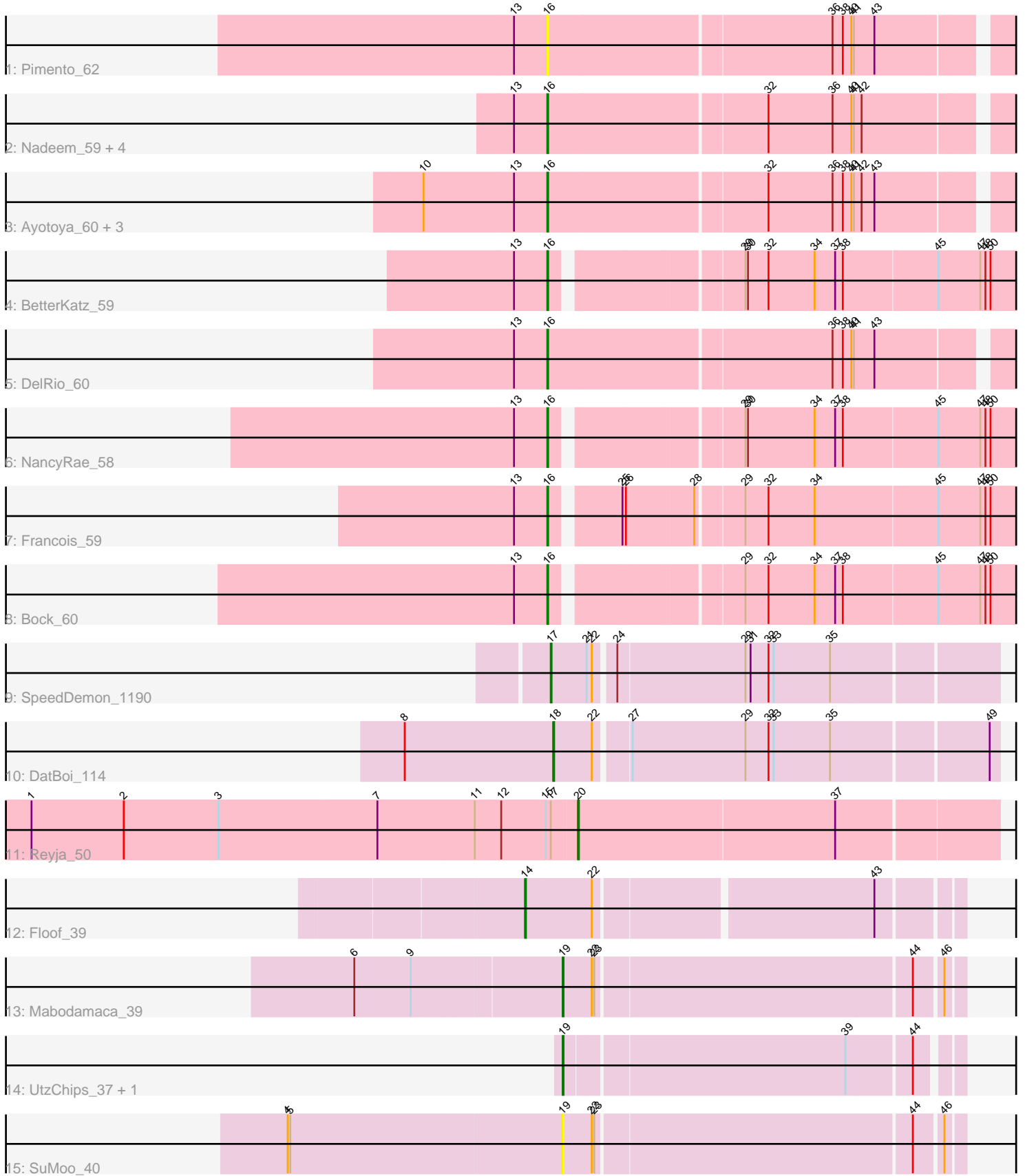# Pham 158155

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 158155 Report

This analysis was run 04/13/24 on database version 558.

Pham number 158155 has 23 members, 3 are drafts.

Phages represented in each track:
- Track 1 : Pimento_62
- Track 2 : Nadeem_59, Brylie_59, Parada_59, WheatThin_58, Mulch_59
- Track 3 : Ayotoya_60, GrandSlam_60, Chop_60, Hamood_60
- Track 4 : BetterKatz_59
- Track 5 : DelRio_60
- Track 6 : NancyRae_58
- Track 7 : Francois_59
- Track 8 : Bock_60
- Track 9 : SpeedDemon_1190
- Track 10 : DatBoi_114
- Track 11 : Reyja_50
- Track 12 : Floof_39
- Track 13 : Mabodamaca_39
- Track 14 : UtzChips_37, Barnstormer_37
- Track 15 : SuMoo_40


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

The start number called the most often in the published annotations is 16, it was called in 13 of the 20 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
- Ayotoya_60, BetterKatz_59, Bock_60, Brylie_59, Chop_60, DelRio_60, Francois_59, GrandSlam_60, Hamood_60, Mulch_59, Nadeem_59, NancyRae_58, Parada_59, Pimento_62, WheatThin_58,

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

Genes that do not have the "Most Annotated" start:
- Barnstormer_37, DatBoi_114, Floof_39, Mabodamaca_39, Reyja_50, SpeedDemon_1190, SuMoo_40, UtzChips_37,

**Summary by start number:**

Start 14:
- Found in 1 of 23 ( 4.3% ) 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: Floof_39 (EH),

Start 16:
- Found in 15 of 23 ( 65.2% ) of genes in pham
- Manual Annotations of this start: 13 of 20
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ayotoya_60 (DI), BetterKatz_59 (DI), Bock_60 (DI), Brylie_59 (DI), Chop_60 (DI), DelRio_60 (DI), Francois_59 (DI), GrandSlam_60 (DI), Hamood_60 (DI), Mulch_59 (DI), Nadeem_59 (DI), NancyRae_58 (DI), Parada_59 (DI), Pimento_62 (DI), WheatThin_58 (DI),

Start 17:
- Found in 2 of 23 ( 8.7% ) of genes in pham
- Manual Annotations of this start: 1 of 20
- Called 50.0% of time when present
- Phage (with cluster) where this start called: SpeedDemon_1190 (DL),

Start 18:
- Found in 1 of 23 ( 4.3% ) 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: DatBoi_114 (DL),

Start 19:
- Found in 4 of 23 ( 17.4% ) of genes in pham
- Manual Annotations of this start: 3 of 20
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Barnstormer_37 (EH), Mabodamaca_39 (EH), SuMoo_40 (EH), UtzChips_37 (EH),

Start 20:
- Found in 1 of 23 ( 4.3% ) 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: Reyja_50 (DY),

**Summary by clusters:**

There are 4 clusters represented in this pham: DL, DY, EH, DI,

Info for manual annotations of cluster DI:
- Start number 16 was manually annotated 13 times for cluster DI.

Info for manual annotations of cluster DL:
- Start number 17 was manually annotated 1 time for cluster DL.
- Start number 18 was manually annotated 1 time for cluster DL.

Info for manual annotations of cluster DY:

•Start number 20 was manually annotated 1 time for cluster DY.

Info for manual annotations of cluster EH:
•Start number 14 was manually annotated 1 time for cluster EH.
•Start number 19 was manually annotated 3 times for cluster EH.


### *Gene Information:*
Gene: Ayotoya_60 Start: 40557, Stop: 41096, Start Num: 16
Candidate Starts for Ayotoya_60:
(10, 40413), (13, 40518), (Start: 16 @40557 has 13 MA's), (32, 40806), (36, 40881), (38, 40893), (40, 40902), (41, 40905), (42, 40914), (43, 40929),

Gene: Barnstormer_37 Start: 25193, Stop: 25627, Start Num: 19
Candidate Starts for Barnstormer_37:
(Start: 19 @25193 has 3 MA's), (39, 25511), (44, 25583),

Gene: BetterKatz_59 Start: 39771, Stop: 40310, Start Num: 16
Candidate Starts for BetterKatz_59:
(13, 39732), (Start: 16 @39771 has 13 MA's), (29, 39969), (30, 39972), (32, 39996), (34, 40050), (37, 40074), (38, 40083), (45, 40191), (47, 40239), (48, 40245), (50, 40251),

Gene: Bock_60 Start: 39800, Stop: 40339, Start Num: 16
Candidate Starts for Bock_60:
(13, 39761), (Start: 16 @39800 has 13 MA's), (29, 39998), (32, 40025), (34, 40079), (37, 40103), (38, 40112), (45, 40220), (47, 40268), (48, 40274), (50, 40280),

Gene: Brylie_59 Start: 39537, Stop: 40076, Start Num: 16
Candidate Starts for Brylie_59:
(13, 39498), (Start: 16 @39537 has 13 MA's), (32, 39786), (36, 39861), (40, 39882), (41, 39885), (42, 39894),

Gene: Chop_60 Start: 40308, Stop: 40847, Start Num: 16
Candidate Starts for Chop_60:
(10, 40164), (13, 40269), (Start: 16 @40308 has 13 MA's), (32, 40557), (36, 40632), (38, 40644), (40, 40653), (41, 40656), (42, 40665), (43, 40680),

Gene: DatBoi_114 Start: 72473, Stop: 72970, Start Num: 18
Candidate Starts for DatBoi_114:
(8, 72302), (Start: 18 @72473 has 1 MA's), (22, 72518), (27, 72554), (29, 72686), (32, 72713), (33, 72719), (35, 72785), (49, 72959),

Gene: DelRio_60 Start: 40718, Stop: 41257, Start Num: 16
Candidate Starts for DelRio_60:
(13, 40679), (Start: 16 @40718 has 13 MA's), (36, 41042), (38, 41054), (40, 41063), (41, 41066), (43, 41090),

Gene: Floof_39 Start: 25907, Stop: 26380, Start Num: 14
Candidate Starts for Floof_39:
(Start: 14 @25907 has 1 MA's), (22, 25982), (43, 26291),

Gene: Francois_59 Start: 39804, Stop: 40343, Start Num: 16
Candidate Starts for Francois_59:
(13, 39765), (Start: 16 @39804 has 13 MA's), (25, 39873), (26, 39876), (28, 39951), (29, 40002), (32, 40029), (34, 40083), (45, 40224), (47, 40272), (48, 40278), (50, 40284),

Gene: GrandSlam_60 Start: 40308, Stop: 40847, Start Num: 16
Candidate Starts for GrandSlam_60:
(10, 40164), (13, 40269), (Start: 16 @40308 has 13 MA's), (32, 40557), (36, 40632), (38, 40644), (40, 40653), (41, 40656), (42, 40665), (43, 40680),

Gene: Hamood_60 Start: 40308, Stop: 40847, Start Num: 16
Candidate Starts for Hamood_60:
(10, 40164), (13, 40269), (Start: 16 @40308 has 13 MA's), (32, 40557), (36, 40632), (38, 40644), (40, 40653), (41, 40656), (42, 40665), (43, 40680),

Gene: Mabodamaca_39 Start: 26406, Stop: 26849, Start Num: 19
Candidate Starts for Mabodamaca_39:
(6, 26169), (9, 26235), (Start: 19 @26406 has 3 MA's), (22, 26439), (23, 26442), (44, 26799), (46, 26829),

Gene: Mulch_59 Start: 39537, Stop: 40076, Start Num: 16
Candidate Starts for Mulch_59:
(13, 39498), (Start: 16 @39537 has 13 MA's), (32, 39786), (36, 39861), (40, 39882), (41, 39885), (42, 39894),

Gene: Nadeem_59 Start: 39525, Stop: 40064, Start Num: 16
Candidate Starts for Nadeem_59:
(13, 39486), (Start: 16 @39525 has 13 MA's), (32, 39774), (36, 39849), (40, 39870), (41, 39873), (42, 39882),

Gene: NancyRae_58 Start: 39535, Stop: 40074, Start Num: 16
Candidate Starts for NancyRae_58:
(13, 39496), (Start: 16 @39535 has 13 MA's), (29, 39733), (30, 39736), (34, 39814), (37, 39838), (38, 39847), (45, 39955), (47, 40003), (48, 40009), (50, 40015),

Gene: Parada_59 Start: 39537, Stop: 40076, Start Num: 16
Candidate Starts for Parada_59:
(13, 39498), (Start: 16 @39537 has 13 MA's), (32, 39786), (36, 39861), (40, 39882), (41, 39885), (42, 39894),

Gene: Pimento_62 Start: 39447, Stop: 39986, Start Num: 16
Candidate Starts for Pimento_62:
(13, 39408), (Start: 16 @39447 has 13 MA's), (36, 39771), (38, 39783), (40, 39792), (41, 39795), (43, 39819),

Gene: Reyja_50 Start: 33061, Stop: 33540, Start Num: 20
Candidate Starts for Reyja_50:
(1, 32431), (2, 32539), (3, 32650), (7, 32833), (11, 32944), (12, 32974), (15, 33025), (Start: 17 @33031 has 1 MA's), (Start: 20 @33061 has 1 MA's), (37, 33358),

Gene: SpeedDemon_1190 Start: 76290, Stop: 76790, Start Num: 17
Candidate Starts for SpeedDemon_1190:

(Start: 17 @76290 has 1 MA's), (21, 76332), (22, 76338), (24, 76359), (29, 76506), (31, 76512), (32, 76533), (33, 76539), (35, 76605),

Gene: SuMoo_40 Start: 26007, Stop: 26450, Start Num: 19
Candidate Starts for SuMoo_40:
(4, 25689), (5, 25692), (Start: 19 @26007 has 3 MA's), (22, 26040), (23, 26043), (44, 26400), (46, 26430),

Gene: UtzChips_37 Start: 25178, Stop: 25612, Start Num: 19
Candidate Starts for UtzChips_37:
(Start: 19 @25178 has 3 MA's), (39, 25496), (44, 25568),

Gene: WheatThin_58 Start: 39525, Stop: 40064, Start Num: 16
Candidate Starts for WheatThin_58:
(13, 39486), (Start: 16 @39525 has 13 MA's), (32, 39774), (36, 39849), (40, 39870), (41, 39873), (42, 39882),