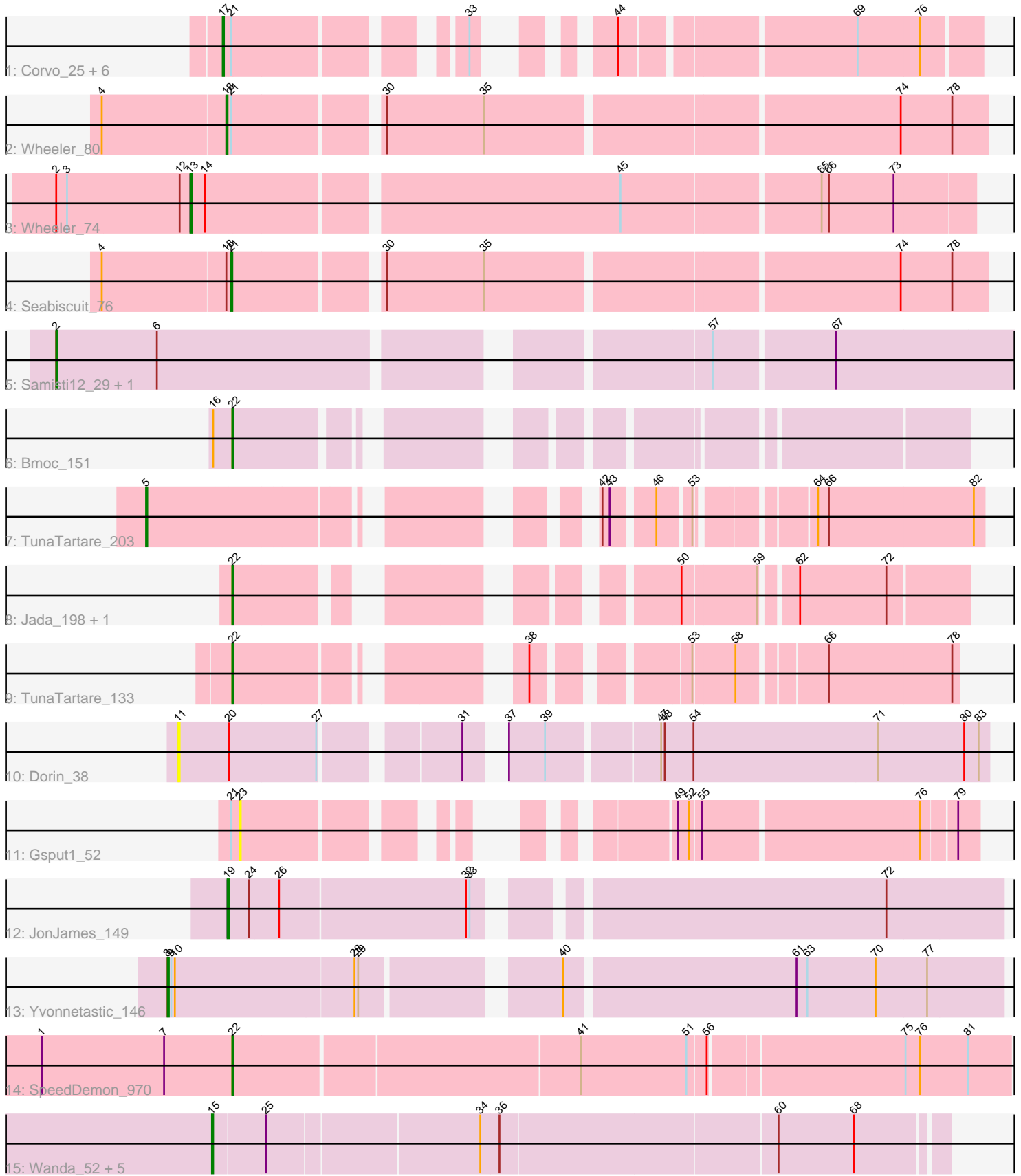


Pham 163853



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 163853 Report

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

Pham number 163853 has 28 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Corvo\_25, Target\_27, Snazzy\_23, Pinto\_27, Hermia\_27, Zeeculate\_24, Atkinbua\_26
- Track 2 : Wheeler\_80
- Track 3 : Wheeler\_74
- Track 4 : Seabiscuit\_76
- Track 5 : Samisti12\_29, EGole\_30
- Track 6 : Bmoc\_151
- Track 7 : TunaTartare\_203
- Track 8 : Jada\_198, Forrest\_200
- Track 9 : TunaTartare\_133
- Track 10 : Dorin\_38
- Track 11 : Gspu1\_52
- Track 12 : JonJames\_149
- Track 13 : Yvonnetastic\_146
- Track 14 : SpeedDemon\_970
- Track 15 : Wanda\_52, DmpstrDiver\_47, Minerva\_52, Duke13\_49, Optimus\_51, BAKA\_50

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

The start number called the most often in the published annotations is 17, it was called in 7 of the 26 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Atkinbua\_26, Corvo\_25, Hermia\_27, Pinto\_27, Snazzy\_23, Target\_27, Zeeculate\_24,

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

- 

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

- BAKA\_50, Bmoc\_151, DmpstrDiver\_47, Dorin\_38, Duke13\_49, EGole\_30, Forrest\_200, Gspu1\_52, Jada\_198, JonJames\_149, Minerva\_52, Optimus\_51, Samisti12\_29, Seabiscuit\_76, SpeedDemon\_970, TunaTartare\_133,

TunaTartare\_203, Wanda\_52, Wheeler\_74, Wheeler\_80, Yvonnetastic\_146,

### Summary by start number:

#### Start 2:

- Found in 3 of 28 ( 10.7% ) of genes in pham
- Manual Annotations of this start: 2 of 26
- Called 66.7% of time when present
- Phage (with cluster) where this start called: EGole\_30 (BE1), Samisti12\_29 (BE1),

#### Start 5:

- Found in 1 of 28 ( 3.6% ) of genes in pham
- Manual Annotations of this start: 1 of 26
- Called 100.0% of time when present
- Phage (with cluster) where this start called: TunaTartare\_203 (BK1),

#### Start 8:

- Found in 1 of 28 ( 3.6% ) of genes in pham
- Manual Annotations of this start: 1 of 26
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Yvonnetastic\_146 (DD),

#### Start 11:

- Found in 1 of 28 ( 3.6% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Dorin\_38 (CG),

#### Start 13:

- Found in 1 of 28 ( 3.6% ) of genes in pham
- Manual Annotations of this start: 1 of 26
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Wheeler\_74 (A1),

#### Start 15:

- Found in 6 of 28 ( 21.4% ) of genes in pham
- Manual Annotations of this start: 6 of 26
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BAKA\_50 (J), DmpstrDiver\_47 (J), Duke13\_49 (J), Minerva\_52 (J), Optimus\_51 (J), Wanda\_52 (J),

#### Start 17:

- Found in 7 of 28 ( 25.0% ) of genes in pham
- Manual Annotations of this start: 7 of 26
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Atkinbua\_26 (A1), Corvo\_25 (A1), Hermia\_27 (A1), Pinto\_27 (A1), Snazzy\_23 (A1), Target\_27 (A1), Zeeculate\_24 (A1),

#### Start 18:

- Found in 2 of 28 ( 7.1% ) of genes in pham
- Manual Annotations of this start: 1 of 26
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Wheeler\_80 (A1),

Start 19:

- Found in 1 of 28 ( 3.6% ) of genes in pham
- Manual Annotations of this start: 1 of 26
- Called 100.0% of time when present
- Phage (with cluster) where this start called: JonJames\_149 (DD),

Start 21:

- Found in 10 of 28 ( 35.7% ) of genes in pham
- Manual Annotations of this start: 1 of 26
- Called 10.0% of time when present
- Phage (with cluster) where this start called: Seabiscuit\_76 (A1),

Start 22:

- Found in 5 of 28 ( 17.9% ) of genes in pham
- Manual Annotations of this start: 5 of 26
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bmoc\_151 (BE1), Forrest\_200 (BK1), Jada\_198 (BK1), SpeedDemon\_970 (DL), TunaTartare\_133 (BK1),

Start 23:

- Found in 1 of 28 ( 3.6% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gspu1\_52 (CU2),

**Summary by clusters:**

There are 8 clusters represented in this pham: DL, CU2, DD, J, CG, A1, BK1, BE1,

Info for manual annotations of cluster A1:

- Start number 13 was manually annotated 1 time for cluster A1.
- Start number 17 was manually annotated 7 times for cluster A1.
- Start number 18 was manually annotated 1 time for cluster A1.
- Start number 21 was manually annotated 1 time for cluster A1.

Info for manual annotations of cluster BE1:

- Start number 2 was manually annotated 2 times for cluster BE1.
- Start number 22 was manually annotated 1 time for cluster BE1.

Info for manual annotations of cluster BK1:

- Start number 5 was manually annotated 1 time for cluster BK1.
- Start number 22 was manually annotated 3 times for cluster BK1.

Info for manual annotations of cluster DD:

- Start number 8 was manually annotated 1 time for cluster DD.
- Start number 19 was manually annotated 1 time for cluster DD.

Info for manual annotations of cluster DL:

- Start number 22 was manually annotated 1 time for cluster DL.

Info for manual annotations of cluster J:

•Start number 15 was manually annotated 6 times for cluster J.

**Gene Information:**

Gene: Atkinbua\_26 Start: 18768, Stop: 19268, Start Num: 17

Candidate Starts for Atkinbua\_26:

(Start: 17 @18768 has 7 MA's), (Start: 21 @18774 has 1 MA's), (33, 18930), (44, 18990), (69, 19170), (76, 19221),

Gene: BAKA\_50 Start: 40286, Stop: 40870, Start Num: 15

Candidate Starts for BAKA\_50:

(Start: 15 @40286 has 6 MA's), (25, 40328), (34, 40499), (36, 40514), (60, 40739), (68, 40802),

Gene: Bmoc\_151 Start: 88009, Stop: 88512, Start Num: 22

Candidate Starts for Bmoc\_151:

(16, 87994), (Start: 22 @88009 has 5 MA's),

Gene: Corvo\_25 Start: 19271, Stop: 19771, Start Num: 17

Candidate Starts for Corvo\_25:

(Start: 17 @19271 has 7 MA's), (Start: 21 @19277 has 1 MA's), (33, 19433), (44, 19493), (69, 19673), (76, 19724),

Gene: DmpstrDiver\_47 Start: 39715, Stop: 40299, Start Num: 15

Candidate Starts for DmpstrDiver\_47:

(Start: 15 @39715 has 6 MA's), (25, 39757), (34, 39928), (36, 39943), (60, 40168), (68, 40231),

Gene: Dorin\_38 Start: 19007, Stop: 19627, Start Num: 11

Candidate Starts for Dorin\_38:

(11, 19007), (20, 19049), (27, 19121), (31, 19220), (37, 19238), (39, 19268), (47, 19355), (48, 19358), (54, 19382), (71, 19535), (80, 19607), (83, 19619),

Gene: Duke13\_49 Start: 40033, Stop: 40617, Start Num: 15

Candidate Starts for Duke13\_49:

(Start: 15 @40033 has 6 MA's), (25, 40075), (34, 40246), (36, 40261), (60, 40486), (68, 40549),

Gene: EGole\_30 Start: 14796, Stop: 14044, Start Num: 2

Candidate Starts for EGole\_30:

(Start: 2 @14796 has 2 MA's), (6, 14712), (57, 14301), (67, 14205),

Gene: Forrest\_200 Start: 100263, Stop: 100757, Start Num: 22

Candidate Starts for Forrest\_200:

(Start: 22 @100263 has 5 MA's), (50, 100536), (59, 100596), (62, 100620), (72, 100692),

Gene: Gspu1\_52 Start: 36371, Stop: 36856, Start Num: 23

Candidate Starts for Gspu1\_52:

(Start: 21 @36365 has 1 MA's), (23, 36371), (49, 36620), (52, 36629), (55, 36638), (76, 36812), (79, 36839),

Gene: Hermia\_27 Start: 19855, Stop: 20355, Start Num: 17

Candidate Starts for Hermia\_27:

(Start: 17 @19855 has 7 MA's), (Start: 21 @19861 has 1 MA's), (33, 20017), (44, 20077), (69, 20257), (76, 20308),

Gene: Jada\_198 Start: 99135, Stop: 99629, Start Num: 22

Candidate Starts for Jada\_198:

(Start: 22 @99135 has 5 MA's), (50, 99408), (59, 99468), (62, 99492), (72, 99564),

Gene: JonJames\_149 Start: 83143, Stop: 83742, Start Num: 19

Candidate Starts for JonJames\_149:

(Start: 19 @83143 has 1 MA's), (24, 83161), (26, 83185), (32, 83338), (33, 83341), (72, 83647),

Gene: Minerva\_52 Start: 41582, Stop: 42166, Start Num: 15

Candidate Starts for Minerva\_52:

(Start: 15 @41582 has 6 MA's), (25, 41624), (34, 41795), (36, 41810), (60, 42035), (68, 42098),

Gene: Optimus\_51 Start: 41167, Stop: 41751, Start Num: 15

Candidate Starts for Optimus\_51:

(Start: 15 @41167 has 6 MA's), (25, 41209), (34, 41380), (36, 41395), (60, 41620), (68, 41683),

Gene: Pinto\_27 Start: 18931, Stop: 19431, Start Num: 17

Candidate Starts for Pinto\_27:

(Start: 17 @18931 has 7 MA's), (Start: 21 @18937 has 1 MA's), (33, 19093), (44, 19153), (69, 19333), (76, 19384),

Gene: Samisti12\_29 Start: 14403, Stop: 13651, Start Num: 2

Candidate Starts for Samisti12\_29:

(Start: 2 @14403 has 2 MA's), (6, 14319), (57, 13908), (67, 13812),

Gene: Seabiscuit\_76 Start: 46023, Stop: 45430, Start Num: 21

Candidate Starts for Seabiscuit\_76:

(4, 46128), (Start: 18 @46026 has 1 MA's), (Start: 21 @46023 has 1 MA's), (30, 45912), (35, 45831), (74, 45501), (78, 45459),

Gene: Snazzy\_23 Start: 18265, Stop: 18765, Start Num: 17

Candidate Starts for Snazzy\_23:

(Start: 17 @18265 has 7 MA's), (Start: 21 @18271 has 1 MA's), (33, 18427), (44, 18487), (69, 18667), (76, 18718),

Gene: SpeedDemon\_970 Start: 66680, Stop: 66057, Start Num: 22

Candidate Starts for SpeedDemon\_970:

(1, 66839), (7, 66737), (Start: 22 @66680 has 5 MA's), (41, 66401), (51, 66314), (56, 66299), (75, 66143), (76, 66131), (81, 66092),

Gene: Target\_27 Start: 19834, Stop: 20334, Start Num: 17

Candidate Starts for Target\_27:

(Start: 17 @19834 has 7 MA's), (Start: 21 @19840 has 1 MA's), (33, 19996), (44, 20056), (69, 20236), (76, 20287),

Gene: TunaTartare\_203 Start: 105397, Stop: 105966, Start Num: 5

Candidate Starts for TunaTartare\_203:

(Start: 5 @105397 has 1 MA's), (42, 105688), (43, 105694), (46, 105724), (53, 105748), (64, 105829), (66, 105838), (82, 105958),

Gene: TunaTartare\_133 Start: 80340, Stop: 80837, Start Num: 22

Candidate Starts for TunaTartare\_133:

(Start: 22 @80340 has 5 MA's), (38, 80529), (53, 80631), (58, 80664), (66, 80730), (78, 80832),

Gene: Wanda\_52 Start: 40059, Stop: 40643, Start Num: 15

Candidate Starts for Wanda\_52:

(Start: 15 @40059 has 6 MA's), (25, 40101), (34, 40272), (36, 40287), (60, 40512), (68, 40575),

Gene: Wheeler\_80 Start: 48775, Stop: 48179, Start Num: 18

Candidate Starts for Wheeler\_80:

(4, 48877), (Start: 18 @48775 has 1 MA's), (Start: 21 @48772 has 1 MA's), (30, 48661), (35, 48580), (74, 48250), (78, 48208),

Gene: Wheeler\_74 Start: 46185, Stop: 45562, Start Num: 13

Candidate Starts for Wheeler\_74:

(Start: 2 @46296 has 2 MA's), (3, 46287), (12, 46194), (Start: 13 @46185 has 1 MA's), (14, 46173), (45, 45846), (65, 45687), (66, 45681), (73, 45627),

Gene: Yvonnetastic\_146 Start: 79771, Stop: 80427, Start Num: 8

Candidate Starts for Yvonnetastic\_146:

(Start: 8 @79771 has 1 MA's), (9, 79774), (10, 79777), (28, 79924), (29, 79927), (40, 80071), (61, 80257), (63, 80266), (70, 80323), (77, 80365),

Gene: Zeeculate\_24 Start: 19013, Stop: 19513, Start Num: 17

Candidate Starts for Zeeculate\_24:

(Start: 17 @19013 has 7 MA's), (Start: 21 @19019 has 1 MA's), (33, 19175), (44, 19235), (69, 19415), (76, 19466),