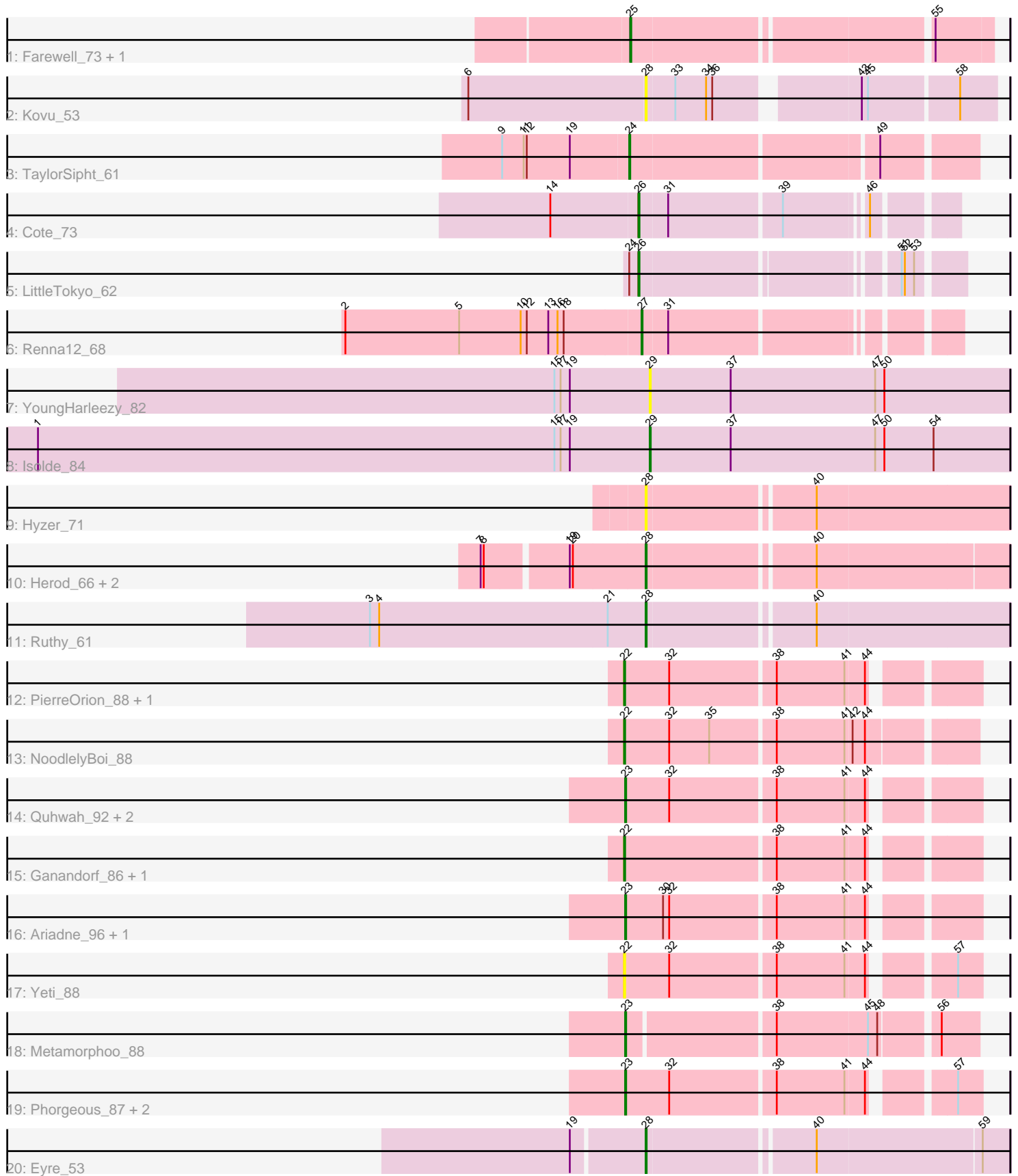


# Pham 86460



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 86460 Report

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

Pham number 86460 has 30 members, 6 are drafts.

Phages represented in each track:

- Track 1 : Farewell\_73, Sparky\_72
- Track 2 : Kovu\_53
- Track 3 : TaylorSipht\_61
- Track 4 : Cote\_73
- Track 5 : LittleTokyo\_62
- Track 6 : Renna12\_68
- Track 7 : YoungHarleezy\_82
- Track 8 : Isolde\_84
- Track 9 : Hyzer\_71
- Track 10 : Herod\_66, Bosnia\_63, Hugley\_64
- Track 11 : Ruthy\_61
- Track 12 : PierreOrion\_88, Phrancesco\_89
- Track 13 : NoodlelyBoi\_88
- Track 14 : Quhwah\_92, KaiHaiDragon\_89, EarickHC\_89
- Track 15 : Ganandorf\_86, Antares\_89
- Track 16 : Ariadne\_96, Smarties\_96
- Track 17 : Yeti\_88
- Track 18 : Metamorphoo\_88
- Track 19 : Phorgeous\_87, Honeyfin\_87, CrazyRich\_86
- Track 20 : Eyre\_53

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

The start number called the most often in the published annotations is 23, it was called in 9 of the 24 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Ariadne\_96, CrazyRich\_86, EarickHC\_89, Honeyfin\_87, KaiHaiDragon\_89, Metamorphoo\_88, Phorgeous\_87, Quhwah\_92, Smarties\_96,

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

- 

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

• Antares\_89, Bosnia\_63, Cote\_73, Eyre\_53, Farewell\_73, Ganandorf\_86, Herod\_66, Hugley\_64, Hyzer\_71, Isolde\_84, Kovu\_53, LittleTokyo\_62, NoodlelyBoi\_88, Phrancesco\_89, PierreOrion\_88, Renna12\_68, Ruthy\_61, Sparky\_72, TaylorSipht\_61, Yeti\_88, YoungHarleezy\_82,

### Summary by start number:

#### Start 22:

- Found in 6 of 30 ( 20.0% ) of genes in pham
- Manual Annotations of this start: 4 of 24
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Antares\_89 (EC), Ganandorf\_86 (EC), NoodlelyBoi\_88 (EC), Phrancesco\_89 (EC), PierreOrion\_88 (EC), Yeti\_88 (EC),

#### Start 23:

- Found in 9 of 30 ( 30.0% ) of genes in pham
- Manual Annotations of this start: 9 of 24
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ariadne\_96 (EC), CrazyRich\_86 (EC), EarickHC\_89 (EC), Honeyfin\_87 (EC), KaiHaiDragon\_89 (EC), Metamorphoo\_88 (EC), Phorgeous\_87 (EC), Quhwah\_92 (EC), Smarties\_96 (EC),

#### Start 24:

- Found in 2 of 30 ( 6.7% ) of genes in pham
- Manual Annotations of this start: 1 of 24
- Called 50.0% of time when present
- Phage (with cluster) where this start called: TaylorSipht\_61 (AS1),

#### Start 25:

- Found in 2 of 30 ( 6.7% ) of genes in pham
- Manual Annotations of this start: 2 of 24
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Farewell\_73 (AF), Sparky\_72 (AF),

#### Start 26:

- Found in 2 of 30 ( 6.7% ) of genes in pham
- Manual Annotations of this start: 2 of 24
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cote\_73 (AS2), LittleTokyo\_62 (AS2),

#### Start 27:

- Found in 1 of 30 ( 3.3% ) of genes in pham
- Manual Annotations of this start: 1 of 24
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Renna12\_68 (AS3),

#### Start 28:

- Found in 7 of 30 ( 23.3% ) of genes in pham
- Manual Annotations of this start: 4 of 24
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bosnia\_63 (CZ1), Eyre\_53 (singleton), Herod\_66 (CZ1), Hugley\_64 (CZ1), Hyzer\_71 (CZ1), Kovu\_53 (AL), Ruthy\_61 (DW),

Start 29:

- Found in 2 of 30 ( 6.7% ) of genes in pham
- Manual Annotations of this start: 1 of 24
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Isolde\_84 (AY), YoungHarleezy\_82 (AY),

### **Summary by clusters:**

There are 10 clusters represented in this pham: AS3, AS2, AS1, AF, CZ1, singleton, EC, AL, AY, DW,

Info for manual annotations of cluster AF:

- Start number 25 was manually annotated 2 times for cluster AF.

Info for manual annotations of cluster AS1:

- Start number 24 was manually annotated 1 time for cluster AS1.

Info for manual annotations of cluster AS2:

- Start number 26 was manually annotated 2 times for cluster AS2.

Info for manual annotations of cluster AS3:

- Start number 27 was manually annotated 1 time for cluster AS3.

Info for manual annotations of cluster AY:

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

Info for manual annotations of cluster CZ1:

- Start number 28 was manually annotated 2 times for cluster CZ1.

Info for manual annotations of cluster DW:

- Start number 28 was manually annotated 1 time for cluster DW.

Info for manual annotations of cluster EC:

- Start number 22 was manually annotated 4 times for cluster EC.
- Start number 23 was manually annotated 9 times for cluster EC.

### **Gene Information:**

Gene: Antares\_89 Start: 52402, Stop: 52716, Start Num: 22

Candidate Starts for Antares\_89:

(Start: 22 @52402 has 4 MA's), (38, 52543), (41, 52609), (44, 52627),

Gene: Ariadne\_96 Start: 52784, Stop: 53098, Start Num: 23

Candidate Starts for Ariadne\_96:

(Start: 23 @52784 has 9 MA's), (30, 52820), (32, 52826), (38, 52925), (41, 52991), (44, 53009),

Gene: Bosnia\_63 Start: 44870, Stop: 45205, Start Num: 28

Candidate Starts for Bosnia\_63:

(7, 44720), (8, 44723), (19, 44798), (20, 44801), (Start: 28 @44870 has 4 MA's), (40, 45023),

Gene: Cote\_73 Start: 37990, Stop: 38265, Start Num: 26

Candidate Starts for Cote\_73:

(14, 37906), (Start: 26 @37990 has 2 MA's), (31, 38017), (39, 38122), (46, 38194),

Gene: CrazyRich\_86 Start: 51658, Stop: 51972, Start Num: 23

Candidate Starts for CrazyRich\_86:

(Start: 23 @51658 has 9 MA's), (32, 51700), (38, 51799), (41, 51865), (44, 51883), (57, 51949),

Gene: EarickHC\_89 Start: 52032, Stop: 52346, Start Num: 23

Candidate Starts for EarickHC\_89:

(Start: 23 @52032 has 9 MA's), (32, 52074), (38, 52173), (41, 52239), (44, 52257),

Gene: Eyre\_53 Start: 35776, Stop: 36111, Start Num: 28

Candidate Starts for Eyre\_53:

(19, 35710), (Start: 28 @35776 has 4 MA's), (40, 35929), (59, 36085),

Gene: Farewell\_73 Start: 49038, Stop: 49364, Start Num: 25

Candidate Starts for Farewell\_73:

(Start: 25 @49038 has 2 MA's), (55, 49311),

Gene: Ganandorf\_86 Start: 51533, Stop: 51847, Start Num: 22

Candidate Starts for Ganandorf\_86:

(Start: 22 @51533 has 4 MA's), (38, 51674), (41, 51740), (44, 51758),

Gene: Herod\_66 Start: 45224, Stop: 45559, Start Num: 28

Candidate Starts for Herod\_66:

(7, 45074), (8, 45077), (19, 45152), (20, 45155), (Start: 28 @45224 has 4 MA's), (40, 45377),

Gene: Honeyfin\_87 Start: 51488, Stop: 51802, Start Num: 23

Candidate Starts for Honeyfin\_87:

(Start: 23 @51488 has 9 MA's), (32, 51530), (38, 51629), (41, 51695), (44, 51713), (57, 51779),

Gene: Hugley\_64 Start: 45204, Stop: 45539, Start Num: 28

Candidate Starts for Hugley\_64:

(7, 45054), (8, 45057), (19, 45132), (20, 45135), (Start: 28 @45204 has 4 MA's), (40, 45357),

Gene: Hyzer\_71 Start: 46977, Stop: 47315, Start Num: 28

Candidate Starts for Hyzer\_71:

(Start: 28 @46977 has 4 MA's), (40, 47130),

Gene: Isolde\_84 Start: 48274, Stop: 48624, Start Num: 29

Candidate Starts for Isolde\_84:

(1, 47677), (15, 48181), (17, 48187), (19, 48196), (Start: 29 @48274 has 1 MA's), (37, 48352), (47, 48493), (50, 48502), (54, 48550),

Gene: KaiHaiDragon\_89 Start: 52032, Stop: 52346, Start Num: 23

Candidate Starts for KaiHaiDragon\_89:

(Start: 23 @52032 has 9 MA's), (32, 52074), (38, 52173), (41, 52239), (44, 52257),

Gene: Kovu\_53 Start: 29765, Stop: 30076, Start Num: 28

Candidate Starts for Kovu\_53:

(6, 29594), (Start: 28 @29765 has 4 MA's), (33, 29792), (34, 29822), (36, 29828), (43, 29951), (45, 29957), (58, 30041),

Gene: LittleTokyo\_62 Start: 35151, Stop: 35429, Start Num: 26

Candidate Starts for LittleTokyo\_62:

(Start: 24 @35142 has 1 MA's), (Start: 26 @35151 has 2 MA's), (51, 35376), (52, 35379), (53, 35388),

Gene: Metamorphoo\_88 Start: 52513, Stop: 52830, Start Num: 23

Candidate Starts for Metamorphoo\_88:

(Start: 23 @52513 has 9 MA's), (38, 52648), (45, 52735), (48, 52744), (56, 52795),

Gene: NoodlelyBoi\_88 Start: 52313, Stop: 52636, Start Num: 22

Candidate Starts for NoodlelyBoi\_88:

(Start: 22 @52313 has 4 MA's), (32, 52355), (35, 52394), (38, 52454), (41, 52520), (42, 52526), (44, 52538),

Gene: Phorgeous\_87 Start: 51529, Stop: 51843, Start Num: 23

Candidate Starts for Phorgeous\_87:

(Start: 23 @51529 has 9 MA's), (32, 51571), (38, 51670), (41, 51736), (44, 51754), (57, 51820),

Gene: Phrancesco\_89 Start: 52295, Stop: 52609, Start Num: 22

Candidate Starts for Phrancesco\_89:

(Start: 22 @52295 has 4 MA's), (32, 52337), (38, 52436), (41, 52502), (44, 52520),

Gene: PierreOrion\_88 Start: 52004, Stop: 52318, Start Num: 22

Candidate Starts for PierreOrion\_88:

(Start: 22 @52004 has 4 MA's), (32, 52046), (38, 52145), (41, 52211), (44, 52229),

Gene: Quhwah\_92 Start: 52589, Stop: 52903, Start Num: 23

Candidate Starts for Quhwah\_92:

(Start: 23 @52589 has 9 MA's), (32, 52631), (38, 52730), (41, 52796), (44, 52814),

Gene: Renna12\_68 Start: 37756, Stop: 38031, Start Num: 27

Candidate Starts for Renna12\_68:

(2, 37471), (5, 37582), (10, 37642), (12, 37648), (13, 37669), (16, 37678), (18, 37684), (Start: 27 @37756 has 1 MA's), (31, 37780),

Gene: Ruthy\_61 Start: 43412, Stop: 43750, Start Num: 28

Candidate Starts for Ruthy\_61:

(3, 43145), (4, 43154), (21, 43376), (Start: 28 @43412 has 4 MA's), (40, 43565),

Gene: Smarties\_96 Start: 52781, Stop: 53095, Start Num: 23

Candidate Starts for Smarties\_96:

(Start: 23 @52781 has 9 MA's), (30, 52817), (32, 52823), (38, 52922), (41, 52988), (44, 53006),

Gene: Sparky\_72 Start: 50632, Stop: 50958, Start Num: 25

Candidate Starts for Sparky\_72:

(Start: 25 @50632 has 2 MA's), (55, 50905),

Gene: TaylorSipht\_61 Start: 37405, Stop: 37719, Start Num: 24

Candidate Starts for TaylorSipht\_61:

(9, 37285), (11, 37306), (12, 37309), (19, 37351), (Start: 24 @37405 has 1 MA's), (49, 37633),

Gene: Yeti\_88 Start: 51725, Stop: 52039, Start Num: 22

Candidate Starts for Yeti\_88:

(Start: 22 @51725 has 4 MA's), (32, 51767), (38, 51866), (41, 51932), (44, 51950), (57, 52016),

Gene: YoungHarleezy\_82 Start: 47912, Stop: 48262, Start Num: 29

Candidate Starts for YoungHarleezy\_82:

(15, 47819), (17, 47825), (19, 47834), (Start: 29 @47912 has 1 MA's), (37, 47990), (47, 48131), (50, 48140),