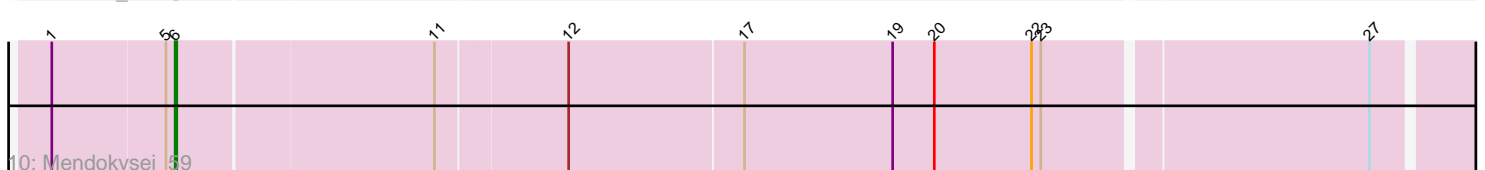
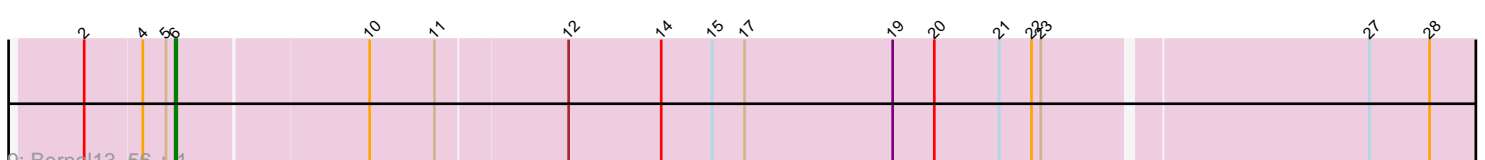
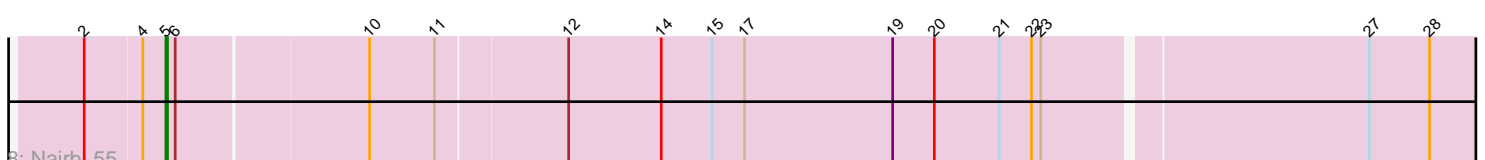
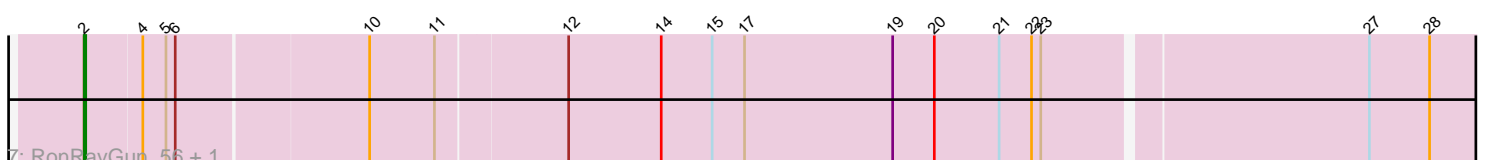
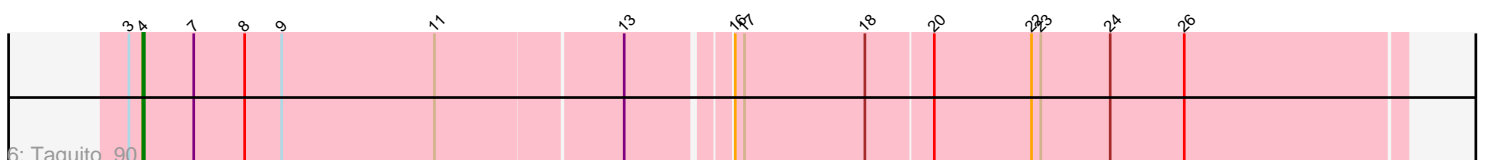
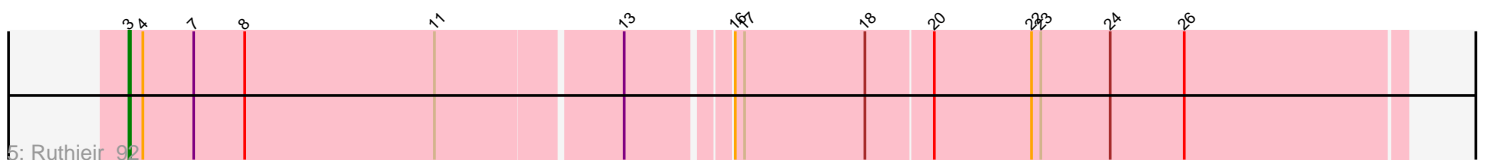
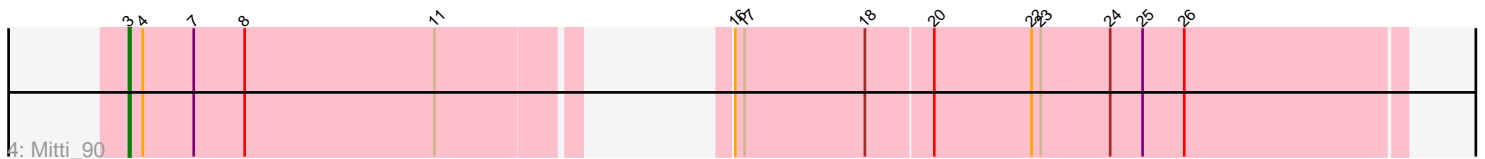
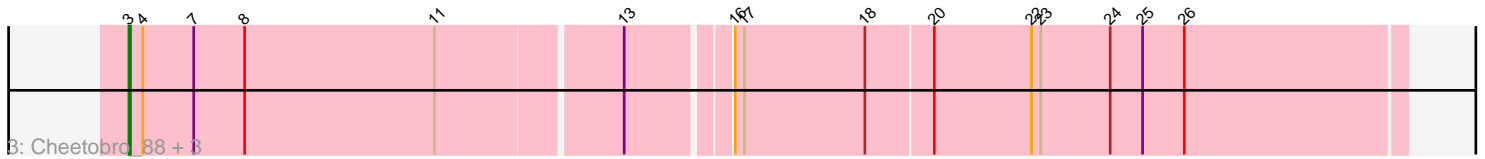
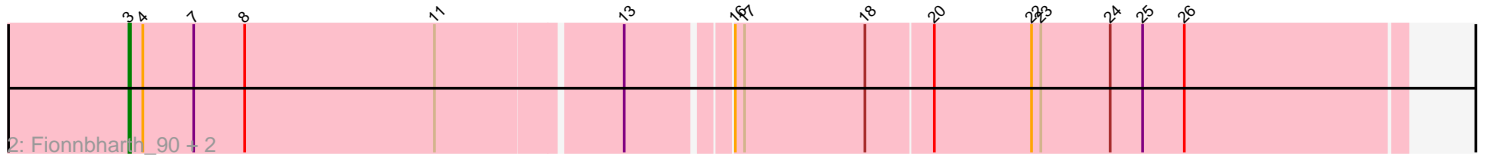
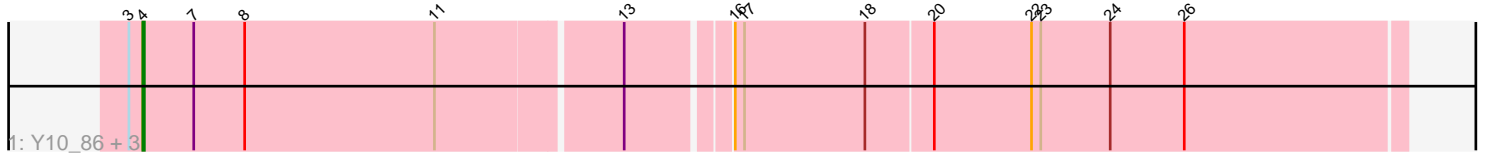


# Pham 196859



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 196859 Report

This analysis was run 12/09/24 on database version 580.

Pham number 196859 has 20 members, 0 are drafts.

Phages represented in each track:

- Track 1 : Y10\_86, JF1\_90, Y2\_86, OmniCritical\_90
- Track 2 : Fionnbharth\_90, Eponine\_92, Wintermute\_90
- Track 3 : Cheetobro\_88, SamScheppers\_89, Chancellor\_90, Slarp\_88
- Track 4 : Mitti\_90
- Track 5 : Ruthiejr\_92
- Track 6 : Taquito\_90
- Track 7 : RonRayGun\_56, Whitty\_55
- Track 8 : Nairb\_55
- Track 9 : Bernal13\_56, Ibrahim\_56
- Track 10 : Mendokysei\_59

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

The start number called the most often in the published annotations is 3, it was called in 9 of the 20 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Chancellor\_90, Cheetobro\_88, Eponine\_92, Fionnbharth\_90, Mitti\_90, Ruthiejr\_92, SamScheppers\_89, Slarp\_88, Wintermute\_90,

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

- JF1\_90, OmniCritical\_90, Taquito\_90, Y10\_86, Y2\_86,

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

- Bernal13\_56, Ibrahim\_56, Mendokysei\_59, Nairb\_55, RonRayGun\_56, Whitty\_55,

### **Summary by start number:**

Start 2:

- Found in 5 of 20 ( 25.0% ) of genes in pham
- Manual Annotations of this start: 2 of 20
- Called 40.0% of time when present
- Phage (with cluster) where this start called: RonRayGun\_56 (T), Whitty\_55 (T),

Start 3:

- Found in 14 of 20 ( 70.0% ) of genes in pham
- Manual Annotations of this start: 9 of 20
- Called 64.3% of time when present
- Phage (with cluster) where this start called: Chancellor\_90 (K4), Cheetobro\_88 (K4), Eponine\_92 (K4), Fionnbharth\_90 (K4), Mitti\_90 (K4), Ruthiejr\_92 (K4), SamScheppers\_89 (K4), Slarp\_88 (K4), Wintermute\_90 (K4),

Start 4:

- Found in 19 of 20 ( 95.0% ) of genes in pham
- Manual Annotations of this start: 5 of 20
- Called 26.3% of time when present
- Phage (with cluster) where this start called: JF1\_90 (K4), OmniCritical\_90 (K4), Taquito\_90 (K4), Y10\_86 (K4), Y2\_86 (K4),

Start 5:

- Found in 6 of 20 ( 30.0% ) of genes in pham
- Manual Annotations of this start: 1 of 20
- Called 16.7% of time when present
- Phage (with cluster) where this start called: Nairb\_55 (T),

Start 6:

- Found in 6 of 20 ( 30.0% ) of genes in pham
- Manual Annotations of this start: 3 of 20
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Bernal13\_56 (T), Ibrahim\_56 (T), Mendokysej\_59 (T),

**Summary by clusters:**

There are 2 clusters represented in this pham: T, K4,

Info for manual annotations of cluster K4:

- Start number 3 was manually annotated 9 times for cluster K4.
- Start number 4 was manually annotated 5 times for cluster K4.

Info for manual annotations of cluster T:

- Start number 2 was manually annotated 2 times for cluster T.
- Start number 5 was manually annotated 1 time for cluster T.
- Start number 6 was manually annotated 3 times for cluster T.

**Gene Information:**

Gene: Bernal13\_56 Start: 40310, Stop: 39471, Start Num: 6

Candidate Starts for Bernal13\_56:

(Start: 2 @40367 has 2 MA's), (Start: 4 @40331 has 5 MA's), (Start: 5 @40316 has 1 MA's), (Start: 6 @40310 has 3 MA's), (10, 40190), (11, 40148), (12, 40067), (14, 40007), (15, 39974), (17, 39953), (19, 39857), (20, 39830), (21, 39788), (22, 39767), (23, 39761), (27, 39560), (28, 39521),

Gene: Chancellor\_90 Start: 54032, Stop: 54832, Start Num: 3

Candidate Starts for Chancellor\_90:

(Start: 3 @54032 has 9 MA's), (Start: 4 @54041 has 5 MA's), (7, 54074), (8, 54107), (11, 54230), (13, 54344), (16, 54404), (17, 54410), (18, 54488), (20, 54530), (22, 54593), (23, 54599), (24, 54644), (25, 54665), (26, 54692),

Gene: Cheetobro\_88 Start: 53586, Stop: 54386, Start Num: 3

Candidate Starts for Cheetobro\_88:

(Start: 3 @53586 has 9 MA's), (Start: 4 @53595 has 5 MA's), (7, 53628), (8, 53661), (11, 53784), (13, 53898), (16, 53958), (17, 53964), (18, 54042), (20, 54084), (22, 54147), (23, 54153), (24, 54198), (25, 54219), (26, 54246),

Gene: Eponine\_92 Start: 55012, Stop: 55812, Start Num: 3

Candidate Starts for Eponine\_92:

(Start: 3 @55012 has 9 MA's), (Start: 4 @55021 has 5 MA's), (7, 55054), (8, 55087), (11, 55210), (13, 55324), (16, 55384), (17, 55390), (18, 55468), (20, 55510), (22, 55573), (23, 55579), (24, 55624), (25, 55645), (26, 55672),

Gene: Fionnbharth\_90 Start: 54410, Stop: 55210, Start Num: 3

Candidate Starts for Fionnbharth\_90:

(Start: 3 @54410 has 9 MA's), (Start: 4 @54419 has 5 MA's), (7, 54452), (8, 54485), (11, 54608), (13, 54722), (16, 54782), (17, 54788), (18, 54866), (20, 54908), (22, 54971), (23, 54977), (24, 55022), (25, 55043), (26, 55070),

Gene: Ibrahim\_56 Start: 40514, Stop: 39675, Start Num: 6

Candidate Starts for Ibrahim\_56:

(Start: 2 @40571 has 2 MA's), (Start: 4 @40535 has 5 MA's), (Start: 5 @40520 has 1 MA's), (Start: 6 @40514 has 3 MA's), (10, 40394), (11, 40352), (12, 40271), (14, 40211), (15, 40178), (17, 40157), (19, 40061), (20, 40034), (21, 39992), (22, 39971), (23, 39965), (27, 39764), (28, 39725),

Gene: JF1\_90 Start: 54343, Stop: 55134, Start Num: 4

Candidate Starts for JF1\_90:

(Start: 3 @54334 has 9 MA's), (Start: 4 @54343 has 5 MA's), (7, 54376), (8, 54409), (11, 54532), (13, 54646), (16, 54706), (17, 54712), (18, 54790), (20, 54832), (22, 54895), (23, 54901), (24, 54946), (26, 54994),

Gene: Mendokysei\_59 Start: 41092, Stop: 40265, Start Num: 6

Candidate Starts for Mendokysei\_59:

(1, 41170), (Start: 5 @41098 has 1 MA's), (Start: 6 @41092 has 3 MA's), (11, 40930), (12, 40849), (17, 40738), (19, 40642), (20, 40615), (22, 40552), (23, 40546), (27, 40345),

Gene: Mitti\_90 Start: 54306, Stop: 55028, Start Num: 3

Candidate Starts for Mitti\_90:

(Start: 3 @54306 has 9 MA's), (Start: 4 @54315 has 5 MA's), (7, 54348), (8, 54381), (11, 54504), (16, 54600), (17, 54606), (18, 54684), (20, 54726), (22, 54789), (23, 54795), (24, 54840), (25, 54861), (26, 54888),

Gene: Nairb\_55 Start: 40316, Stop: 39471, Start Num: 5

Candidate Starts for Nairb\_55:

(Start: 2 @40367 has 2 MA's), (Start: 4 @40331 has 5 MA's), (Start: 5 @40316 has 1 MA's), (Start: 6 @40310 has 3 MA's), (10, 40190), (11, 40148), (12, 40067), (14, 40007), (15, 39974), (17, 39953), (19, 39857), (20, 39830), (21, 39788), (22, 39767), (23, 39761), (27, 39560), (28, 39521),

Gene: OmniCritical\_90 Start: 54317, Stop: 55108, Start Num: 4

Candidate Starts for OmniCritical\_90:

(Start: 3 @54308 has 9 MA's), (Start: 4 @54317 has 5 MA's), (7, 54350), (8, 54383), (11, 54506), (13, 54620), (16, 54680), (17, 54686), (18, 54764), (20, 54806), (22, 54869), (23, 54875), (24, 54920), (26, 54968),

Gene: RonRayGun\_56 Start: 40571, Stop: 39675, Start Num: 2

Candidate Starts for RonRayGun\_56:

(Start: 2 @40571 has 2 MA's), (Start: 4 @40535 has 5 MA's), (Start: 5 @40520 has 1 MA's), (Start: 6 @40514 has 3 MA's), (10, 40394), (11, 40352), (12, 40271), (14, 40211), (15, 40178), (17, 40157), (19, 40061), (20, 40034), (21, 39992), (22, 39971), (23, 39965), (27, 39764), (28, 39725),

Gene: Ruthiejr\_92 Start: 54201, Stop: 55001, Start Num: 3

Candidate Starts for Ruthiejr\_92:

(Start: 3 @54201 has 9 MA's), (Start: 4 @54210 has 5 MA's), (7, 54243), (8, 54276), (11, 54399), (13, 54513), (16, 54573), (17, 54579), (18, 54657), (20, 54699), (22, 54762), (23, 54768), (24, 54813), (26, 54861),

Gene: SamScheppers\_89 Start: 54686, Stop: 55486, Start Num: 3

Candidate Starts for SamScheppers\_89:

(Start: 3 @54686 has 9 MA's), (Start: 4 @54695 has 5 MA's), (7, 54728), (8, 54761), (11, 54884), (13, 54998), (16, 55058), (17, 55064), (18, 55142), (20, 55184), (22, 55247), (23, 55253), (24, 55298), (25, 55319), (26, 55346),

Gene: Slarp\_88 Start: 53589, Stop: 54389, Start Num: 3

Candidate Starts for Slarp\_88:

(Start: 3 @53589 has 9 MA's), (Start: 4 @53598 has 5 MA's), (7, 53631), (8, 53664), (11, 53787), (13, 53901), (16, 53961), (17, 53967), (18, 54045), (20, 54087), (22, 54150), (23, 54156), (24, 54201), (25, 54222), (26, 54249),

Gene: Taquito\_90 Start: 54661, Stop: 55455, Start Num: 4

Candidate Starts for Taquito\_90:

(Start: 3 @54652 has 9 MA's), (Start: 4 @54661 has 5 MA's), (7, 54694), (8, 54727), (9, 54751), (11, 54850), (13, 54967), (16, 55027), (17, 55033), (18, 55111), (20, 55153), (22, 55216), (23, 55222), (24, 55267), (26, 55315),

Gene: Whitty\_55 Start: 40368, Stop: 39472, Start Num: 2

Candidate Starts for Whitty\_55:

(Start: 2 @40368 has 2 MA's), (Start: 4 @40332 has 5 MA's), (Start: 5 @40317 has 1 MA's), (Start: 6 @40311 has 3 MA's), (10, 40191), (11, 40149), (12, 40068), (14, 40008), (15, 39975), (17, 39954), (19, 39858), (20, 39831), (21, 39789), (22, 39768), (23, 39762), (27, 39561), (28, 39522),

Gene: Wintermute\_90 Start: 54390, Stop: 55190, Start Num: 3

Candidate Starts for Wintermute\_90:

(Start: 3 @54390 has 9 MA's), (Start: 4 @54399 has 5 MA's), (7, 54432), (8, 54465), (11, 54588), (13, 54702), (16, 54762), (17, 54768), (18, 54846), (20, 54888), (22, 54951), (23, 54957), (24, 55002), (25, 55023), (26, 55050),

Gene: Y10\_86 Start: 54343, Stop: 55134, Start Num: 4

Candidate Starts for Y10\_86:

(Start: 3 @54334 has 9 MA's), (Start: 4 @54343 has 5 MA's), (7, 54376), (8, 54409), (11, 54532), (13, 54646), (16, 54706), (17, 54712), (18, 54790), (20, 54832), (22, 54895), (23, 54901), (24, 54946), (26, 54994),

Gene: Y2\_86 Start: 54343, Stop: 55134, Start Num: 4

Candidate Starts for Y2\_86:

(Start: 3 @54334 has 9 MA's), (Start: 4 @54343 has 5 MA's), (7, 54376), (8, 54409), (11, 54532), (13, 54646), (16, 54706), (17, 54712), (18, 54790), (20, 54832), (22, 54895), (23, 54901), (24, 54946), (26, 54994),