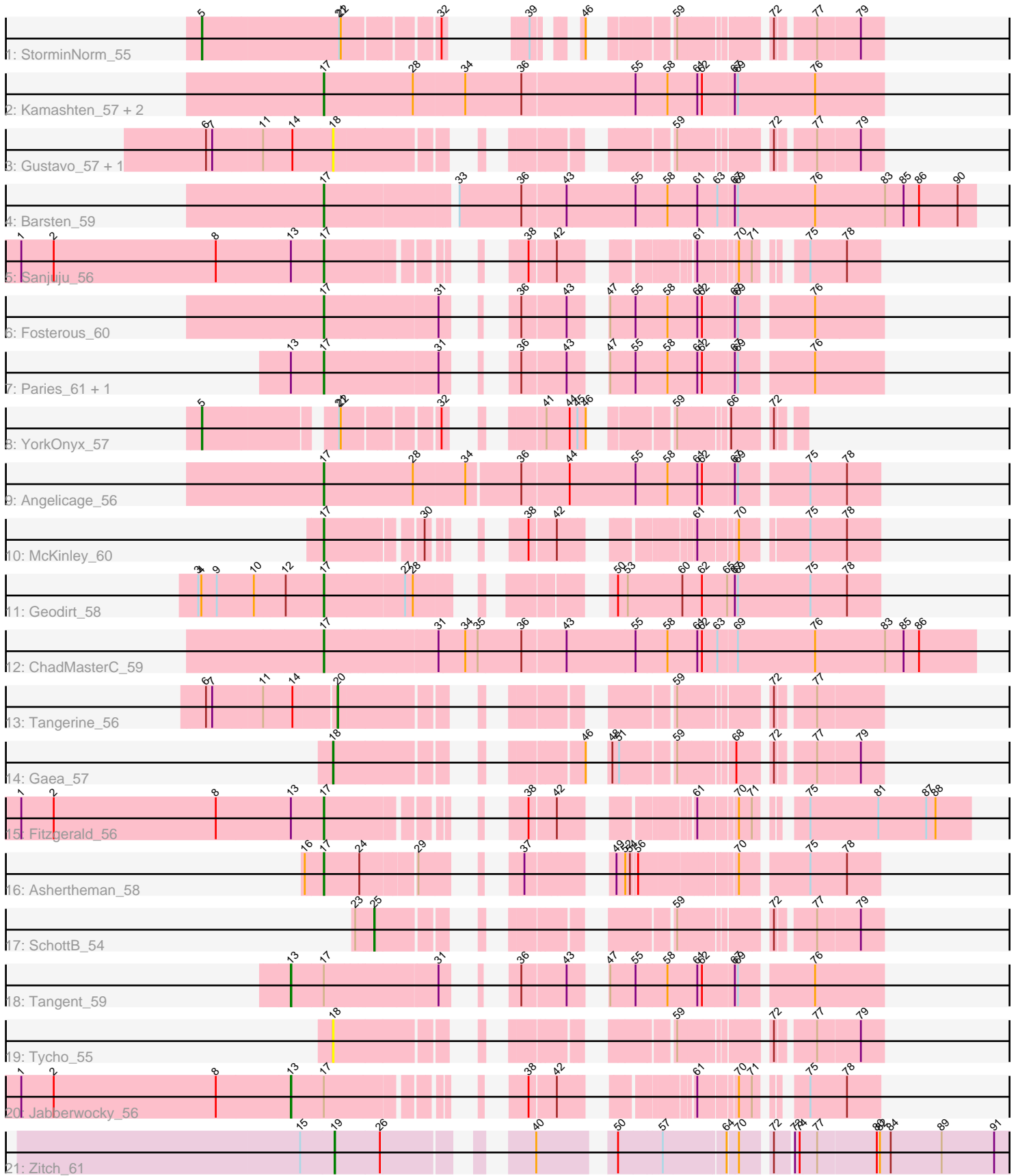


Pham 163888



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 163888 Report

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

Pham number 163888 has 25 members, 5 are drafts.

Phages represented in each track:

- Track 1 : StorminNorm\_55
- Track 2 : Kamashten\_57, Thing3\_57, BobBob\_57
- Track 3 : Gustavo\_57, Saronaya\_57
- Track 4 : Barsten\_59
- Track 5 : Sanjuju\_56
- Track 6 : Fosterous\_60
- Track 7 : Paries\_61, Rofo\_58
- Track 8 : YorkOnyx\_57
- Track 9 : Angelicage\_56
- Track 10 : McKinley\_60
- Track 11 : Geodirt\_58
- Track 12 : ChadMasterC\_59
- Track 13 : Tangerine\_56
- Track 14 : Gaea\_57
- Track 15 : Fitzgerald\_56
- Track 16 : Ashertheman\_58
- Track 17 : SchottB\_54
- Track 18 : Tangent\_59
- Track 19 : Tycho\_55
- Track 20 : Jabberwocky\_56
- Track 21 : Zitch\_61

### ***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 12 of the 20 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Angelicage\_56, Ashertheman\_58, Barsten\_59, BobBob\_57, ChadMasterC\_59, Fitzgerald\_56, Fosterous\_60, Geodirt\_58, Kamashten\_57, McKinley\_60, Paries\_61, Rofo\_58, Sanjuju\_56, Thing3\_57,

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

- Jabberwocky\_56, Tangent\_59,

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

- Gaea\_57, Gustavo\_57, Saronaya\_57, SchottB\_54, StorminNorm\_55, Tangerine\_56, Tycho\_55, YorkOnyx\_57, Zitch\_61,

### Summary by start number:

Start 5:

- Found in 2 of 25 ( 8.0% ) of genes in pham
- Manual Annotations of this start: 2 of 20
- Called 100.0% of time when present
- Phage (with cluster) where this start called: StorminNorm\_55 (DE1), YorkOnyx\_57 (DE1),

Start 13:

- Found in 6 of 25 ( 24.0% ) of genes in pham
- Manual Annotations of this start: 2 of 20
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Jabberwocky\_56 (DE1), Tangent\_59 (DE1),

Start 17:

- Found in 16 of 25 ( 64.0% ) of genes in pham
- Manual Annotations of this start: 12 of 20
- Called 87.5% of time when present
- Phage (with cluster) where this start called: Angelicage\_56 (DE1), Ashertheman\_58 (DE1), Barsten\_59 (DE1), BobBob\_57 (DE1), ChadMasterC\_59 (DE1), Fitzgerald\_56 (DE1), Fosterous\_60 (DE1), Geodirt\_58 (DE1), Kamashten\_57 (DE1), McKinley\_60 (DE1), Paries\_61 (DE1), Rofo\_58 (DE1), Sanjuju\_56 (DE1), Thing3\_57 (DE1),

Start 18:

- Found in 4 of 25 ( 16.0% ) of genes in pham
- Manual Annotations of this start: 1 of 20
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gaea\_57 (DE1), Gustavo\_57 (DE1), Saronaya\_57 (DE1), Tycho\_55 (DE1),

Start 19:

- Found in 1 of 25 ( 4.0% ) of genes in pham
- Manual Annotations of this start: 1 of 20
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Zitch\_61 (DE4),

Start 20:

- Found in 1 of 25 ( 4.0% ) of genes in pham
- Manual Annotations of this start: 1 of 20
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Tangerine\_56 (DE1),

Start 25:

- Found in 1 of 25 ( 4.0% ) of genes in pham
- Manual Annotations of this start: 1 of 20
- Called 100.0% of time when present

- Phage (with cluster) where this start called: SchottB\_54 (DE1),

### **Summary by clusters:**

There are 2 clusters represented in this pham: DE1, DE4,

Info for manual annotations of cluster DE1:

- Start number 5 was manually annotated 2 times for cluster DE1.
- Start number 13 was manually annotated 2 times for cluster DE1.
- Start number 17 was manually annotated 12 times for cluster DE1.
- Start number 18 was manually annotated 1 time for cluster DE1.
- Start number 20 was manually annotated 1 time for cluster DE1.
- Start number 25 was manually annotated 1 time for cluster DE1.

Info for manual annotations of cluster DE4:

- Start number 19 was manually annotated 1 time for cluster DE4.

### **Gene Information:**

Gene: Angelicage\_56 Start: 47180, Stop: 48190, Start Num: 17

Candidate Starts for Angelicage\_56:

(Start: 17 @47180 has 12 MA's), (28, 47351), (34, 47447), (36, 47546), (44, 47633), (55, 47759), (58, 47819), (61, 47873), (62, 47879), (67, 47933), (69, 47939), (75, 48059), (78, 48128),

Gene: Ashertheman\_58 Start: 46515, Stop: 47336, Start Num: 17

Candidate Starts for Ashertheman\_58:

(16, 46482), (Start: 17 @46515 has 12 MA's), (24, 46584), (29, 46680), (37, 46776), (49, 46896), (52, 46911), (54, 46920), (56, 46932), (70, 47094), (75, 47205), (78, 47274),

Gene: Barsten\_59 Start: 47136, Stop: 48338, Start Num: 17

Candidate Starts for Barsten\_59:

(Start: 17 @47136 has 12 MA's), (33, 47367), (36, 47487), (43, 47568), (55, 47700), (58, 47760), (61, 47814), (63, 47847), (67, 47874), (69, 47880), (76, 48030), (83, 48162), (85, 48198), (86, 48228), (90, 48303),

Gene: BobBob\_57 Start: 46363, Stop: 47412, Start Num: 17

Candidate Starts for BobBob\_57:

(Start: 17 @46363 has 12 MA's), (28, 46534), (34, 46630), (36, 46738), (55, 46951), (58, 47011), (61, 47065), (62, 47071), (67, 47125), (69, 47131), (76, 47281),

Gene: ChadMasterC\_59 Start: 48535, Stop: 49746, Start Num: 17

Candidate Starts for ChadMasterC\_59:

(Start: 17 @48535 has 12 MA's), (31, 48739), (34, 48790), (35, 48814), (36, 48895), (43, 48976), (55, 49108), (58, 49168), (61, 49222), (62, 49228), (63, 49255), (69, 49288), (76, 49438), (83, 49570), (85, 49606), (86, 49636),

Gene: Fitzgerald\_56 Start: 47515, Stop: 48432, Start Num: 17

Candidate Starts for Fitzgerald\_56:

(1, 46933), (2, 46996), (8, 47311), (Start: 13 @47455 has 2 MA's), (Start: 17 @47515 has 12 MA's), (38, 47758), (42, 47806), (61, 47983), (70, 48040), (71, 48064), (75, 48124), (81, 48253), (87, 48346), (88, 48364),

Gene: Fosterous\_60 Start: 47490, Stop: 48347, Start Num: 17

Candidate Starts for Fosterous\_60:

(Start: 17 @47490 has 12 MA's), (31, 47694), (36, 47745), (43, 47826), (47, 47862), (55, 47907), (58, 47967), (61, 48021), (62, 48027), (67, 48081), (69, 48087), (76, 48216),

Gene: Gaea\_57 Start: 45626, Stop: 46414, Start Num: 18

Candidate Starts for Gaea\_57:

(Start: 18 @45626 has 1 MA's), (46, 45974), (48, 45983), (51, 45995), (59, 46085), (68, 46175), (72, 46226), (77, 46289), (79, 46370),

Gene: Geodirt\_58 Start: 47882, Stop: 48784, Start Num: 17

Candidate Starts for Geodirt\_58:

(3, 47648), (4, 47654), (9, 47684), (10, 47756), (12, 47813), (Start: 17 @47882 has 12 MA's), (27, 48035), (28, 48050), (50, 48284), (53, 48302), (60, 48407), (62, 48443), (65, 48491), (67, 48506), (69, 48512), (75, 48653), (78, 48722),

Gene: Gustavo\_57 Start: 46149, Stop: 46925, Start Num: 18

Candidate Starts for Gustavo\_57:

(6, 45915), (7, 45927), (11, 46017), (14, 46074), (Start: 18 @46149 has 1 MA's), (59, 46596), (72, 46737), (77, 46800), (79, 46881),

Gene: Jabberwocky\_56 Start: 47831, Stop: 48631, Start Num: 13

Candidate Starts for Jabberwocky\_56:

(1, 47309), (2, 47372), (8, 47687), (Start: 13 @47831 has 2 MA's), (Start: 17 @47891 has 12 MA's), (38, 48134), (42, 48182), (61, 48359), (70, 48416), (71, 48440), (75, 48500), (78, 48569),

Gene: Kamashten\_57 Start: 46476, Stop: 47525, Start Num: 17

Candidate Starts for Kamashten\_57:

(Start: 17 @46476 has 12 MA's), (28, 46647), (34, 46743), (36, 46851), (55, 47064), (58, 47124), (61, 47178), (62, 47184), (67, 47238), (69, 47244), (76, 47394),

Gene: McKinley\_60 Start: 47567, Stop: 48328, Start Num: 17

Candidate Starts for McKinley\_60:

(Start: 17 @47567 has 12 MA's), (30, 47729), (38, 47804), (42, 47852), (61, 48032), (70, 48089), (75, 48197), (78, 48266),

Gene: Paries\_61 Start: 47806, Stop: 48663, Start Num: 17

Candidate Starts for Paries\_61:

(Start: 13 @47746 has 2 MA's), (Start: 17 @47806 has 12 MA's), (31, 48010), (36, 48061), (43, 48142), (47, 48178), (55, 48223), (58, 48283), (61, 48337), (62, 48343), (67, 48397), (69, 48403), (76, 48532),

Gene: Rofo\_58 Start: 47154, Stop: 48011, Start Num: 17

Candidate Starts for Rofo\_58:

(Start: 13 @47094 has 2 MA's), (Start: 17 @47154 has 12 MA's), (31, 47358), (36, 47409), (43, 47490), (47, 47526), (55, 47571), (58, 47631), (61, 47685), (62, 47691), (67, 47745), (69, 47751), (76, 47880),

Gene: Sanjuju\_56 Start: 47648, Stop: 48388, Start Num: 17

Candidate Starts for Sanjuju\_56:

(1, 47066), (2, 47129), (8, 47444), (Start: 13 @47588 has 2 MA's), (Start: 17 @47648 has 12 MA's), (38, 47891), (42, 47939), (61, 48116), (70, 48173), (71, 48197), (75, 48257), (78, 48326),

Gene: Saronaya\_57 Start: 46149, Stop: 46925, Start Num: 18

Candidate Starts for Saronaya\_57:

(6, 45915), (7, 45927), (11, 46017), (14, 46074), (Start: 18 @46149 has 1 MA's), (59, 46596), (72, 46737), (77, 46800), (79, 46881),

Gene: SchottB\_54 Start: 46419, Stop: 47117, Start Num: 25

Candidate Starts for SchottB\_54:

(23, 46386), (Start: 25 @46419 has 1 MA's), (59, 46788), (72, 46929), (77, 46992), (79, 47073),

Gene: StorminNorm\_55 Start: 45626, Stop: 46564, Start Num: 5

Candidate Starts for StorminNorm\_55:

(Start: 5 @45626 has 2 MA's), (21, 45881), (22, 45884), (32, 46040), (39, 46082), (46, 46130), (59, 46235), (72, 46376), (77, 46439), (79, 46520),

Gene: Tangent\_59 Start: 46717, Stop: 47634, Start Num: 13

Candidate Starts for Tangent\_59:

(Start: 13 @46717 has 2 MA's), (Start: 17 @46777 has 12 MA's), (31, 46981), (36, 47032), (43, 47113), (47, 47149), (55, 47194), (58, 47254), (61, 47308), (62, 47314), (67, 47368), (69, 47374), (76, 47503),

Gene: Tangerine\_56 Start: 45560, Stop: 46327, Start Num: 20

Candidate Starts for Tangerine\_56:

(6, 45326), (7, 45338), (11, 45428), (14, 45485), (Start: 20 @45560 has 1 MA's), (59, 45998), (72, 46139), (77, 46202),

Gene: Thing3\_57 Start: 46476, Stop: 47525, Start Num: 17

Candidate Starts for Thing3\_57:

(Start: 17 @46476 has 12 MA's), (28, 46647), (34, 46743), (36, 46851), (55, 47064), (58, 47124), (61, 47178), (62, 47184), (67, 47238), (69, 47244), (76, 47394),

Gene: Tycho\_55 Start: 45494, Stop: 46273, Start Num: 18

Candidate Starts for Tycho\_55:

(Start: 18 @45494 has 1 MA's), (59, 45944), (72, 46085), (77, 46148), (79, 46229),

Gene: YorkOnyx\_57 Start: 46072, Stop: 46905, Start Num: 5

Candidate Starts for YorkOnyx\_57:

(Start: 5 @46072 has 2 MA's), (21, 46291), (22, 46294), (32, 46450), (41, 46540), (44, 46582), (45, 46597), (46, 46612), (59, 46720), (66, 46801), (72, 46861),

Gene: Zitch\_61 Start: 45762, Stop: 46910, Start Num: 19

Candidate Starts for Zitch\_61:

(15, 45696), (Start: 19 @45762 has 1 MA's), (26, 45849), (40, 46056), (50, 46176), (57, 46257), (64, 46371), (70, 46389), (72, 46437), (73, 46467), (74, 46476), (77, 46509), (80, 46620), (82, 46626), (84, 46647), (89, 46746), (91, 46848),