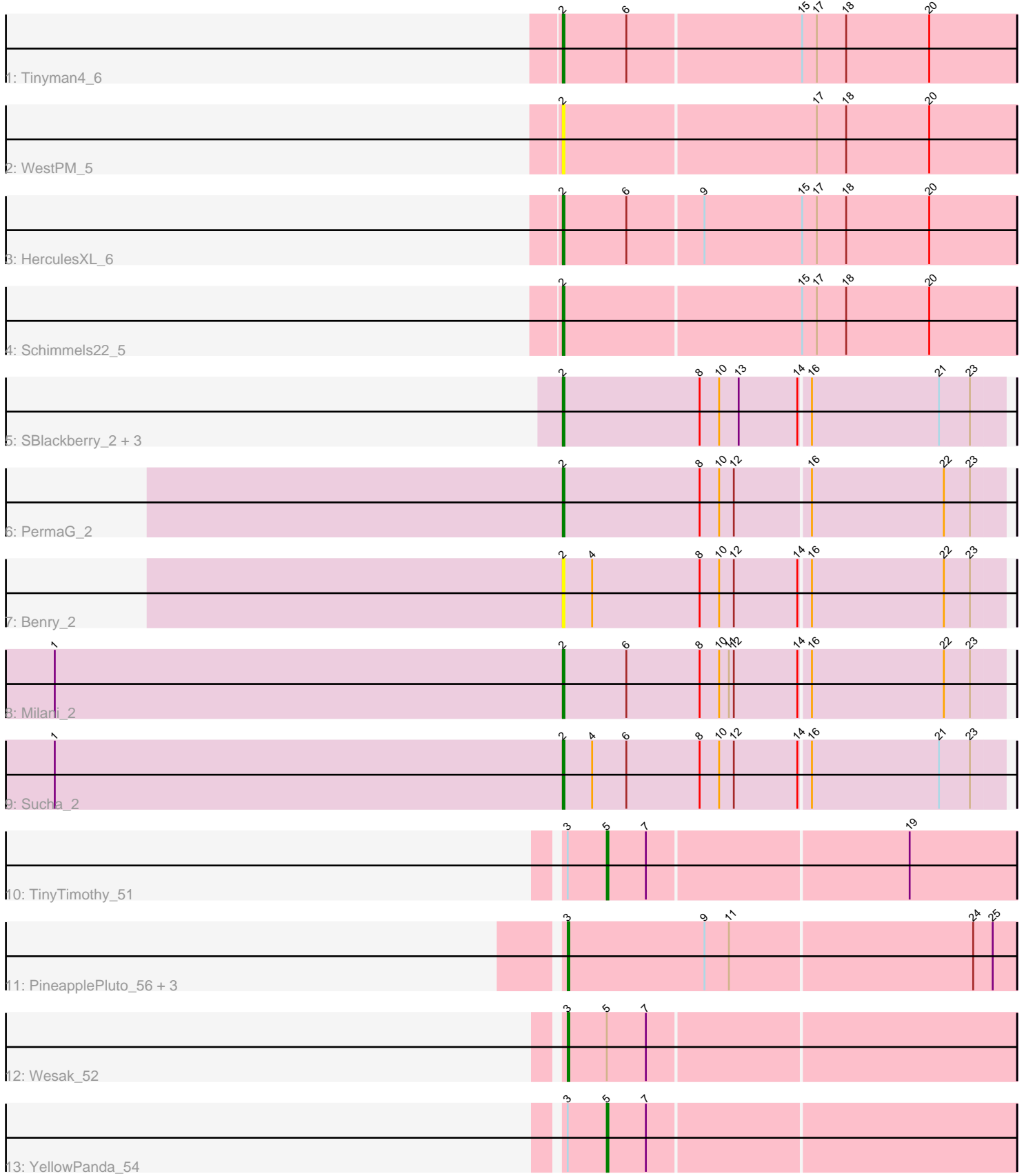


Pham 162211



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 162211 Report

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

Pham number 162211 has 19 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Tinyman4\_6
- Track 2 : WestPM\_5
- Track 3 : HerculesXL\_6
- Track 4 : Schimmels22\_5
- Track 5 : SBlackberry\_2, Jera\_2, TurboVicky\_2, Zanella\_2
- Track 6 : PermaG\_2
- Track 7 : Benry\_2
- Track 8 : Milani\_2
- Track 9 : Sucha\_2
- Track 10 : TinyTimothy\_51
- Track 11 : PineapplePluto\_56, Oatly\_55, CrunchyBoi\_56, HitchHiker\_56
- Track 12 : Wesak\_52
- Track 13 : YellowPanda\_54

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

The start number called the most often in the published annotations is 2, it was called in 10 of the 16 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Benry\_2, HerculesXL\_6, Jera\_2, Milani\_2, PermaG\_2, SBlackberry\_2, Schimmels22\_5, Sucha\_2, Tinyman4\_6, TurboVicky\_2, WestPM\_5, Zanella\_2,

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

- 

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

- CrunchyBoi\_56, HitchHiker\_56, Oatly\_55, PineapplePluto\_56, TinyTimothy\_51, Wesak\_52, YellowPanda\_54,

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

Start 2:

- Found in 12 of 19 ( 63.2% ) of genes in pham

- Manual Annotations of this start: 10 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Benry\_2 (EJ), HerculesXL\_6 (EA11), Jera\_2 (EJ), Milani\_2 (EJ), PermaG\_2 (EJ), SBlackberry\_2 (EJ), Schimmels22\_5 (EA11), Sucha\_2 (EJ), Tinyman4\_6 (EA11), TurboVicky\_2 (EJ), WestPM\_5 (EA11), Zanella\_2 (EJ),

#### Start 3:

- Found in 7 of 19 ( 36.8% ) of genes in pham
- Manual Annotations of this start: 4 of 16
- Called 71.4% of time when present
- Phage (with cluster) where this start called: CrunchyBoi\_56 (EK1), HitchHiker\_56 (EK1), Oatly\_55 (EK1), PineapplePluto\_56 (EK1), Wesak\_52 (EK1),

#### Start 5:

- Found in 3 of 19 ( 15.8% ) of genes in pham
- Manual Annotations of this start: 2 of 16
- Called 66.7% of time when present
- Phage (with cluster) where this start called: TinyTimothy\_51 (EK1), YellowPanda\_54 (EK1),

### **Summary by clusters:**

There are 3 clusters represented in this pham: EA11, EK1, EJ,

Info for manual annotations of cluster EA11:

- Start number 2 was manually annotated 3 times for cluster EA11.

Info for manual annotations of cluster EJ:

- Start number 2 was manually annotated 7 times for cluster EJ.

Info for manual annotations of cluster EK1:

- Start number 3 was manually annotated 4 times for cluster EK1.
- Start number 5 was manually annotated 2 times for cluster EK1.

### **Gene Information:**

Gene: Benry\_2 Start: 594, Stop: 860, Start Num: 2

Candidate Starts for Benry\_2:

(Start: 2 @594 has 10 MA's), (4, 612), (8, 678), (10, 690), (12, 699), (14, 738), (16, 744), (22, 825), (23, 840),

Gene: CrunchyBoi\_56 Start: 52939, Stop: 53211, Start Num: 3

Candidate Starts for CrunchyBoi\_56:

(Start: 3 @52939 has 4 MA's), (9, 53023), (11, 53038), (24, 53185), (25, 53197),

Gene: HerculesXL\_6 Start: 3738, Stop: 4013, Start Num: 2

Candidate Starts for HerculesXL\_6:

(Start: 2 @3738 has 10 MA's), (6, 3777), (9, 3822), (15, 3882), (17, 3891), (18, 3909), (20, 3960),

Gene: HitchHiker\_56 Start: 53084, Stop: 53356, Start Num: 3

Candidate Starts for HitchHiker\_56:

(Start: 3 @53084 has 4 MA's), (9, 53168), (11, 53183), (24, 53330), (25, 53342),

Gene: Jera\_2 Start: 594, Stop: 860, Start Num: 2

Candidate Starts for Jera\_2:

(Start: 2 @594 has 10 MA's), (8, 678), (10, 690), (13, 702), (14, 738), (16, 744), (21, 822), (23, 840),

Gene: Milani\_2 Start: 594, Stop: 860, Start Num: 2

Candidate Starts for Milani\_2:

(1, 282), (Start: 2 @594 has 10 MA's), (6, 633), (8, 678), (10, 690), (11, 696), (12, 699), (14, 738), (16, 744), (22, 825), (23, 840),

Gene: Oatly\_55 Start: 52644, Stop: 52916, Start Num: 3

Candidate Starts for Oatly\_55:

(Start: 3 @52644 has 4 MA's), (9, 52728), (11, 52743), (24, 52890), (25, 52902),

Gene: PermaG\_2 Start: 600, Stop: 866, Start Num: 2

Candidate Starts for PermaG\_2:

(Start: 2 @600 has 10 MA's), (8, 684), (10, 696), (12, 705), (16, 750), (22, 831), (23, 846),

Gene: PineapplePluto\_56 Start: 53007, Stop: 53279, Start Num: 3

Candidate Starts for PineapplePluto\_56:

(Start: 3 @53007 has 4 MA's), (9, 53091), (11, 53106), (24, 53253), (25, 53265),

Gene: SBlackberry\_2 Start: 594, Stop: 860, Start Num: 2

Candidate Starts for SBlackberry\_2:

(Start: 2 @594 has 10 MA's), (8, 678), (10, 690), (13, 702), (14, 738), (16, 744), (21, 822), (23, 840),

Gene: Schimmels22\_5 Start: 3579, Stop: 3854, Start Num: 2

Candidate Starts for Schimmels22\_5:

(Start: 2 @3579 has 10 MA's), (15, 3723), (17, 3732), (18, 3750), (20, 3801),

Gene: Sucha\_2 Start: 594, Stop: 860, Start Num: 2

Candidate Starts for Sucha\_2:

(1, 282), (Start: 2 @594 has 10 MA's), (4, 612), (6, 633), (8, 678), (10, 690), (12, 699), (14, 738), (16, 744), (21, 822), (23, 840),

Gene: TinyTimothy\_51 Start: 53085, Stop: 53330, Start Num: 5

Candidate Starts for TinyTimothy\_51:

(Start: 3 @53061 has 4 MA's), (Start: 5 @53085 has 2 MA's), (7, 53109), (19, 53265),

Gene: Tinyman4\_6 Start: 3738, Stop: 4013, Start Num: 2

Candidate Starts for Tinyman4\_6:

(Start: 2 @3738 has 10 MA's), (6, 3777), (15, 3882), (17, 3891), (18, 3909), (20, 3960),

Gene: TurboVicky\_2 Start: 594, Stop: 860, Start Num: 2

Candidate Starts for TurboVicky\_2:

(Start: 2 @594 has 10 MA's), (8, 678), (10, 690), (13, 702), (14, 738), (16, 744), (21, 822), (23, 840),

Gene: Wesak\_52 Start: 52918, Stop: 53187, Start Num: 3

Candidate Starts for Wesak\_52:

(Start: 3 @52918 has 4 MA's), (Start: 5 @52942 has 2 MA's), (7, 52966),

Gene: WestPM\_5 Start: 3579, Stop: 3854, Start Num: 2

Candidate Starts for WestPM\_5:

(Start: 2 @3579 has 10 MA's), (17, 3732), (18, 3750), (20, 3801),

Gene: YellowPanda\_54 Start: 52811, Stop: 53056, Start Num: 5

Candidate Starts for YellowPanda\_54:

(Start: 3 @52787 has 4 MA's), (Start: 5 @52811 has 2 MA's), (7, 52835),

Gene: Zanella\_2 Start: 594, Stop: 860, Start Num: 2

Candidate Starts for Zanella\_2:

(Start: 2 @594 has 10 MA's), (8, 678), (10, 690), (13, 702), (14, 738), (16, 744), (21, 822), (23, 840),