



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 200460 Report

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

Pham number 200460 has 34 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Samisti12\_212, Lululemon\_205, Watermoore\_207, PacManQ\_205, BlueOtter\_206, HangryHippo\_206, Sushi23\_208, Cross\_207, Cursive\_210
- Track 2 : PinkiePie\_208, Liandry\_208, Squillium\_211
- Track 3 : Anedea\_222
- Track 4 : Paradiddles\_200
- Track 5 : LukeCage\_226
- Track 6 : StarPlatinum\_230
- Track 7 : Yaboi\_226, Sollertia\_222, Stanimal\_221, BoomerJR\_220, Genie2\_220
- Track 8 : Tomas\_220
- Track 9 : Francob\_147, Gilson\_149, Phredrick\_148, Kenrey\_151
- Track 10 : Comrade\_141, Stigma\_142
- Track 11 : Blueeyedbeauty\_140
- Track 12 : Emma1919\_149
- Track 13 : Westy\_146
- Track 14 : TunaTartare\_144
- Track 15 : Muntaha\_179, Wakanda\_177

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

The start number called the most often in the published annotations is 11, it was called in 26 of the 33 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Anedea\_222, BlueOtter\_206, BoomerJR\_220, Cross\_207, Cursive\_210, Emma1919\_149, Francob\_147, Genie2\_220, Gilson\_149, HangryHippo\_206, Kenrey\_151, Liandry\_208, LukeCage\_226, Lululemon\_205, PacManQ\_205, Phredrick\_148, PinkiePie\_208, Samisti12\_212, Sollertia\_222, Squillium\_211, Stanimal\_221, StarPlatinum\_230, Sushi23\_208, Tomas\_220, Watermoore\_207, Yaboi\_226,

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

- Blueeyedbeauty\_140, Paradiddles\_200, TunaTartare\_144,

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

- Comrade\_141, Muntaha\_179, Stigma\_142, Wakanda\_177, Westy\_146,

### Summary by start number:

#### Start 2:

- Found in 1 of 34 ( 2.9% ) of genes in pham
- Manual Annotations of this start: 1 of 33
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Blueeyedbeauty\_140 (BK1),

#### Start 5:

- Found in 3 of 34 ( 8.8% ) of genes in pham
- No Manual Annotations of this start.
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Westy\_146 (BK1),

#### Start 7:

- Found in 1 of 34 ( 2.9% ) of genes in pham
- Manual Annotations of this start: 1 of 33
- Called 100.0% of time when present
- Phage (with cluster) where this start called: TunaTartare\_144 (BK1),

#### Start 10:

- Found in 5 of 34 ( 14.7% ) of genes in pham
- Manual Annotations of this start: 4 of 33
- Called 80.0% of time when present
- Phage (with cluster) where this start called: Comrade\_141 (BK1), Muntaha\_179 (BK2), Stigma\_142 (BK1), Wakanda\_177 (BK2),

#### Start 11:

- Found in 29 of 34 ( 85.3% ) of genes in pham
- Manual Annotations of this start: 26 of 33
- Called 89.7% of time when present
- Phage (with cluster) where this start called: Anedea\_222 (BE1), BlueOtter\_206 (BE1), BoomerJR\_220 (BE2), Cross\_207 (BE1), Cursive\_210 (BE1), Emma1919\_149 (BK1), Francob\_147 (BK1), Genie2\_220 (BE2), Gilson\_149 (BK1), HangryHippo\_206 (BE1), Kenrey\_151 (BK1), Liandry\_208 (BE1), LukeCage\_226 (BE2), Lululemon\_205 (BE1), PacManQ\_205 (BE1), Phredrick\_148 (BK1), PinkiePie\_208 (BE1), Samisti12\_212 (BE1), Sollertia\_222 (BE2), Squillium\_211 (BE1), Stanimal\_221 (BE2), StarPlatinum\_230 (BE2), Sushi23\_208 (BE1), Tomas\_220 (BE2), Watermoore\_207 (BE1), Yaboi\_226 (BE2),

#### Start 13:

- Found in 7 of 34 ( 20.6% ) of genes in pham
- Manual Annotations of this start: 1 of 33
- Called 14.3% of time when present
- Phage (with cluster) where this start called: Paradiddles\_200 (BE1),

### Summary by clusters:

There are 4 clusters represented in this pham: BE2, BE1, BK1, BK2,

Info for manual annotations of cluster BE1:

- Start number 11 was manually annotated 13 times for cluster BE1.
- Start number 13 was manually annotated 1 time for cluster BE1.

Info for manual annotations of cluster BE2:

- Start number 11 was manually annotated 8 times for cluster BE2.

Info for manual annotations of cluster BK1:

- Start number 2 was manually annotated 1 time for cluster BK1.
- Start number 7 was manually annotated 1 time for cluster BK1.
- Start number 10 was manually annotated 2 times for cluster BK1.
- Start number 11 was manually annotated 5 times for cluster BK1.

Info for manual annotations of cluster BK2:

- Start number 10 was manually annotated 2 times for cluster BK2.

### **Gene Information:**

Gene: Anedea\_222 Start: 107754, Stop: 108062, Start Num: 11

Candidate Starts for Anedea\_222:

(9, 107739), (Start: 11 @107754 has 26 MA's), (15, 107832), (20, 107949), (21, 107955), (23, 107964), (24, 107985), (27, 107994),

Gene: BlueOtter\_206 Start: 105525, Stop: 105833, Start Num: 11

Candidate Starts for BlueOtter\_206:

(Start: 11 @105525 has 26 MA's), (14, 105597), (15, 105603), (17, 105621), (20, 105720), (27, 105765),

Gene: Blueeyedbeauty\_140 Start: 79745, Stop: 80158, Start Num: 2

Candidate Starts for Blueeyedbeauty\_140:

(1, 79730), (Start: 2 @79745 has 1 MA's), (3, 79748), (4, 79751), (6, 79805), (Start: 11 @79853 has 26 MA's), (15, 79931), (19, 80027), (20, 80048), (24, 80084),

Gene: BoomerJR\_220 Start: 107155, Stop: 107448, Start Num: 11

Candidate Starts for BoomerJR\_220:

(Start: 11 @107155 has 26 MA's), (16, 107236), (18, 107290), (20, 107350), (21, 107356), (23, 107365),

Gene: Comrade\_141 Start: 82061, Stop: 82372, Start Num: 10

Candidate Starts for Comrade\_141:

(5, 81992), (8, 82046), (Start: 10 @82061 has 4 MA's), (Start: 13 @82121 has 1 MA's), (15, 82148), (19, 82244), (20, 82265),

Gene: Cross\_207 Start: 106170, Stop: 106478, Start Num: 11

Candidate Starts for Cross\_207:

(Start: 11 @106170 has 26 MA's), (14, 106242), (15, 106248), (17, 106266), (20, 106365), (27, 106410),

Gene: Cursive\_210 Start: 105854, Stop: 106162, Start Num: 11

Candidate Starts for Cursive\_210:

(Start: 11 @105854 has 26 MA's), (14, 105926), (15, 105932), (17, 105950), (20, 106049), (27, 106094),

Gene: Emma1919\_149 Start: 82062, Stop: 82367, Start Num: 11  
Candidate Starts for Emma1919\_149:  
(6, 82014), (Start: 11 @82062 has 26 MA's), (15, 82140), (19, 82236), (20, 82257),

Gene: Francob\_147 Start: 82570, Stop: 82881, Start Num: 11  
Candidate Starts for Francob\_147:  
(6, 82522), (Start: 11 @82570 has 26 MA's), (12, 82576), (15, 82648), (19, 82744), (20, 82765),

Gene: Genie2\_220 Start: 107280, Stop: 107573, Start Num: 11  
Candidate Starts for Genie2\_220:  
(Start: 11 @107280 has 26 MA's), (16, 107361), (18, 107415), (20, 107475), (21, 107481), (23, 107490),

Gene: Gilson\_149 Start: 82024, Stop: 82329, Start Num: 11  
Candidate Starts for Gilson\_149:  
(6, 81976), (Start: 11 @82024 has 26 MA's), (12, 82030), (15, 82102), (19, 82198), (20, 82219),

Gene: HangryHippo\_206 Start: 105525, Stop: 105833, Start Num: 11  
Candidate Starts for HangryHippo\_206:  
(Start: 11 @105525 has 26 MA's), (14, 105597), (15, 105603), (17, 105621), (20, 105720), (27, 105765),

Gene: Kenrey\_151 Start: 83184, Stop: 83495, Start Num: 11  
Candidate Starts for Kenrey\_151:  
(6, 83136), (Start: 11 @83184 has 26 MA's), (12, 83190), (15, 83262), (19, 83358), (20, 83379),

Gene: Liandry\_208 Start: 105631, Stop: 105939, Start Num: 11  
Candidate Starts for Liandry\_208:  
(Start: 11 @105631 has 26 MA's), (Start: 13 @105682 has 1 MA's), (20, 105826), (22, 105838), (24, 105862), (27, 105871),

Gene: LukeCage\_226 Start: 109136, Stop: 109429, Start Num: 11  
Candidate Starts for LukeCage\_226:  
(Start: 11 @109136 has 26 MA's), (16, 109217), (18, 109271), (20, 109331), (25, 109370), (26, 109373),

Gene: Lululemon\_205 Start: 104906, Stop: 105214, Start Num: 11  
Candidate Starts for Lululemon\_205:  
(Start: 11 @104906 has 26 MA's), (14, 104978), (15, 104984), (17, 105002), (20, 105101), (27, 105146),

Gene: Muntaha\_179 Start: 92605, Stop: 92913, Start Num: 10  
Candidate Starts for Muntaha\_179:  
(Start: 10 @92605 has 4 MA's), (19, 92788), (20, 92809),

Gene: PacManQ\_205 Start: 104906, Stop: 105214, Start Num: 11  
Candidate Starts for PacManQ\_205:  
(Start: 11 @104906 has 26 MA's), (14, 104978), (15, 104984), (17, 105002), (20, 105101), (27, 105146),

Gene: Paradiddles\_200 Start: 106869, Stop: 107126, Start Num: 13  
Candidate Starts for Paradiddles\_200:

(Start: 11 @106818 has 26 MA's), (Start: 13 @106869 has 1 MA's), (20, 107013), (22, 107025), (24, 107049), (27, 107058),

Gene: Phredrick\_148 Start: 81519, Stop: 81830, Start Num: 11

Candidate Starts for Phredrick\_148:

(6, 81471), (Start: 11 @81519 has 26 MA's), (12, 81525), (15, 81597), (19, 81693), (20, 81714),

Gene: PinkiePie\_208 Start: 105631, Stop: 105939, Start Num: 11

Candidate Starts for PinkiePie\_208:

(Start: 11 @105631 has 26 MA's), (Start: 13 @105682 has 1 MA's), (20, 105826), (22, 105838), (24, 105862), (27, 105871),

Gene: Samisti12\_212 Start: 107816, Stop: 108124, Start Num: 11

Candidate Starts for Samisti12\_212:

(Start: 11 @107816 has 26 MA's), (14, 107888), (15, 107894), (17, 107912), (20, 108011), (27, 108056),

Gene: Sollertia\_222 Start: 107269, Stop: 107562, Start Num: 11

Candidate Starts for Sollertia\_222:

(Start: 11 @107269 has 26 MA's), (16, 107350), (18, 107404), (20, 107464), (21, 107470), (23, 107479),

Gene: Squillium\_211 Start: 105633, Stop: 105941, Start Num: 11

Candidate Starts for Squillium\_211:

(Start: 11 @105633 has 26 MA's), (Start: 13 @105684 has 1 MA's), (20, 105828), (22, 105840), (24, 105864), (27, 105873),

Gene: Stanimal\_221 Start: 107641, Stop: 107934, Start Num: 11

Candidate Starts for Stanimal\_221:

(Start: 11 @107641 has 26 MA's), (16, 107722), (18, 107776), (20, 107836), (21, 107842), (23, 107851),

Gene: StarPlatinum\_230 Start: 109367, Stop: 109660, Start Num: 11

Candidate Starts for StarPlatinum\_230:

(Start: 11 @109367 has 26 MA's), (16, 109448), (18, 109502), (20, 109562), (25, 109601),

Gene: Stigma\_142 Start: 82506, Stop: 82817, Start Num: 10

Candidate Starts for Stigma\_142:

(5, 82437), (8, 82491), (Start: 10 @82506 has 4 MA's), (Start: 13 @82566 has 1 MA's), (15, 82593), (19, 82689), (20, 82710),

Gene: Sushi23\_208 Start: 106826, Stop: 107134, Start Num: 11

Candidate Starts for Sushi23\_208:

(Start: 11 @106826 has 26 MA's), (14, 106898), (15, 106904), (17, 106922), (20, 107021), (27, 107066),

Gene: Tomas\_220 Start: 107653, Stop: 107946, Start Num: 11

Candidate Starts for Tomas\_220:

(Start: 11 @107653 has 26 MA's), (20, 107848),

Gene: TunaTartare\_144 Start: 84201, Stop: 84557, Start Num: 7

Candidate Starts for TunaTartare\_144:

(Start: 7 @84201 has 1 MA's), (Start: 11 @84243 has 26 MA's), (15, 84321), (17, 84339), (20, 84438),

Gene: Wakanda\_177 Start: 92285, Stop: 92593, Start Num: 10

Candidate Starts for Wakanda\_177:

(Start: 10 @92285 has 4 MA's), (19, 92468), (20, 92489),

Gene: Watermoore\_207 Start: 107168, Stop: 107476, Start Num: 11

Candidate Starts for Watermoore\_207:

(Start: 11 @107168 has 26 MA's), (14, 107240), (15, 107246), (17, 107264), (20, 107363), (27, 107408),

Gene: Westy\_146 Start: 83326, Stop: 83715, Start Num: 5

Candidate Starts for Westy\_146:

(5, 83326), (8, 83380), (Start: 10 @83395 has 4 MA's), (Start: 13 @83455 has 1 MA's), (15, 83482), (19, 83578), (20, 83599),

Gene: Yaboi\_226 Start: 107204, Stop: 107497, Start Num: 11

Candidate Starts for Yaboi\_226:

(Start: 11 @107204 has 26 MA's), (16, 107285), (18, 107339), (20, 107399), (21, 107405), (23, 107414),