



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 171694 Report

This analysis was run 07/10/24 on database version 566.

Pham number 171694 has 28 members, 6 are drafts.

Phages represented in each track:

- Track 1 : Spilled\_25, JimJam\_294, StarPlatinum\_295, LukeCage\_26, JimJam\_26, StarPlatinum\_25, Spilled\_293, LukeCage\_289, Jollison\_30, Jollison\_294
- Track 2 : Birchlyn\_23, SaltySpittoon\_26, Birchlyn\_283, Karimac\_26, KentuckyRacer\_29, CeilingFan\_303, Amabiko\_26, IchabodCrane\_278, Wipeout\_25, PumpkinSpice\_26, Amabiko\_290, Karimac\_284, Quaran19\_26, CeilingFan\_29, KentuckyRacer\_303
- Track 3 : Spelly\_292, Spelly\_26
- Track 4 : PumpkinSpice\_290

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

The start number called the most often in the published annotations is 1, it was called in 21 of the 22 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Amabiko\_26, Amabiko\_290, Birchlyn\_23, Birchlyn\_283, CeilingFan\_29, CeilingFan\_303, IchabodCrane\_278, JimJam\_26, JimJam\_294, Jollison\_294, Jollison\_30, Karimac\_26, Karimac\_284, KentuckyRacer\_29, KentuckyRacer\_303, LukeCage\_26, LukeCage\_289, PumpkinSpice\_26, Quaran19\_26, SaltySpittoon\_26, Spelly\_26, Spelly\_292, Spilled\_25, Spilled\_293, StarPlatinum\_25, StarPlatinum\_295, Wipeout\_25,

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

- PumpkinSpice\_290,

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

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

Start 1:

- Found in 28 of 28 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 21 of 22
- Called 96.4% of time when present

- Phage (with cluster) where this start called: Amabiko\_26 (BE2), Amabiko\_290 (BE2), Birchlyn\_23 (BE2), Birchlyn\_283 (BE2), CeilingFan\_29 (BE2), CeilingFan\_303 (BE2), IchabodCrane\_278 (BE2), JimJam\_26 (BE2), JimJam\_294 (BE2), Jollison\_294 (BE2), Jollison\_30 (BE2), Karimac\_26 (BE2), Karimac\_284 (BE2), KentuckyRacer\_29 (BE2), KentuckyRacer\_303 (BE2), LukeCage\_26 (BE2), LukeCage\_289 (BE2), PumpkinSpice\_26 (BE2), Quaran19\_26 (BE2), SaltySpitooon\_26 (BE2), Spelly\_26 (BE2), Spelly\_292 (BE2), Spilled\_25 (BE2), Spilled\_293 (BE2), StarPlatinum\_25 (BE2), StarPlatinum\_295 (BE2), Wipeout\_25 (BE2),

Start 2:

- Found in 28 of 28 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 1 of 22
- Called 3.6% of time when present
- Phage (with cluster) where this start called: PumpkinSpice\_290 (BE2),

### Summary by clusters:

There is one cluster represented in this pham: BE2

Info for manual annotations of cluster BE2:

- Start number 1 was manually annotated 21 times for cluster BE2.
- Start number 2 was manually annotated 1 time for cluster BE2.

### Gene Information:

Gene: Amabiko\_26 Start: 11579, Stop: 11376, Start Num: 1

Candidate Starts for Amabiko\_26:

(Start: 1 @11579 has 21 MA's), (Start: 2 @11561 has 1 MA's), (3, 11519), (4, 11468), (5, 11444), (6, 11432), (7, 11423), (8, 11417),

Gene: Amabiko\_290 Start: 130405, Stop: 130202, Start Num: 1

Candidate Starts for Amabiko\_290:

(Start: 1 @130405 has 21 MA's), (Start: 2 @130387 has 1 MA's), (3, 130345), (4, 130294), (5, 130270), (6, 130258), (7, 130249), (8, 130243),

Gene: Birchlyn\_23 Start: 9424, Stop: 9221, Start Num: 1

Candidate Starts for Birchlyn\_23:

(Start: 1 @9424 has 21 MA's), (Start: 2 @9406 has 1 MA's), (3, 9364), (4, 9313), (5, 9289), (6, 9277), (7, 9268), (8, 9262),

Gene: Birchlyn\_283 Start: 125515, Stop: 125312, Start Num: 1

Candidate Starts for Birchlyn\_283:

(Start: 1 @125515 has 21 MA's), (Start: 2 @125497 has 1 MA's), (3, 125455), (4, 125404), (5, 125380), (6, 125368), (7, 125359), (8, 125353),

Gene: CeilingFan\_303 Start: 131982, Stop: 131779, Start Num: 1

Candidate Starts for CeilingFan\_303:

(Start: 1 @131982 has 21 MA's), (Start: 2 @131964 has 1 MA's), (3, 131922), (4, 131871), (5, 131847), (6, 131835), (7, 131826), (8, 131820),

Gene: CeilingFan\_29 Start: 11375, Stop: 11172, Start Num: 1  
Candidate Starts for CeilingFan\_29:  
(Start: 1 @11375 has 21 MA's), (Start: 2 @11357 has 1 MA's), (3, 11315), (4, 11264), (5, 11240), (6, 11228), (7, 11219), (8, 11213),

Gene: IchabodCrane\_278 Start: 129721, Stop: 129518, Start Num: 1  
Candidate Starts for IchabodCrane\_278:  
(Start: 1 @129721 has 21 MA's), (Start: 2 @129703 has 1 MA's), (3, 129661), (4, 129610), (5, 129586), (6, 129574), (7, 129565), (8, 129559),

Gene: JimJam\_294 Start: 133114, Stop: 132911, Start Num: 1  
Candidate Starts for JimJam\_294:  
(Start: 1 @133114 has 21 MA's), (Start: 2 @133096 has 1 MA's), (3, 133054), (4, 133003), (6, 132967), (7, 132958), (8, 132952),

Gene: JimJam\_26 Start: 11578, Stop: 11375, Start Num: 1  
Candidate Starts for JimJam\_26:  
(Start: 1 @11578 has 21 MA's), (Start: 2 @11560 has 1 MA's), (3, 11518), (4, 11467), (6, 11431), (7, 11422), (8, 11416),

Gene: Jollison\_30 Start: 11579, Stop: 11376, Start Num: 1  
Candidate Starts for Jollison\_30:  
(Start: 1 @11579 has 21 MA's), (Start: 2 @11561 has 1 MA's), (3, 11519), (4, 11468), (6, 11432), (7, 11423), (8, 11417),

Gene: Jollison\_294 Start: 130254, Stop: 130051, Start Num: 1  
Candidate Starts for Jollison\_294:  
(Start: 1 @130254 has 21 MA's), (Start: 2 @130236 has 1 MA's), (3, 130194), (4, 130143), (6, 130107), (7, 130098), (8, 130092),

Gene: Karimac\_26 Start: 11581, Stop: 11378, Start Num: 1  
Candidate Starts for Karimac\_26:  
(Start: 1 @11581 has 21 MA's), (Start: 2 @11563 has 1 MA's), (3, 11521), (4, 11470), (5, 11446), (6, 11434), (7, 11425), (8, 11419),

Gene: Karimac\_284 Start: 130900, Stop: 130697, Start Num: 1  
Candidate Starts for Karimac\_284:  
(Start: 1 @130900 has 21 MA's), (Start: 2 @130882 has 1 MA's), (3, 130840), (4, 130789), (5, 130765), (6, 130753), (7, 130744), (8, 130738),

Gene: KentuckyRacer\_29 Start: 11376, Stop: 11173, Start Num: 1  
Candidate Starts for KentuckyRacer\_29:  
(Start: 1 @11376 has 21 MA's), (Start: 2 @11358 has 1 MA's), (3, 11316), (4, 11265), (5, 11241), (6, 11229), (7, 11220), (8, 11214),

Gene: KentuckyRacer\_303 Start: 132827, Stop: 132624, Start Num: 1  
Candidate Starts for KentuckyRacer\_303:  
(Start: 1 @132827 has 21 MA's), (Start: 2 @132809 has 1 MA's), (3, 132767), (4, 132716), (5, 132692), (6, 132680), (7, 132671), (8, 132665),

Gene: LukeCage\_26 Start: 11328, Stop: 11125, Start Num: 1  
Candidate Starts for LukeCage\_26:

(Start: 1 @11328 has 21 MA's), (Start: 2 @11310 has 1 MA's), (3, 11268), (4, 11217), (6, 11181), (7, 11172), (8, 11166),

Gene: LukeCage\_289 Start: 132232, Stop: 132029, Start Num: 1

Candidate Starts for LukeCage\_289:

(Start: 1 @132232 has 21 MA's), (Start: 2 @132214 has 1 MA's), (3, 132172), (4, 132121), (6, 132085), (7, 132076), (8, 132070),

Gene: PumpkinSpice\_26 Start: 11579, Stop: 11376, Start Num: 1

Candidate Starts for PumpkinSpice\_26:

(Start: 1 @11579 has 21 MA's), (Start: 2 @11561 has 1 MA's), (3, 11519), (4, 11468), (5, 11444), (6, 11432), (7, 11423), (8, 11417),

Gene: PumpkinSpice\_290 Start: 131453, Stop: 131268, Start Num: 2

Candidate Starts for PumpkinSpice\_290:

(Start: 1 @131471 has 21 MA's), (Start: 2 @131453 has 1 MA's), (3, 131411), (4, 131360), (5, 131336), (6, 131324), (7, 131315), (8, 131309),

Gene: Quaran19\_26 Start: 11570, Stop: 11367, Start Num: 1

Candidate Starts for Quaran19\_26:

(Start: 1 @11570 has 21 MA's), (Start: 2 @11552 has 1 MA's), (3, 11510), (4, 11459), (5, 11435), (6, 11423), (7, 11414), (8, 11408),

Gene: SaltySpittoon\_26 Start: 11579, Stop: 11376, Start Num: 1

Candidate Starts for SaltySpittoon\_26:

(Start: 1 @11579 has 21 MA's), (Start: 2 @11561 has 1 MA's), (3, 11519), (4, 11468), (5, 11444), (6, 11432), (7, 11423), (8, 11417),

Gene: Spelly\_292 Start: 130383, Stop: 130180, Start Num: 1

Candidate Starts for Spelly\_292:

(Start: 1 @130383 has 21 MA's), (Start: 2 @130365 has 1 MA's), (3, 130323), (6, 130236), (7, 130227), (8, 130221),

Gene: Spelly\_26 Start: 11579, Stop: 11376, Start Num: 1

Candidate Starts for Spelly\_26:

(Start: 1 @11579 has 21 MA's), (Start: 2 @11561 has 1 MA's), (3, 11519), (6, 11432), (7, 11423), (8, 11417),

Gene: Spilled\_25 Start: 11189, Stop: 10986, Start Num: 1

Candidate Starts for Spilled\_25:

(Start: 1 @11189 has 21 MA's), (Start: 2 @11171 has 1 MA's), (3, 11129), (4, 11078), (6, 11042), (7, 11033), (8, 11027),

Gene: Spilled\_293 Start: 131658, Stop: 131455, Start Num: 1

Candidate Starts for Spilled\_293:

(Start: 1 @131658 has 21 MA's), (Start: 2 @131640 has 1 MA's), (3, 131598), (4, 131547), (6, 131511), (7, 131502), (8, 131496),

Gene: StarPlatinum\_295 Start: 132920, Stop: 132717, Start Num: 1

Candidate Starts for StarPlatinum\_295:

(Start: 1 @132920 has 21 MA's), (Start: 2 @132902 has 1 MA's), (3, 132860), (4, 132809), (6, 132773), (7, 132764), (8, 132758),

Gene: StarPlatinum\_25 Start: 11233, Stop: 11030, Start Num: 1

Candidate Starts for StarPlatinum\_25:

(Start: 1 @11233 has 21 MA's), (Start: 2 @11215 has 1 MA's), (3, 11173), (4, 11122), (6, 11086), (7, 11077), (8, 11071),

Gene: Wipeout\_25 Start: 11195, Stop: 10992, Start Num: 1

Candidate Starts for Wipeout\_25:

(Start: 1 @11195 has 21 MA's), (Start: 2 @11177 has 1 MA's), (3, 11135), (4, 11084), (5, 11060), (6, 11048), (7, 11039), (8, 11033),