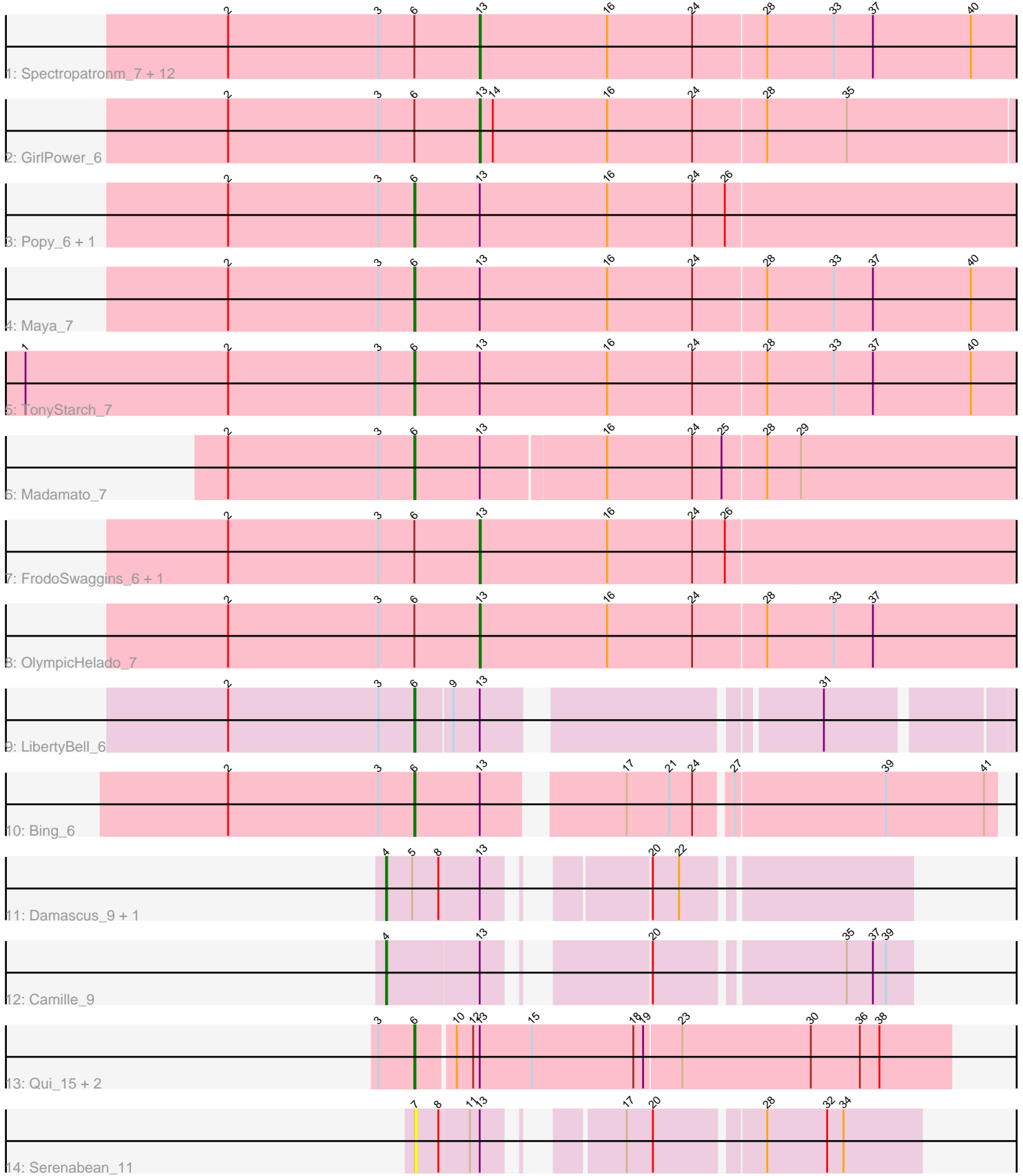


Pham 163817



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 163817 Report

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

Pham number 163817 has 31 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Spectropatronm\_7, TieDye\_6, TaidaOne\_7, Esketit\_7, CherryBlossom\_7, Hoshi\_7, FidgetOrca\_7, Jaylociraptor\_7, IceWarrior\_7, Meibysrarus\_7, Rima\_7, Namu\_7, Indigenous\_7
- Track 2 : GirlPower\_6
- Track 3 : Popy\_6, DrGrey\_6
- Track 4 : Maya\_7
- Track 5 : TonyStarch\_7
- Track 6 : Madamato\_7
- Track 7 : FrodoSwaggins\_6, Soshi\_6
- Track 8 : OlympicHelado\_7
- Track 9 : LibertyBell\_6
- Track 10 : Bing\_6
- Track 11 : Damascus\_9, DizzyRudy\_9
- Track 12 : Camille\_9
- Track 13 : Qui\_15, Paella\_15, Elver\_14
- Track 14 : Serenabean\_11

### ***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 17 of the 29 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- CherryBlossom\_7, Esketit\_7, FidgetOrca\_7, FrodoSwaggins\_6, GirlPower\_6, Hoshi\_7, IceWarrior\_7, Indigenous\_7, Jaylociraptor\_7, Meibysrarus\_7, Namu\_7, OlympicHelado\_7, Rima\_7, Soshi\_6, Spectropatronm\_7, TaidaOne\_7, TieDye\_6,

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

- Bing\_6, Camille\_9, Damascus\_9, DizzyRudy\_9, DrGrey\_6, Elver\_14, LibertyBell\_6, Madamato\_7, Maya\_7, Paella\_15, Popy\_6, Qui\_15, Serenabean\_11, TonyStarch\_7,

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

-

## Summary by start number:

### Start 4:

- Found in 3 of 31 ( 9.7% ) of genes in pham
- Manual Annotations of this start: 3 of 29
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Camille\_9 (EL), Damascus\_9 (EL), DizzyRudy\_9 (EL),

### Start 6:

- Found in 27 of 31 ( 87.1% ) of genes in pham
- Manual Annotations of this start: 9 of 29
- Called 37.0% of time when present
- Phage (with cluster) where this start called: Bing\_6 (BI5), DrGrey\_6 (BI1), Elver\_14 (FK), LibertyBell\_6 (BI3), Madamato\_7 (BI1), Maya\_7 (BI1), Paella\_15 (FK), Popy\_6 (BI1), Qui\_15 (FK), TonyStarch\_7 (BI1),

### Start 7:

- Found in 1 of 31 ( 3.2% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Serenabean\_11 (singleton),

### Start 13:

- Found in 31 of 31 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 17 of 29
- Called 54.8% of time when present
- Phage (with cluster) where this start called: CherryBlossom\_7 (BI1), Esketit\_7 (BI1), FidgetOrca\_7 (BI1), FrodoSwaggins\_6 (BI1), GirlPower\_6 (BI1), Hoshi\_7 (BI1), IceWarrior\_7 (BI1), Indigenous\_7 (BI1), Jaylociraptor\_7 (BI1), Meibysrarus\_7 (BI1), Namo\_7 (BI1), OlympicHelado\_7 (BI1), Rima\_7 (BI1), Soshi\_6 (BI1), Spectropatronm\_7 (BI1), TaidaOne\_7 (BI1), TieDye\_6 (BI1),

## Summary by clusters:

There are 6 clusters represented in this pham: EL, singleton, BI5, FK, BI3, BI1,

### Info for manual annotations of cluster BI1:

- Start number 6 was manually annotated 5 times for cluster BI1.
- Start number 13 was manually annotated 17 times for cluster BI1.

### Info for manual annotations of cluster BI3:

- Start number 6 was manually annotated 1 time for cluster BI3.

### Info for manual annotations of cluster BI5:

- Start number 6 was manually annotated 1 time for cluster BI5.

### Info for manual annotations of cluster EL:

- Start number 4 was manually annotated 3 times for cluster EL.

### Info for manual annotations of cluster FK:

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

**Gene Information:**

Gene: Bing\_6 Start: 2300, Stop: 2794, Start Num: 6

Candidate Starts for Bing\_6:

(2, 2129), (3, 2267), (Start: 6 @2300 has 9 MA's), (Start: 13 @2360 has 17 MA's), (17, 2468), (21, 2507), (24, 2528), (27, 2558), (39, 2693), (41, 2783),

Gene: Camille\_9 Start: 3443, Stop: 3859, Start Num: 4

Candidate Starts for Camille\_9:

(Start: 4 @3443 has 3 MA's), (Start: 13 @3527 has 17 MA's), (20, 3638), (35, 3800), (37, 3824), (39, 3836),

Gene: CherryBlossom\_7 Start: 2641, Stop: 3147, Start Num: 13

Candidate Starts for CherryBlossom\_7:

(2, 2410), (3, 2548), (Start: 6 @2581 has 9 MA's), (Start: 13 @2641 has 17 MA's), (16, 2758), (24, 2836), (28, 2902), (33, 2962), (37, 2998), (40, 3088),

Gene: Damascus\_9 Start: 3418, Stop: 3831, Start Num: 4

Candidate Starts for Damascus\_9:

(Start: 4 @3418 has 3 MA's), (5, 3442), (8, 3466), (Start: 13 @3502 has 17 MA's), (20, 3610), (22, 3634),

Gene: DizzyRudy\_9 Start: 3416, Stop: 3829, Start Num: 4

Candidate Starts for DizzyRudy\_9:

(Start: 4 @3416 has 3 MA's), (5, 3440), (8, 3464), (Start: 13 @3500 has 17 MA's), (20, 3608), (22, 3632),

Gene: DrGrey\_6 Start: 2286, Stop: 2834, Start Num: 6

Candidate Starts for DrGrey\_6:

(2, 2115), (3, 2253), (Start: 6 @2286 has 9 MA's), (Start: 13 @2346 has 17 MA's), (16, 2463), (24, 2541), (26, 2571),

Gene: Elver\_14 Start: 7089, Stop: 7571, Start Num: 6

Candidate Starts for Elver\_14:

(3, 7056), (Start: 6 @7089 has 9 MA's), (10, 7122), (12, 7137), (Start: 13 @7143 has 17 MA's), (15, 7191), (18, 7284), (19, 7293), (23, 7326), (30, 7443), (36, 7488), (38, 7506),

Gene: Esketit\_7 Start: 2624, Stop: 3130, Start Num: 13

Candidate Starts for Esketit\_7:

(2, 2393), (3, 2531), (Start: 6 @2564 has 9 MA's), (Start: 13 @2624 has 17 MA's), (16, 2741), (24, 2819), (28, 2885), (33, 2945), (37, 2981), (40, 3071),

Gene: FidgetOrca\_7 Start: 2624, Stop: 3130, Start Num: 13

Candidate Starts for FidgetOrca\_7:

(2, 2393), (3, 2531), (Start: 6 @2564 has 9 MA's), (Start: 13 @2624 has 17 MA's), (16, 2741), (24, 2819), (28, 2885), (33, 2945), (37, 2981), (40, 3071),

Gene: FrodoSwaggins\_6 Start: 2346, Stop: 2834, Start Num: 13

Candidate Starts for FrodoSwaggins\_6:

(2, 2115), (3, 2253), (Start: 6 @2286 has 9 MA's), (Start: 13 @2346 has 17 MA's), (16, 2463), (24, 2541), (26, 2571),

Gene: GirlPower\_6 Start: 3196, Stop: 3699, Start Num: 13

Candidate Starts for GirlPower\_6:

(2, 2965), (3, 3103), (Start: 6 @3136 has 9 MA's), (Start: 13 @3196 has 17 MA's), (14, 3208), (16, 3313), (24, 3391), (28, 3457), (35, 3529),

Gene: Hoshi\_7 Start: 2624, Stop: 3130, Start Num: 13

Candidate Starts for Hoshi\_7:

(2, 2393), (3, 2531), (Start: 6 @2564 has 9 MA's), (Start: 13 @2624 has 17 MA's), (16, 2741), (24, 2819), (28, 2885), (33, 2945), (37, 2981), (40, 3071),

Gene: IceWarrior\_7 Start: 2624, Stop: 3130, Start Num: 13

Candidate Starts for IceWarrior\_7:

(2, 2393), (3, 2531), (Start: 6 @2564 has 9 MA's), (Start: 13 @2624 has 17 MA's), (16, 2741), (24, 2819), (28, 2885), (33, 2945), (37, 2981), (40, 3071),

Gene: Indigenous\_7 Start: 2624, Stop: 3130, Start Num: 13

Candidate Starts for Indigenous\_7:

(2, 2393), (3, 2531), (Start: 6 @2564 has 9 MA's), (Start: 13 @2624 has 17 MA's), (16, 2741), (24, 2819), (28, 2885), (33, 2945), (37, 2981), (40, 3071),

Gene: Jaylociraptor\_7 Start: 2624, Stop: 3130, Start Num: 13

Candidate Starts for Jaylociraptor\_7:

(2, 2393), (3, 2531), (Start: 6 @2564 has 9 MA's), (Start: 13 @2624 has 17 MA's), (16, 2741), (24, 2819), (28, 2885), (33, 2945), (37, 2981), (40, 3071),

Gene: LibertyBell\_6 Start: 2263, Stop: 2757, Start Num: 6

Candidate Starts for LibertyBell\_6:

(2, 2092), (3, 2230), (Start: 6 @2263 has 9 MA's), (9, 2296), (Start: 13 @2320 has 17 MA's), (31, 2587),

Gene: Madamoto\_7 Start: 2562, Stop: 3104, Start Num: 6

Candidate Starts for Madamoto\_7:

(2, 2391), (3, 2529), (Start: 6 @2562 has 9 MA's), (Start: 13 @2622 has 17 MA's), (16, 2733), (24, 2811), (25, 2838), (28, 2877), (29, 2907),

Gene: Maya\_7 Start: 2572, Stop: 3138, Start Num: 6

Candidate Starts for Maya\_7:

(2, 2401), (3, 2539), (Start: 6 @2572 has 9 MA's), (Start: 13 @2632 has 17 MA's), (16, 2749), (24, 2827), (28, 2893), (33, 2953), (37, 2989), (40, 3079),

Gene: Meibysrarus\_7 Start: 2624, Stop: 3130, Start Num: 13

Candidate Starts for Meibysrarus\_7:

(2, 2393), (3, 2531), (Start: 6 @2564 has 9 MA's), (Start: 13 @2624 has 17 MA's), (16, 2741), (24, 2819), (28, 2885), (33, 2945), (37, 2981), (40, 3071),

Gene: Namo\_7 Start: 2624, Stop: 3130, Start Num: 13

Candidate Starts for Namo\_7:

(2, 2393), (3, 2531), (Start: 6 @2564 has 9 MA's), (Start: 13 @2624 has 17 MA's), (16, 2741), (24, 2819), (28, 2885), (33, 2945), (37, 2981), (40, 3071),

Gene: OlympicHelado\_7 Start: 2624, Stop: 3130, Start Num: 13

Candidate Starts for OlympicHelado\_7:

(2, 2393), (3, 2531), (Start: 6 @2564 has 9 MA's), (Start: 13 @2624 has 17 MA's), (16, 2741), (24, 2819), (28, 2885), (33, 2945), (37, 2981),

Gene: Paella\_15 Start: 7088, Stop: 7570, Start Num: 6

Candidate Starts for Paella\_15:

(3, 7055), (Start: 6 @7088 has 9 MA's), (10, 7121), (12, 7136), (Start: 13 @7142 has 17 MA's), (15, 7190), (18, 7283), (19, 7292), (23, 7325), (30, 7442), (36, 7487), (38, 7505),

Gene: Popy\_6 Start: 2286, Stop: 2834, Start Num: 6

Candidate Starts for Popy\_6:

(2, 2115), (3, 2253), (Start: 6 @2286 has 9 MA's), (Start: 13 @2346 has 17 MA's), (16, 2463), (24, 2541), (26, 2571),

Gene: Qui\_15 Start: 7088, Stop: 7570, Start Num: 6

Candidate Starts for Qui\_15:

(3, 7055), (Start: 6 @7088 has 9 MA's), (10, 7121), (12, 7136), (Start: 13 @7142 has 17 MA's), (15, 7190), (18, 7283), (19, 7292), (23, 7325), (30, 7442), (36, 7487), (38, 7505),

Gene: Rima\_7 Start: 2624, Stop: 3130, Start Num: 13

Candidate Starts for Rima\_7:

(2, 2393), (3, 2531), (Start: 6 @2564 has 9 MA's), (Start: 13 @2624 has 17 MA's), (16, 2741), (24, 2819), (28, 2885), (33, 2945), (37, 2981), (40, 3071),

Gene: Serenabean\_11 Start: 7019, Stop: 7417, Start Num: 7

Candidate Starts for Serenabean\_11:

(7, 7019), (8, 7040), (11, 7067), (Start: 13 @7076 has 17 MA's), (17, 7160), (20, 7184), (28, 7277), (32, 7331), (34, 7346),

Gene: Soshi\_6 Start: 2346, Stop: 2834, Start Num: 13

Candidate Starts for Soshi\_6:

(2, 2115), (3, 2253), (Start: 6 @2286 has 9 MA's), (Start: 13 @2346 has 17 MA's), (16, 2463), (24, 2541), (26, 2571),

Gene: Spectropatronm\_7 Start: 2624, Stop: 3130, Start Num: 13

Candidate Starts for Spectropatronm\_7:

(2, 2393), (3, 2531), (Start: 6 @2564 has 9 MA's), (Start: 13 @2624 has 17 MA's), (16, 2741), (24, 2819), (28, 2885), (33, 2945), (37, 2981), (40, 3071),

Gene: TaidaOne\_7 Start: 2624, Stop: 3130, Start Num: 13

Candidate Starts for TaidaOne\_7:

(2, 2393), (3, 2531), (Start: 6 @2564 has 9 MA's), (Start: 13 @2624 has 17 MA's), (16, 2741), (24, 2819), (28, 2885), (33, 2945), (37, 2981), (40, 3071),

Gene: TieDye\_6 Start: 2334, Stop: 2840, Start Num: 13

Candidate Starts for TieDye\_6:

(2, 2103), (3, 2241), (Start: 6 @2274 has 9 MA's), (Start: 13 @2334 has 17 MA's), (16, 2451), (24, 2529), (28, 2595), (33, 2655), (37, 2691), (40, 2781),

Gene: TonyStarch\_7 Start: 2564, Stop: 3130, Start Num: 6

Candidate Starts for TonyStarch\_7:

(1, 2207), (2, 2393), (3, 2531), (Start: 6 @2564 has 9 MA's), (Start: 13 @2624 has 17 MA's), (16, 2741), (24, 2819), (28, 2885), (33, 2945), (37, 2981), (40, 3071),