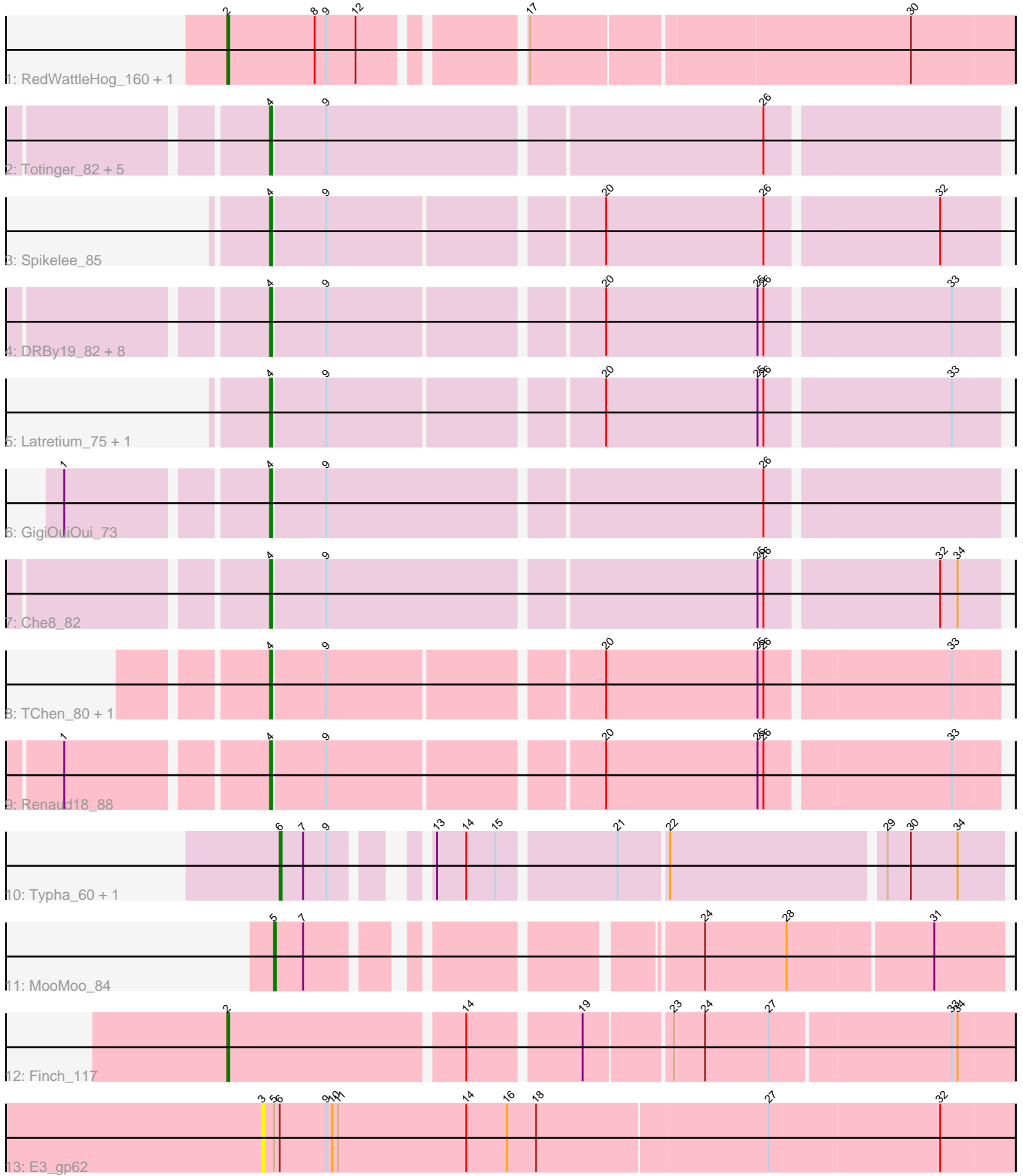


# Pham 170210



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 170210 Report

This analysis was run 07/09/24 on database version 566.

Pham number 170210 has 30 members, 4 are drafts.

Phages represented in each track:

- Track 1 : RedWattleHog\_160, Stormageddon\_161
- Track 2 : Totinger\_82, Nivrat\_75, LilMoolah\_77, Starcevich\_79, Fastidio\_77, LittleShirley\_85
- Track 3 : Spikelee\_85
- Track 4 : DRBy19\_82, Jarcob\_78, OlympiaSaint\_78, IbOuu\_76, Clifton\_71, James\_79, ShroomBoi\_79, Philus\_81, Bipolar\_81
- Track 5 : Latretium\_75, OwlsT2W\_80
- Track 6 : GigiOuiOui\_73
- Track 7 : Che8\_82
- Track 8 : TChen\_80, LunaStella\_78
- Track 9 : Renaud18\_88
- Track 10 : Typha\_60, Hilltopfarm\_60
- Track 11 : MooMoo\_84
- Track 12 : Finch\_117
- Track 13 : E3\_gp62

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

The start number called the most often in the published annotations is 4, it was called in 20 of the 26 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Bipolar\_81, Che8\_82, Clifton\_71, DRBy19\_82, Fastidio\_77, GigiOuiOui\_73, IbOuu\_76, James\_79, Jarcob\_78, Latretium\_75, LilMoolah\_77, LittleShirley\_85, LunaStella\_78, Nivrat\_75, OlympiaSaint\_78, OwlsT2W\_80, Philus\_81, Renaud18\_88, ShroomBoi\_79, Spikelee\_85, Starcevich\_79, TChen\_80, Totinger\_82,

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

- 

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

- E3\_gp62, Finch\_117, Hilltopfarm\_60, MooMoo\_84, RedWattleHog\_160, Stormageddon\_161, Typha\_60,

## Summary by start number:

### Start 2:

- Found in 3 of 30 ( 10.0% ) of genes in pham
- Manual Annotations of this start: 3 of 26
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Finch\_117 (singleton), RedWattleHog\_160 (DX), Stormageddon\_161 (DX),

### Start 3:

- Found in 1 of 30 ( 3.3% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: E3\_gp62 (singleton),

### Start 4:

- Found in 23 of 30 ( 76.7% ) of genes in pham
- Manual Annotations of this start: 20 of 26
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bipolar\_81 (F1), Che8\_82 (F1), Clifton\_71 (F1), DRBy19\_82 (F1), Fastidio\_77 (F1), GigiOuiOui\_73 (F1), IbOuu\_76 (F1), James\_79 (F1), Jarcob\_78 (F1), Latretium\_75 (F1), LilMoolah\_77 (F1), LittleShirley\_85 (F1), LunaStella\_78 (F4), Nivrat\_75 (F1), OlympiaSaint\_78 (F1), OwlsT2W\_80 (F1), Philus\_81 (F1), Renaud18\_88 (F4), ShroomBoi\_79 (F1), Spikelee\_85 (F1), Starcevich\_79 (F1), TChen\_80 (F4), Totinger\_82 (F1),

### Start 5:

- Found in 2 of 30 ( 6.7% ) 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: MooMoo\_84 (singleton),

### Start 6:

- Found in 3 of 30 ( 10.0% ) 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: Hilltopfarm\_60 (Y), Typha\_60 (Y),

## Summary by clusters:

There are 5 clusters represented in this pham: Y, F1, singleton, F4, DX,

Info for manual annotations of cluster DX:

- Start number 2 was manually annotated 2 times for cluster DX.

Info for manual annotations of cluster F1:

- Start number 4 was manually annotated 17 times for cluster F1.

Info for manual annotations of cluster F4:

- Start number 4 was manually annotated 3 times for cluster F4.

Info for manual annotations of cluster Y:

- Start number 6 was manually annotated 2 times for cluster Y.

**Gene Information:**

Gene: Bipolar\_81 Start: 49898, Stop: 50251, Start Num: 4

Candidate Starts for Bipolar\_81:

(Start: 4 @49898 has 20 MA's), (9, 49925), (20, 50057), (25, 50135), (26, 50138), (33, 50228),

Gene: Che8\_82 Start: 48631, Stop: 48987, Start Num: 4

Candidate Starts for Che8\_82:

(Start: 4 @48631 has 20 MA's), (9, 48658), (25, 48871), (26, 48874), (32, 48958), (34, 48967),

Gene: Clifton\_71 Start: 46466, Stop: 46819, Start Num: 4

Candidate Starts for Clifton\_71:

(Start: 4 @46466 has 20 MA's), (9, 46493), (20, 46625), (25, 46703), (26, 46706), (33, 46796),

Gene: DRBy19\_82 Start: 50195, Stop: 50548, Start Num: 4

Candidate Starts for DRBy19\_82:

(Start: 4 @50195 has 20 MA's), (9, 50222), (20, 50354), (25, 50432), (26, 50435), (33, 50525),

Gene: E3\_gp62 Start: 24510, Stop: 24896, Start Num: 3

Candidate Starts for E3\_gp62:

(3, 24510), (Start: 5 @24516 has 1 MA's), (Start: 6 @24519 has 2 MA's), (9, 24543), (10, 24546), (11, 24549), (14, 24615), (16, 24636), (18, 24651), (27, 24768), (32, 24855),

Gene: Fastidio\_77 Start: 45442, Stop: 45798, Start Num: 4

Candidate Starts for Fastidio\_77:

(Start: 4 @45442 has 20 MA's), (9, 45469), (26, 45685),

Gene: Finch\_117 Start: 86737, Stop: 87120, Start Num: 2

Candidate Starts for Finch\_117:

(Start: 2 @86737 has 3 MA's), (14, 86854), (19, 86908), (23, 86950), (24, 86965), (27, 86998), (33, 87088), (34, 87091),

Gene: GigiOuiOui\_73 Start: 47038, Stop: 47394, Start Num: 4

Candidate Starts for GigiOuiOui\_73:

(1, 46942), (Start: 4 @47038 has 20 MA's), (9, 47065), (26, 47281),

Gene: Hilltopfarm\_60 Start: 44032, Stop: 44364, Start Num: 6

Candidate Starts for Hilltopfarm\_60:

(Start: 6 @44032 has 2 MA's), (7, 44044), (9, 44056), (13, 44089), (14, 44104), (15, 44119), (21, 44176), (22, 44200), (29, 44305), (30, 44317), (34, 44341),

Gene: IbOuu\_76 Start: 46272, Stop: 46625, Start Num: 4

Candidate Starts for IbOuu\_76:

(Start: 4 @46272 has 20 MA's), (9, 46299), (20, 46431), (25, 46509), (26, 46512), (33, 46602),

Gene: James\_79 Start: 49530, Stop: 49883, Start Num: 4

Candidate Starts for James\_79:

(Start: 4 @49530 has 20 MA's), (9, 49557), (20, 49689), (25, 49767), (26, 49770), (33, 49860),

Gene: Jacob\_78 Start: 49127, Stop: 49480, Start Num: 4

Candidate Starts for Jacob\_78:

(Start: 4 @49127 has 20 MA's), (9, 49154), (20, 49286), (25, 49364), (26, 49367), (33, 49457),

Gene: Latretium\_75 Start: 45992, Stop: 46345, Start Num: 4

Candidate Starts for Latretium\_75:

(Start: 4 @45992 has 20 MA's), (9, 46019), (20, 46151), (25, 46229), (26, 46232), (33, 46322),

Gene: LilMoolah\_77 Start: 48185, Stop: 48448, Start Num: 4

Candidate Starts for LilMoolah\_77:

(Start: 4 @48185 has 20 MA's), (9, 48212), (26, 48428),

Gene: LittleShirley\_85 Start: 49115, Stop: 49471, Start Num: 4

Candidate Starts for LittleShirley\_85:

(Start: 4 @49115 has 20 MA's), (9, 49142), (26, 49358),

Gene: LunaStella\_78 Start: 47826, Stop: 48179, Start Num: 4

Candidate Starts for LunaStella\_78:

(Start: 4 @47826 has 20 MA's), (9, 47853), (20, 47985), (25, 48063), (26, 48066), (33, 48156),

Gene: MooMoo\_84 Start: 49010, Stop: 49342, Start Num: 5

Candidate Starts for MooMoo\_84:

(Start: 5 @49010 has 1 MA's), (7, 49025), (24, 49193), (28, 49235), (31, 49307),

Gene: Nivrat\_75 Start: 48058, Stop: 48321, Start Num: 4

Candidate Starts for Nivrat\_75:

(Start: 4 @48058 has 20 MA's), (9, 48085), (26, 48301),

Gene: OlympiaSaint\_78 Start: 48472, Stop: 48825, Start Num: 4

Candidate Starts for OlympiaSaint\_78:

(Start: 4 @48472 has 20 MA's), (9, 48499), (20, 48631), (25, 48709), (26, 48712), (33, 48802),

Gene: OwlsT2W\_80 Start: 48157, Stop: 48510, Start Num: 4

Candidate Starts for OwlsT2W\_80:

(Start: 4 @48157 has 20 MA's), (9, 48184), (20, 48316), (25, 48394), (26, 48397), (33, 48487),

Gene: Philus\_81 Start: 50171, Stop: 50524, Start Num: 4

Candidate Starts for Philus\_81:

(Start: 4 @50171 has 20 MA's), (9, 50198), (20, 50330), (25, 50408), (26, 50411), (33, 50501),

Gene: RedWattleHog\_160 Start: 106582, Stop: 106965, Start Num: 2

Candidate Starts for RedWattleHog\_160:

(Start: 2 @106582 has 3 MA's), (8, 106627), (9, 106633), (12, 106648), (17, 106720), (30, 106909),

Gene: Renaud18\_88 Start: 49125, Stop: 49478, Start Num: 4

Candidate Starts for Renaud18\_88:

(1, 49029), (Start: 4 @49125 has 20 MA's), (9, 49152), (20, 49284), (25, 49362), (26, 49365), (33, 49455),

Gene: ShroomBoi\_79 Start: 48390, Stop: 48743, Start Num: 4

Candidate Starts for ShroomBoi\_79:

(Start: 4 @48390 has 20 MA's), (9, 48417), (20, 48549), (25, 48627), (26, 48630), (33, 48720),

Gene: Spikelee\_85 Start: 50696, Stop: 51049, Start Num: 4

Candidate Starts for Spikelee\_85:

(Start: 4 @50696 has 20 MA's), (9, 50723), (20, 50855), (26, 50936), (32, 51020),

Gene: Starcevich\_79 Start: 49396, Stop: 49752, Start Num: 4

Candidate Starts for Starcevich\_79:

(Start: 4 @49396 has 20 MA's), (9, 49423), (26, 49639),

Gene: Stormageddon\_161 Start: 107546, Stop: 107929, Start Num: 2

Candidate Starts for Stormageddon\_161:

(Start: 2 @107546 has 3 MA's), (8, 107591), (9, 107597), (12, 107612), (17, 107684), (30, 107873),

Gene: TChen\_80 Start: 49777, Stop: 50130, Start Num: 4

Candidate Starts for TChen\_80:

(Start: 4 @49777 has 20 MA's), (9, 49804), (20, 49936), (25, 50014), (26, 50017), (33, 50107),

Gene: Totinger\_82 Start: 48192, Stop: 48548, Start Num: 4

Candidate Starts for Totinger\_82:

(Start: 4 @48192 has 20 MA's), (9, 48219), (26, 48435),

Gene: Typha\_60 Start: 44340, Stop: 44672, Start Num: 6

Candidate Starts for Typha\_60:

(Start: 6 @44340 has 2 MA's), (7, 44352), (9, 44364), (13, 44397), (14, 44412), (15, 44427), (21, 44484), (22, 44508), (29, 44613), (30, 44625), (34, 44649),