, Start Num: 6

Candidate Starts for Mutzi\_49:

(Start: 3 @40953 has 3 MA's), (Start: 4 @40959 has 1 MA's), (Start: 5 @40983 has 3 MA's), (Start: 6 @40989 has 18 MA's), (9, 41169),

Gene: Nubi\_49 Start: 39986, Stop: 40177, Start Num: 6

Candidate Starts for Nubi 49:

(Start: 3 @39950 has 3 MA's), (Start: 4 @39956 has 1 MA's), (Start: 5 @39980 has 3 MA's), (Start: 6 @39986 has 18 MA's), (9, 40166),

Gene: Phlop\_48 Start: 40067, Stop: 40258, Start Num: 6

Candidate Starts for Phlop\_48:

(Start: 3 @ 40031 has 3 MA's), (Start: 4 @ 40037 has 1 MA's), (Start: 5 @ 40061 has 3 MA's), (Start: 6 @ 40067 has 18 MA's), (7, 40181), (9, 40247),

Gene: PinkCoffee\_51 Start: 40134, Stop: 40361, Start Num: 3

Candidate Starts for PinkCoffee\_51:

(Start: 3 @ 40134 has 3 MA's), (Start: 4 @ 40140 has 1 MA's), (Start: 5 @ 40164 has 3 MA's), (Start: 6 @ 40170 has 18 MA's), (7, 40284), (9, 40350),

Gene: Portcullis\_51 Start: 39673, Stop: 39864, Start Num: 6

Candidate Starts for Portcullis\_51:

(Start: 3 @39637 has 3 MA's), (Start: 5 @39667 has 3 MA's), (Start: 6 @39673 has 18 MA's), (9, 39853).

Gene: PullumCavea 48 Start: 40067, Stop: 40258, Start Num: 6

Candidate Starts for PullumCavea\_48:

(Start: 3 @40031 has 3 MA's), (Start: 4 @40037 has 1 MA's), (Start: 5 @40061 has 3 MA's), (Start: 6 @40067 has 18 MA's), (7, 40181), (9, 40247),

Gene: RogerDodger\_52 Start: 40210, Stop: 40401, Start Num: 6

Candidate Starts for RogerDodger\_52:

(Start: 3 @40174 has 3 MA's), (Start: 4 @40180 has 1 MA's), (Start: 5 @40204 has 3 MA's), (Start: 6 @40210 has 18 MA's), (9, 40390),

Gene: Salvador\_48 Start: 39879, Stop: 40070, Start Num: 6

Candidate Starts for Salvador\_48:

(Start: 3 @39843 has 3 MA's), (Start: 4 @39849 has 1 MA's), (Start: 5 @39873 has 3 MA's), (Start: 6 @39879 has 18 MA's), (9, 40059),

Gene: Savbucketdawg\_49 Start: 39660, Stop: 39851, Start Num: 6

Candidate Starts for Savbucketdawg\_49:

(Start: 3 @39624 has 3 MA's), (Start: 4 @39630 has 1 MA's), (Start: 5 @39654 has 3 MA's), (Start: 6 @39660 has 18 MA's), (9, 39840),

Gene: Shinji\_49 Start: 39423, Stop: 39614, Start Num: 6

Candidate Starts for Shinji\_49:

(Start: 3 @39387 has 3 MA's), (Start: 5 @39417 has 3 MA's), (Start: 6 @39423 has 18 MA's), (9, 39603),

Gene: SmokingBunny\_49 Start: 39972, Stop: 40163, Start Num: 6

Candidate Starts for SmokingBunny 49:

(Start: 3 @39936 has 3 MA's), (Start: 4 @39942 has 1 MA's), (Start: 5 @39966 has 3 MA's), (Start: 6 @39972 has 18 MA's), (9, 40152),

Gene: Togo\_48 Start: 39972, Stop: 40163, Start Num: 6

Candidate Starts for Togo 48:

(Start: 3 @39936 has 3 MA's), (Start: 4 @39942 has 1 MA's), (Start: 5 @39966 has 3 MA's), (Start: 6 @39972 has 18 MA's), (9, 40152),

Gene: Twister6\_51 Start: 39773, Stop: 39964, Start Num: 6

Candidate Starts for Twister6\_51:

(Start: 3 @39737 has 3 MA's), (Start: 5 @39767 has 3 MA's), (Start: 6 @39773 has 18 MA's), (9, 39953),

Gene: Valary\_51 Start: 40779, Stop: 41006, Start Num: 3

Candidate Starts for Valary\_51:

(Start: 3 @40779 has 3 MA's), (Start: 4 @40785 has 1 MA's), (Start: 5 @40809 has 3 MA's), (Start: 6 @40815 has 18 MA's), (9, 40995),

Gene: VanDeWege\_52 Start: 40077, Stop: 40298, Start Num: 4

Candidate Starts for VanDeWege\_52:

(Start: 3 @40071 has 3 MA's), (Start: 4 @40077 has 1 MA's), (Start: 5 @40101 has 3 MA's), (Start: 6 @40107 has 18 MA's), (9, 40287),

Gene: Wizard\_48 Start: 40013, Stop: 40204, Start Num: 6

Candidate Starts for Wizard 48:

(Start: 3 @39977 has 3 MA's), (Start: 4 @39983 has 1 MA's), (Start: 5 @40007 has 3 MA's), (Start: 6

@40013 has 18 MA's), (9, 40193),