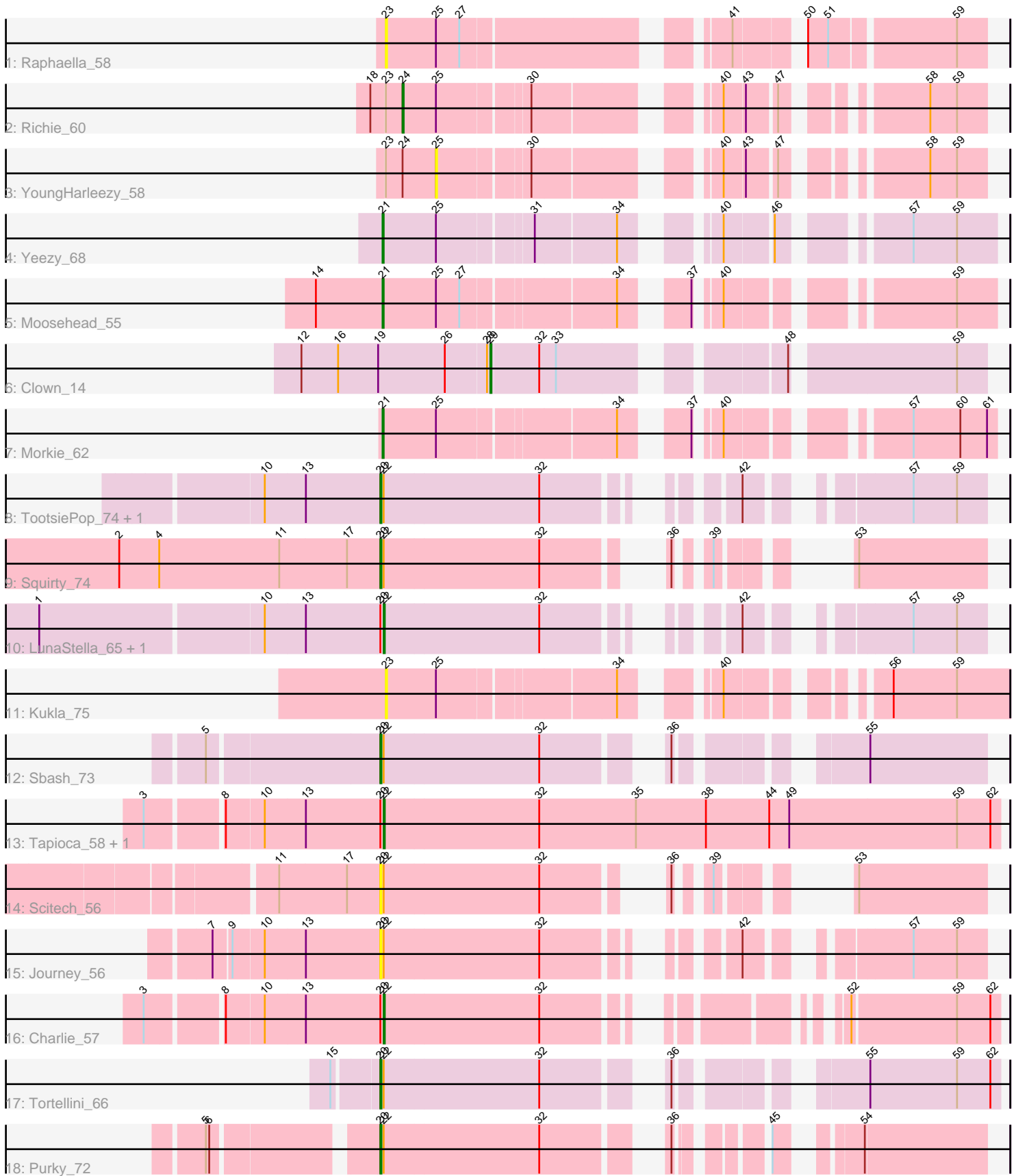


# Pham 147419



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 147419 Report

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

Pham number 147419 has 21 members, 6 are drafts.

Phages represented in each track:

- Track 1 : Raphaella\_58
- Track 2 : Richie\_60
- Track 3 : YoungHarleezy\_58
- Track 4 : Yeezy\_68
- Track 5 : Moosehead\_55
- Track 6 : Clown\_14
- Track 7 : Morkie\_62
- Track 8 : TootsiePop\_74, Misha28\_74
- Track 9 : Squirty\_74
- Track 10 : LunaStella\_65, TChen\_73
- Track 11 : Kukla\_75
- Track 12 : Sbash\_73
- Track 13 : Tapioca\_58, Andies\_54
- Track 14 : Scitech\_56
- Track 15 : Journey\_56
- Track 16 : Charlie\_57
- Track 17 : Tortellini\_66
- Track 18 : Purky\_72

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

The start number called the most often in the published annotations is 20, it was called in 6 of the 15 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Journey\_56, Misha28\_74, Purky\_72, Sbash\_73, Scitech\_56, Squirty\_74, TootsiePop\_74, Tortellini\_66,

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

- Andies\_54, Charlie\_57, LunaStella\_65, TChen\_73, Tapioca\_58,

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

- Clown\_14, Kukla\_75, Moosehead\_55, Morkie\_62, Raphaella\_58, Richie\_60, Yeezy\_68, YoungHarleezy\_58,

## Summary by start number:

### Start 20:

- Found in 13 of 21 ( 61.9% ) of genes in pham
- Manual Annotations of this start: 6 of 15
- Called 61.5% of time when present
- Phage (with cluster) where this start called: Journey\_56 (N), Misha28\_74 (F1), Purky\_72 (P6), Sbash\_73 (I2), Scitech\_56 (N), Squirty\_74 (F3), TootsiePop\_74 (F1), Tortellini\_66 (P2),

### Start 21:

- Found in 3 of 21 ( 14.3% ) of genes in pham
- Manual Annotations of this start: 3 of 15
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Moosehead\_55 (CZ6), Morkie\_62 (DH), Yeezy\_68 (CZ3),

### Start 22:

- Found in 13 of 21 ( 61.9% ) of genes in pham
- Manual Annotations of this start: 4 of 15
- Called 38.5% of time when present
- Phage (with cluster) where this start called: Andies\_54 (N), Charlie\_57 (N), LunaStella\_65 (F4), TChen\_73 (F4), Tapioca\_58 (N),

### Start 23:

- Found in 4 of 21 ( 19.0% ) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Kukla\_75 (FJ), Raphaella\_58 (AY),

### Start 24:

- Found in 2 of 21 ( 9.5% ) of genes in pham
- Manual Annotations of this start: 1 of 15
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Richie\_60 (AY),

### Start 25:

- Found in 7 of 21 ( 33.3% ) of genes in pham
- No Manual Annotations of this start.
- Called 14.3% of time when present
- Phage (with cluster) where this start called: YoungHarleezy\_58 (AY),

### Start 29:

- Found in 1 of 21 ( 4.8% ) of genes in pham
- Manual Annotations of this start: 1 of 15
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Clown\_14 (DC2),

## Summary by clusters:

There are 13 clusters represented in this pham: P2, F1, F3, F4, DH, CZ3, I2, CZ6, N, AY, P6, FJ, DC2,

Info for manual annotations of cluster AY:

- Start number 24 was manually annotated 1 time for cluster AY.

Info for manual annotations of cluster CZ3:

- Start number 21 was manually annotated 1 time for cluster CZ3.

Info for manual annotations of cluster CZ6:

- Start number 21 was manually annotated 1 time for cluster CZ6.

Info for manual annotations of cluster DC2:

- Start number 29 was manually annotated 1 time for cluster DC2.

Info for manual annotations of cluster DH:

- Start number 21 was manually annotated 1 time for cluster DH.

Info for manual annotations of cluster F1:

- Start number 20 was manually annotated 2 times for cluster F1.

Info for manual annotations of cluster F3:

- Start number 20 was manually annotated 1 time for cluster F3.

Info for manual annotations of cluster F4:

- Start number 22 was manually annotated 1 time for cluster F4.

Info for manual annotations of cluster I2:

- Start number 20 was manually annotated 1 time for cluster I2.

Info for manual annotations of cluster N:

- Start number 22 was manually annotated 3 times for cluster N.

Info for manual annotations of cluster P2:

- Start number 20 was manually annotated 1 time for cluster P2.

Info for manual annotations of cluster P6:

- Start number 20 was manually annotated 1 time for cluster P6.

### ***Gene Information:***

Gene: Andies\_54 Start: 38349, Stop: 38900, Start Num: 22

Candidate Starts for Andies\_54:

(3, 38151), (8, 38211), (10, 38244), (13, 38280), (Start: 20 @38346 has 6 MA's), (Start: 22 @38349 has 4 MA's), (32, 38487), (35, 38574), (38, 38637), (44, 38694), (49, 38712), (59, 38862), (62, 38892),

Gene: Charlie\_57 Start: 37679, Stop: 38128, Start Num: 22

Candidate Starts for Charlie\_57:

(3, 37481), (8, 37541), (10, 37574), (13, 37610), (Start: 20 @37676 has 6 MA's), (Start: 22 @37679 has 4 MA's), (32, 37817), (52, 38000), (59, 38090), (62, 38120),

Gene: Clown\_14 Start: 8028, Stop: 8411, Start Num: 29

Candidate Starts for Clown\_14:

(12, 7860), (16, 7893), (19, 7929), (26, 7989), (28, 8025), (Start: 29 @8028 has 1 MA's), (32, 8070), (33, 8085), (48, 8250), (59, 8385),

Gene: Journey\_56 Start: 35411, Stop: 35842, Start Num: 20

Candidate Starts for Journey\_56:

(7, 35267), (9, 35282), (10, 35309), (13, 35345), (Start: 20 @35411 has 6 MA's), (Start: 22 @35414 has 4 MA's), (32, 35552), (42, 35669), (57, 35777), (59, 35816),

Gene: Kukla\_75 Start: 41885, Stop: 42343, Start Num: 23

Candidate Starts for Kukla\_75:

(23, 41885), (25, 41930), (34, 42077), (40, 42134), (56, 42239), (59, 42296),

Gene: LunaStella\_65 Start: 45366, Stop: 45794, Start Num: 22

Candidate Starts for LunaStella\_65:

(1, 45066), (10, 45261), (13, 45297), (Start: 20 @45363 has 6 MA's), (Start: 22 @45366 has 4 MA's), (32, 45504), (42, 45621), (57, 45729), (59, 45768),

Gene: Misha28\_74 Start: 45990, Stop: 46421, Start Num: 20

Candidate Starts for Misha28\_74:

(10, 45888), (13, 45924), (Start: 20 @45990 has 6 MA's), (Start: 22 @45993 has 4 MA's), (32, 46131), (42, 46248), (57, 46356), (59, 46395),

Gene: Moosehead\_55 Start: 33633, Stop: 34088, Start Num: 21

Candidate Starts for Moosehead\_55:

(14, 33573), (Start: 21 @33633 has 3 MA's), (25, 33681), (27, 33702), (34, 33828), (37, 33870), (40, 33885), (59, 34053),

Gene: Morkie\_62 Start: 37124, Stop: 37579, Start Num: 21

Candidate Starts for Morkie\_62:

(Start: 21 @37124 has 3 MA's), (25, 37172), (34, 37319), (37, 37361), (40, 37376), (57, 37505), (60, 37547), (61, 37571),

Gene: Purky\_72 Start: 44925, Stop: 45359, Start Num: 20

Candidate Starts for Purky\_72:

(5, 44793), (6, 44796), (Start: 20 @44925 has 6 MA's), (Start: 22 @44928 has 4 MA's), (32, 45066), (36, 45147), (45, 45201), (54, 45252),

Gene: Raphaella\_58 Start: 33209, Stop: 33670, Start Num: 23

Candidate Starts for Raphaella\_58:

(23, 33209), (25, 33254), (27, 33275), (41, 33473), (50, 33521), (51, 33539), (59, 33644),

Gene: Richie\_60 Start: 34284, Stop: 34706, Start Num: 24

Candidate Starts for Richie\_60:

(18, 34257), (23, 34269), (Start: 24 @34284 has 1 MA's), (25, 34314), (30, 34389), (40, 34518), (43, 34536), (47, 34560), (58, 34656), (59, 34680),

Gene: Sbash\_73 Start: 47394, Stop: 47846, Start Num: 20

Candidate Starts for Sbash\_73:

(5, 47247), (Start: 20 @47394 has 6 MA's), (Start: 22 @47397 has 4 MA's), (32, 47535), (36, 47616), (55, 47742),

Gene: Scitech\_56 Start: 38238, Stop: 38633, Start Num: 20

Candidate Starts for Scitech\_56:

(11, 38148), (17, 38208), (Start: 20 @38238 has 6 MA's), (Start: 22 @38241 has 4 MA's), (32, 38379), (36, 38448), (39, 38466), (53, 38520),

Gene: Squirty\_74 Start: 49246, Stop: 49641, Start Num: 20

Candidate Starts for Squirty\_74:

(2, 49012), (4, 49048), (11, 49156), (17, 49216), (Start: 20 @49246 has 6 MA's), (Start: 22 @49249 has 4 MA's), (32, 49387), (36, 49456), (39, 49474), (53, 49528),

Gene: TChen\_73 Start: 47317, Stop: 47745, Start Num: 22

Candidate Starts for TChen\_73:

(1, 47017), (10, 47212), (13, 47248), (Start: 20 @47314 has 6 MA's), (Start: 22 @47317 has 4 MA's), (32, 47455), (42, 47572), (57, 47680), (59, 47719),

Gene: Tapioca\_58 Start: 38788, Stop: 39339, Start Num: 22

Candidate Starts for Tapioca\_58:

(3, 38590), (8, 38650), (10, 38683), (13, 38719), (Start: 20 @38785 has 6 MA's), (Start: 22 @38788 has 4 MA's), (32, 38926), (35, 39013), (38, 39076), (44, 39133), (49, 39151), (59, 39301), (62, 39331),

Gene: TootsiePop\_74 Start: 45990, Stop: 46421, Start Num: 20

Candidate Starts for TootsiePop\_74:

(10, 45888), (13, 45924), (Start: 20 @45990 has 6 MA's), (Start: 22 @45993 has 4 MA's), (32, 46131), (42, 46248), (57, 46356), (59, 46395),

Gene: Tortellini\_66 Start: 44536, Stop: 45000, Start Num: 20

Candidate Starts for Tortellini\_66:

(15, 44500), (Start: 20 @44536 has 6 MA's), (Start: 22 @44539 has 4 MA's), (32, 44677), (36, 44758), (55, 44884), (59, 44962), (62, 44992),

Gene: Yeezy\_68 Start: 43930, Stop: 44385, Start Num: 21

Candidate Starts for Yeezy\_68:

(Start: 21 @43930 has 3 MA's), (25, 43978), (31, 44056), (34, 44125), (40, 44182), (46, 44221), (57, 44311), (59, 44350),

Gene: YoungHarleezy\_58 Start: 33817, Stop: 34209, Start Num: 25

Candidate Starts for YoungHarleezy\_58:

(23, 33772), (Start: 24 @33787 has 1 MA's), (25, 33817), (30, 33892), (40, 34021), (43, 34039), (47, 34063), (58, 34159), (59, 34183),