

# Pham 194153



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 194153 Report

This analysis was run 11/02/24 on database version 579.

WARNING: Pham size does not match number of genes in report. Either unphamerated genes have been added (by you) or starterator has removed genes due to invalid start codon.

Pham number 194153 has 39 members, 18 are drafts.

Phages represented in each track:

- Track 1 : SpecialK\_27, Halsey\_28, Moss\_27
- Track 2 : Sooty\_23, Kalimba\_23, Cappuccino\_23, Gambol\_23, Donkey\_23
- Track 3 : Mysterium\_23, Ashes\_26
- Track 4 : Lannister\_29
- Track 5 : Daudau\_27
- Track 6 : Verabelle\_30
- Track 7 : Verse\_28
- Track 8 : Provolone\_29, ElGato\_29
- Track 9 : Celery\_31
- Track 10 : Dexters\_27, Kaine\_29
- Track 11 : Yosif\_29
- Track 12 : Pavo\_30
- Track 13 : Amela\_28
- Track 14 : phiCAM\_29
- Track 15 : Vanseggelen\_33
- Track 16 : Alsaber\_29
- Track 17 : Speedwell\_35
- Track 18 : Saftant\_28
- Track 19 : Conan\_29
- Track 20 : GreenWeasel\_29, BroPlease\_28, phiHau3\_29
- Track 21 : Celia\_29, Itza\_29, Urza\_29
- Track 22 : VieEnRose\_29
- Track 23 : Finalfrontier\_26, BabyDaisy\_26, Kate33\_25
- Track 24 : Gaia\_35

### ***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 4 of the 21 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- EIGato\_29, Lannister\_29, Provolone\_29, Vanseggelen\_33, Yosif\_29,

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

- Alsaber\_29, Conan\_29, Dexers\_27, Kaine\_29, Pavo\_30,

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

- Amela\_28, Ashes\_26, BabyDaisy\_26, BroPlease\_28, Cappuccino\_23, Celery\_31, Celia\_29, Daudau\_27, Donkey\_23, Finalfrontier\_26, Gaia\_35, Gambol\_23, GreenWeasel\_29, Halsey\_28, Itza\_29, Kalimba\_23, Kate33\_25, Moss\_27, Mysterium\_23, Saftant\_28, Sooty\_23, SpecialK\_27, Speedwell\_35, Urza\_29, Verabelle\_30, Verse\_28, VieEnRose\_29, phiCAM\_29, phiHau3\_29,

### Summary by start number:

Start 4:

- Found in 15 of 39 ( 38.5% ) of genes in pham
- Manual Annotations of this start: 1 of 21
- Called 26.7% of time when present
- Phage (with cluster) where this start called: Celery\_31 (BD3), Dexers\_27 (BD3), Kaine\_29 (BD3), Pavo\_30 (BD3),

Start 6:

- Found in 7 of 39 ( 17.9% ) of genes in pham
- Manual Annotations of this start: 2 of 21
- Called 71.4% of time when present
- Phage (with cluster) where this start called: Amela\_28 (BD3), Saftant\_28 (BD3), Speedwell\_35 (BD3), Verabelle\_30 (BD3), phiCAM\_29 (BD3),

Start 7:

- Found in 10 of 39 ( 25.6% ) of genes in pham
- Manual Annotations of this start: 4 of 21
- Called 50.0% of time when present
- Phage (with cluster) where this start called: EIGato\_29 (BD3), Lannister\_29 (BD1), Provolone\_29 (BD3), Vanseggelen\_33 (BD3), Yosif\_29 (BD3),

Start 9:

- Found in 1 of 39 ( 2.6% ) of genes in pham
- Manual Annotations of this start: 1 of 21
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Daudau\_27 (BD2),

Start 10:

- Found in 4 of 39 ( 10.3% ) of genes in pham
- Manual Annotations of this start: 3 of 21
- Called 75.0% of time when present
- Phage (with cluster) where this start called: BroPlease\_28 (BD4), GreenWeasel\_29 (BD4), phiHau3\_29 (BD4),

Start 11:

- Found in 4 of 39 ( 10.3% ) of genes in pham
- Manual Annotations of this start: 4 of 21
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Celia\_29 (BD6), Itza\_29 (BD6), Urza\_29 (BD6), VieEnRose\_29 (BD6),

Start 12:

- Found in 1 of 39 ( 2.6% ) of genes in pham
- Manual Annotations of this start: 1 of 21
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gaia\_35 (X),

Start 13:

- Found in 15 of 39 ( 38.5% ) of genes in pham
- Manual Annotations of this start: 3 of 21
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Alsaber\_29 (BD3), Conan\_29 (BD3), Verse\_28 (BD3),

Start 15:

- Found in 10 of 39 ( 25.6% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ashes\_26 (AZ5), Cappuccino\_23 (AZ5), Donkey\_23 (AZ5), Gambol\_23 (AZ5), Halsey\_28 (AZ5), Kalimba\_23 (AZ5), Moss\_27 (AZ5), Mysterium\_23 (AZ5), Sooty\_23 (AZ5), SpecialK\_27 (AZ5),

Start 17:

- Found in 3 of 39 ( 7.7% ) of genes in pham
- Manual Annotations of this start: 2 of 21
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BabyDaisy\_26 (EB), Finalfrontier\_26 (EB), Kate33\_25 (EB),

### **Summary by clusters:**

There are 8 clusters represented in this pham: EB, BD4, BD6, BD1, BD3, BD2, X, AZ5,

Info for manual annotations of cluster BD1:

- Start number 7 was manually annotated 1 time for cluster BD1.

Info for manual annotations of cluster BD2:

- Start number 9 was manually annotated 1 time for cluster BD2.

Info for manual annotations of cluster BD3:

- Start number 4 was manually annotated 1 time for cluster BD3.
- Start number 6 was manually annotated 2 times for cluster BD3.
- Start number 7 was manually annotated 3 times for cluster BD3.
- Start number 13 was manually annotated 3 times for cluster BD3.

Info for manual annotations of cluster BD4:

- Start number 10 was manually annotated 3 times for cluster BD4.

Info for manual annotations of cluster BD6:

- Start number 11 was manually annotated 4 times for cluster BD6.

Info for manual annotations of cluster EB:

- Start number 17 was manually annotated 2 times for cluster EB.

Info for manual annotations of cluster X:

- Start number 12 was manually annotated 1 time for cluster X.

### **Gene Information:**

Gene: Alsaber\_29 Start: 23589, Stop: 23822, Start Num: 13

Candidate Starts for Alsaber\_29:

(Start: 4 @23529 has 1 MA's), (Start: 7 @23544 has 4 MA's), (Start: 13 @23589 has 3 MA's), (26, 23679),

Gene: Amela\_28 Start: 24358, Stop: 24642, Start Num: 6

Candidate Starts for Amela\_28:

(Start: 4 @24346 has 1 MA's), (Start: 6 @24358 has 2 MA's), (Start: 13 @24406 has 3 MA's), (26, 24496), (27, 24499), (31, 24523), (35, 24541),

Gene: Ashes\_26 Start: 18268, Stop: 18474, Start Num: 15

Candidate Starts for Ashes\_26:

(15, 18268), (39, 18433),

Gene: BabyDaisy\_26 Start: 19813, Stop: 19992, Start Num: 17

Candidate Starts for BabyDaisy\_26:

(8, 19762), (Start: 17 @19813 has 2 MA's), (31, 19915), (33, 19924),

Gene: BroPlease\_28 Start: 22457, Stop: 22663, Start Num: 10

Candidate Starts for BroPlease\_28:

(3, 22388), (Start: 10 @22457 has 3 MA's), (31, 22595), (35, 22613), (37, 22631),

Gene: Cappuccino\_23 Start: 18179, Stop: 18385, Start Num: 15

Candidate Starts for Cappuccino\_23:

(15, 18179), (25, 18254), (39, 18344),

Gene: Celery\_31 Start: 23463, Stop: 23756, Start Num: 4

Candidate Starts for Celery\_31:

(Start: 4 @23463 has 1 MA's), (Start: 6 @23475 has 2 MA's), (Start: 13 @23523 has 3 MA's), (34, 23652),

Gene: Celia\_29 Start: 23000, Stop: 23194, Start Num: 11

Candidate Starts for Celia\_29:

(2, 22868), (8, 22970), (Start: 11 @23000 has 4 MA's), (21, 23075), (25, 23087), (33, 23126), (35, 23135), (37, 23153),

Gene: Conan\_29 Start: 23488, Stop: 23721, Start Num: 13

Candidate Starts for Conan\_29:

(Start: 4 @23428 has 1 MA's), (Start: 7 @23443 has 4 MA's), (Start: 13 @23488 has 3 MA's), (26, 23578),

Gene: Daudau\_27 Start: 22524, Stop: 22754, Start Num: 9  
Candidate Starts for Daudau\_27:  
(2, 22419), (8, 22521), (Start: 9 @22524 has 1 MA's), (Start: 10 @22530 has 3 MA's), (16, 22575),  
(20, 22635), (29, 22665), (31, 22680),

Gene: Dexers\_27 Start: 23450, Stop: 23743, Start Num: 4  
Candidate Starts for Dexers\_27:  
(Start: 4 @23450 has 1 MA's), (Start: 7 @23465 has 4 MA's), (Start: 13 @23510 has 3 MA's), (26,  
23600),

Gene: Donkey\_23 Start: 18179, Stop: 18385, Start Num: 15  
Candidate Starts for Donkey\_23:  
(15, 18179), (25, 18254), (39, 18344),

Gene: ElGato\_29 Start: 23103, Stop: 23381, Start Num: 7  
Candidate Starts for ElGato\_29:  
(Start: 4 @23088 has 1 MA's), (Start: 7 @23103 has 4 MA's), (Start: 13 @23148 has 3 MA's), (26,  
23238),

Gene: Finalfrontier\_26 Start: 20179, Stop: 20358, Start Num: 17  
Candidate Starts for Finalfrontier\_26:  
(8, 20128), (Start: 17 @20179 has 2 MA's), (31, 20281), (33, 20290),

Gene: Gaia\_35 Start: 31586, Stop: 31867, Start Num: 12  
Candidate Starts for Gaia\_35:  
(1, 31313), (Start: 12 @31586 has 1 MA's), (22, 31670), (23, 31673), (25, 31679), (27, 31688), (28,  
31691), (30, 31703), (32, 31721), (33, 31724), (34, 31727), (38, 31760), (40, 31838), (41, 31859),

Gene: Gambol\_23 Start: 18179, Stop: 18385, Start Num: 15  
Candidate Starts for Gambol\_23:  
(15, 18179), (25, 18254), (39, 18344),

Gene: GreenWeasel\_29 Start: 22466, Stop: 22672, Start Num: 10  
Candidate Starts for GreenWeasel\_29:  
(3, 22397), (Start: 10 @22466 has 3 MA's), (31, 22604), (35, 22622), (37, 22640),

Gene: Halsey\_28 Start: 18274, Stop: 18480, Start Num: 15  
Candidate Starts for Halsey\_28:  
(5, 18202), (15, 18274), (39, 18439),

Gene: Itza\_29 Start: 22914, Stop: 23108, Start Num: 11  
Candidate Starts for Itza\_29:  
(2, 22782), (8, 22884), (Start: 11 @22914 has 4 MA's), (21, 22989), (25, 23001), (33, 23040), (35,  
23049), (37, 23067),

Gene: Kaine\_29 Start: 23238, Stop: 23531, Start Num: 4  
Candidate Starts for Kaine\_29:  
(Start: 4 @23238 has 1 MA's), (Start: 7 @23253 has 4 MA's), (Start: 13 @23298 has 3 MA's), (26,  
23388),

Gene: Kalimba\_23 Start: 18180, Stop: 18386, Start Num: 15  
Candidate Starts for Kalimba\_23:  
(15, 18180), (25, 18255), (39, 18345),

Gene: Kate33\_25 Start: 19636, Stop: 19815, Start Num: 17  
Candidate Starts for Kate33\_25:  
(8, 19585), (Start: 17 @19636 has 2 MA's), (31, 19738), (33, 19747),

Gene: Lannister\_29 Start: 22999, Stop: 23220, Start Num: 7  
Candidate Starts for Lannister\_29:  
(Start: 7 @22999 has 4 MA's), (24, 23107), (36, 23164),

Gene: Moss\_27 Start: 18269, Stop: 18475, Start Num: 15  
Candidate Starts for Moss\_27:  
(5, 18197), (15, 18269), (39, 18434),

Gene: Mysterium\_23 Start: 18269, Stop: 18475, Start Num: 15  
Candidate Starts for Mysterium\_23:  
(15, 18269), (39, 18434),

Gene: Pavo\_30 Start: 23701, Stop: 23994, Start Num: 4  
Candidate Starts for Pavo\_30:  
(Start: 4 @23701 has 1 MA's), (Start: 7 @23716 has 4 MA's), (Start: 13 @23761 has 3 MA's), (26, 23851),

Gene: Provolone\_29 Start: 23095, Stop: 23373, Start Num: 7  
Candidate Starts for Provolone\_29:  
(Start: 4 @23080 has 1 MA's), (Start: 7 @23095 has 4 MA's), (Start: 13 @23140 has 3 MA's), (26, 23230),

Gene: Saftant\_28 Start: 23714, Stop: 24013, Start Num: 6  
Candidate Starts for Saftant\_28:  
(Start: 4 @23702 has 1 MA's), (Start: 6 @23714 has 2 MA's), (Start: 13 @23765 has 3 MA's), (18, 23798), (24, 23849), (35, 23900), (37, 23918),

Gene: Sooty\_23 Start: 18181, Stop: 18387, Start Num: 15  
Candidate Starts for Sooty\_23:  
(15, 18181), (25, 18256), (39, 18346),

Gene: SpecialK\_27 Start: 18176, Stop: 18382, Start Num: 15  
Candidate Starts for SpecialK\_27:  
(5, 18104), (15, 18176), (39, 18341),

Gene: Speedwell\_35 Start: 24981, Stop: 25262, Start Num: 6  
Candidate Starts for Speedwell\_35:  
(Start: 4 @24969 has 1 MA's), (Start: 6 @24981 has 2 MA's), (Start: 13 @25029 has 3 MA's), (31, 25146),

Gene: Urza\_29 Start: 22935, Stop: 23129, Start Num: 11  
Candidate Starts for Urza\_29:  
(2, 22803), (8, 22905), (Start: 11 @22935 has 4 MA's), (21, 23010), (25, 23022), (33, 23061), (35, 23070), (37, 23088),

Gene: Vanseggelen\_33 Start: 23285, Stop: 23563, Start Num: 7  
Candidate Starts for Vanseggelen\_33:

(Start: 4 @23270 has 1 MA's), (Start: 7 @23285 has 4 MA's), (Start: 13 @23330 has 3 MA's), (26, 23420), (34, 23459), (37, 23483),

Gene: Verabelle\_30 Start: 23699, Stop: 23980, Start Num: 6

Candidate Starts for Verabelle\_30:

(Start: 4 @23687 has 1 MA's), (Start: 6 @23699 has 2 MA's), (Start: 13 @23747 has 3 MA's), (19, 23801), (26, 23837), (34, 23876),

Gene: Verse\_28 Start: 24400, Stop: 24636, Start Num: 13

Candidate Starts for Verse\_28:

(Start: 4 @24340 has 1 MA's), (Start: 6 @24352 has 2 MA's), (Start: 13 @24400 has 3 MA's), (26, 24490), (27, 24493), (31, 24517), (35, 24535),

Gene: VieEnRose\_29 Start: 23003, Stop: 23209, Start Num: 11

Candidate Starts for VieEnRose\_29:

(8, 22973), (Start: 11 @23003 has 4 MA's), (14, 23024), (25, 23105), (35, 23153), (37, 23171),

Gene: Yosif\_29 Start: 23870, Stop: 24091, Start Num: 7

Candidate Starts for Yosif\_29:

(Start: 7 @23870 has 4 MA's), (27, 23987),

Gene: phiCAM\_29 Start: 25497, Stop: 25778, Start Num: 6

Candidate Starts for phiCAM\_29:

(Start: 4 @25485 has 1 MA's), (Start: 6 @25497 has 2 MA's), (Start: 13 @25545 has 3 MA's),

Gene: phiHau3\_29 Start: 22430, Stop: 22636, Start Num: 10

Candidate Starts for phiHau3\_29:

(3, 22361), (Start: 10 @22430 has 3 MA's), (31, 22568), (35, 22586), (37, 22604),