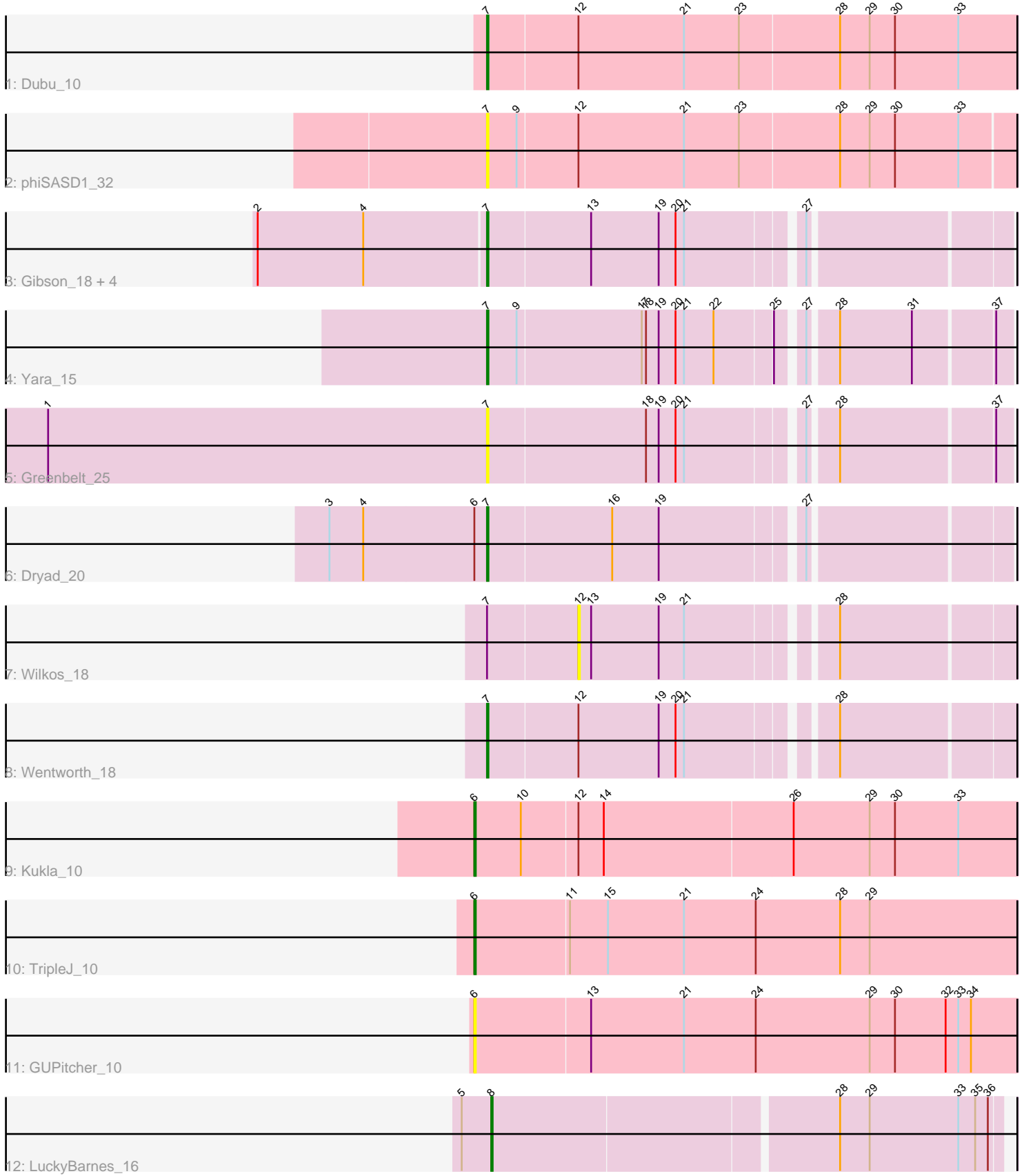


Pham 203405



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 203405 Report

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

Pham number 203405 has 16 members, 4 are drafts.

Phages represented in each track:

- Track 1 : Dubu\_10
- Track 2 : phiSASD1\_32
- Track 3 : Gibson\_18, Lizz\_18, PHTowN\_18, Rooney\_18, ShakeNBake\_18
- Track 4 : Yara\_15
- Track 5 : Greenbelt\_25
- Track 6 : Dryad\_20
- Track 7 : Wilkos\_18
- Track 8 : Wentworth\_18
- Track 9 : Kukla\_10
- Track 10 : TripleJ\_10
- Track 11 : GUPitcher\_10
- Track 12 : LuckyBarnes\_16

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

The start number called the most often in the published annotations is 7, it was called in 9 of the 12 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Dryad\_20, Dubu\_10, Gibson\_18, Greenbelt\_25, Lizz\_18, PHTowN\_18, Rooney\_18, ShakeNBake\_18, Wentworth\_18, Yara\_15, phiSASD1\_32,

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

- Wilkos\_18,

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

- GUPitcher\_10, Kukla\_10, LuckyBarnes\_16, TripleJ\_10,

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

Start 6:

- Found in 4 of 16 ( 25.0% ) of genes in pham
- Manual Annotations of this start: 2 of 12
- Called 75.0% of time when present

- Phage (with cluster) where this start called: GUPitcher\_10 (FJ), Kukla\_10 (FJ), TripleJ\_10 (FJ),

Start 7:

- Found in 12 of 16 ( 75.0% ) of genes in pham
- Manual Annotations of this start: 9 of 12
- Called 91.7% of time when present
- Phage (with cluster) where this start called: Dryad\_20 (BN), Dubu\_10 (BJ), Gibson\_18 (BN), Greenbelt\_25 (BN), Lizz\_18 (BN), PHTowN\_18 (BN), Rooney\_18 (BN), ShakeNBake\_18 (BN), Wentworth\_18 (BN), Yara\_15 (BN), phiSASD1\_32 (BJ),

Start 8:

- Found in 1 of 16 ( 6.2% ) of genes in pham
- Manual Annotations of this start: 1 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: LuckyBarnes\_16 (singleton),

Start 12:

- Found in 5 of 16 ( 31.2% ) of genes in pham
- No Manual Annotations of this start.
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Wilkos\_18 (BN),

### **Summary by clusters:**

There are 4 clusters represented in this pham: BN, FJ, BJ, singleton,

Info for manual annotations of cluster BJ:

- Start number 7 was manually annotated 1 time for cluster BJ.

Info for manual annotations of cluster BN:

- Start number 7 was manually annotated 8 times for cluster BN.

Info for manual annotations of cluster FJ:

- Start number 6 was manually annotated 2 times for cluster FJ.

### **Gene Information:**

Gene: Dryad\_20 Start: 11479, Stop: 11826, Start Num: 7

Candidate Starts for Dryad\_20:

(3, 11368), (4, 11392), (Start: 6 @11470 has 2 MA's), (Start: 7 @11479 has 9 MA's), (16, 11566), (19, 11599), (27, 11692),

Gene: Dubu\_10 Start: 7230, Stop: 7601, Start Num: 7

Candidate Starts for Dubu\_10:

(Start: 7 @7230 has 9 MA's), (12, 7293), (21, 7368), (23, 7407), (28, 7476), (29, 7497), (30, 7515), (33, 7560),

Gene: GUPitcher\_10 Start: 7556, Stop: 7939, Start Num: 6

Candidate Starts for GUPitcher\_10:

(Start: 6 @7556 has 2 MA's), (13, 7637), (21, 7703), (24, 7754), (29, 7835), (30, 7853), (32, 7889), (33, 7898), (34, 7907),

Gene: Gibson\_18 Start: 11037, Stop: 11384, Start Num: 7

Candidate Starts for Gibson\_18:

(2, 10878), (4, 10953), (Start: 7 @11037 has 9 MA's), (13, 11109), (19, 11157), (20, 11169), (21, 11175), (27, 11250),

Gene: Greenbelt\_25 Start: 10906, Stop: 11253, Start Num: 7

Candidate Starts for Greenbelt\_25:

(1, 10594), (Start: 7 @10906 has 9 MA's), (18, 11017), (19, 11026), (20, 11038), (21, 11044), (27, 11119), (28, 11137), (37, 11242),

Gene: Kukla\_10 Start: 7582, Stop: 7962, Start Num: 6

Candidate Starts for Kukla\_10:

(Start: 6 @7582 has 2 MA's), (10, 7615), (12, 7654), (14, 7672), (26, 7804), (29, 7858), (30, 7876), (33, 7921),

Gene: Lizz\_18 Start: 10953, Stop: 11300, Start Num: 7

Candidate Starts for Lizz\_18:

(2, 10794), (4, 10869), (Start: 7 @10953 has 9 MA's), (13, 11025), (19, 11073), (20, 11085), (21, 11091), (27, 11166),

Gene: LuckyBarnes\_16 Start: 10375, Stop: 10725, Start Num: 8

Candidate Starts for LuckyBarnes\_16:

(5, 10354), (Start: 8 @10375 has 1 MA's), (28, 10612), (29, 10633), (33, 10696), (35, 10708), (36, 10717),

Gene: PHTowN\_18 Start: 10953, Stop: 11300, Start Num: 7

Candidate Starts for PHTowN\_18:

(2, 10794), (4, 10869), (Start: 7 @10953 has 9 MA's), (13, 11025), (19, 11073), (20, 11085), (21, 11091), (27, 11166),

Gene: Rooney\_18 Start: 11034, Stop: 11381, Start Num: 7

Candidate Starts for Rooney\_18:

(2, 10875), (4, 10950), (Start: 7 @11034 has 9 MA's), (13, 11106), (19, 11154), (20, 11166), (21, 11172), (27, 11247),

Gene: ShakeNBake\_18 Start: 10953, Stop: 11300, Start Num: 7

Candidate Starts for ShakeNBake\_18:

(2, 10794), (4, 10869), (Start: 7 @10953 has 9 MA's), (13, 11025), (19, 11073), (20, 11085), (21, 11091), (27, 11166),

Gene: TripleJ\_10 Start: 7875, Stop: 8258, Start Num: 6

Candidate Starts for TripleJ\_10:

(Start: 6 @7875 has 2 MA's), (11, 7941), (15, 7968), (21, 8022), (24, 8073), (28, 8133), (29, 8154),

Gene: Wentworth\_18 Start: 10743, Stop: 11093, Start Num: 7

Candidate Starts for Wentworth\_18:

(Start: 7 @10743 has 9 MA's), (12, 10806), (19, 10863), (20, 10875), (21, 10881), (28, 10974),

Gene: Wilkos\_18 Start: 10975, Stop: 11262, Start Num: 12

Candidate Starts for Wilkos\_18:

(Start: 7 @10912 has 9 MA's), (12, 10975), (13, 10984), (19, 11032), (21, 11050), (28, 11143),

Gene: Yara\_15 Start: 9856, Stop: 10203, Start Num: 7

Candidate Starts for Yara\_15:

(Start: 7 @9856 has 9 MA's), (9, 9877), (17, 9964), (18, 9967), (19, 9976), (20, 9988), (21, 9994), (22, 10015), (25, 10054), (27, 10069), (28, 10087), (31, 10138), (37, 10192),

Gene: phiSASD1\_32 Start: 7773, Stop: 8141, Start Num: 7

Candidate Starts for phiSASD1\_32:

(Start: 7 @7773 has 9 MA's), (9, 7794), (12, 7836), (21, 7911), (23, 7950), (28, 8019), (29, 8040), (30, 8058), (33, 8103),