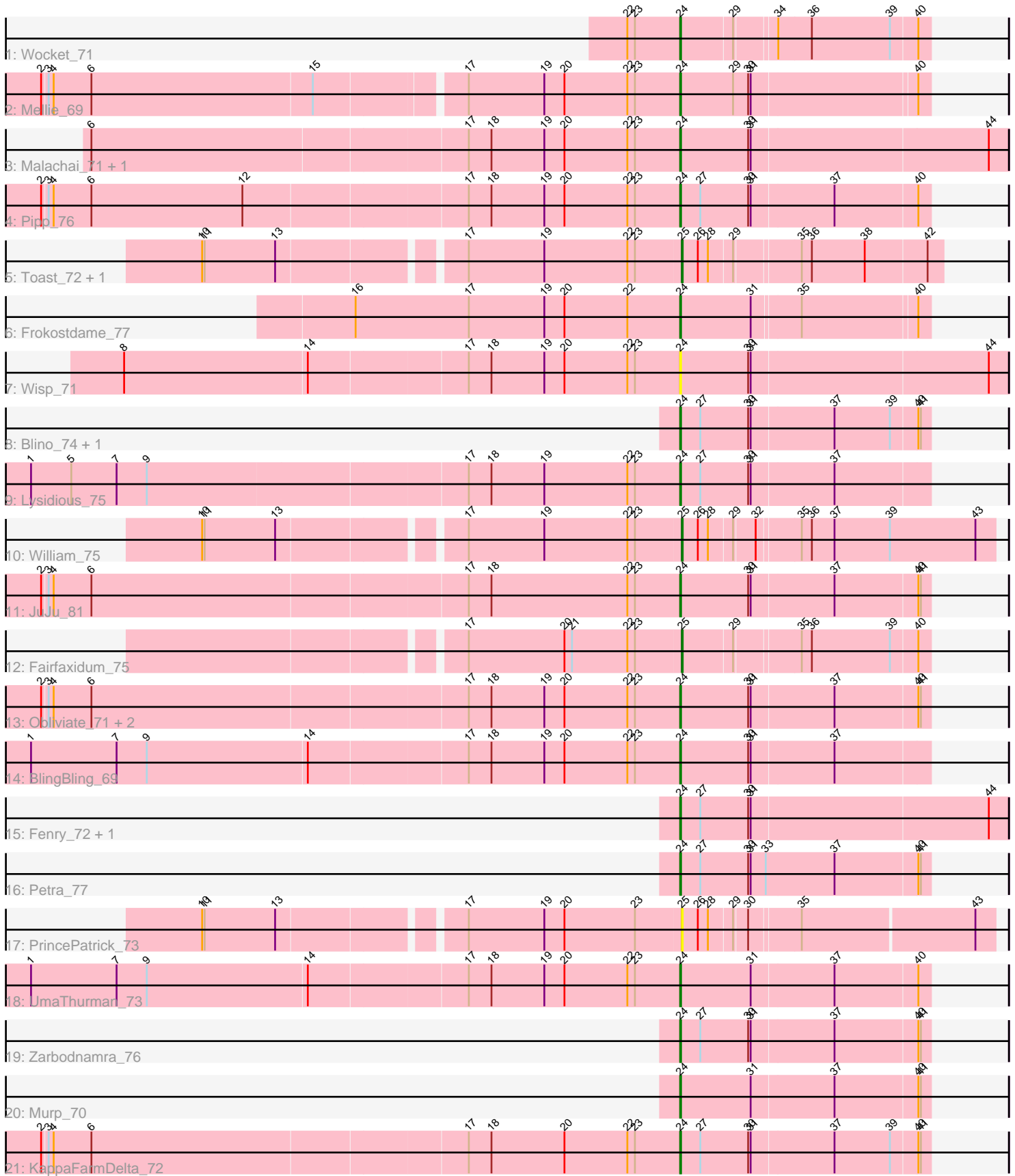


Pham 158120



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 158120 Report

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

Pham number 158120 has 27 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Wocket\_71
- Track 2 : Mellie\_69
- Track 3 : Malachai\_71, Begonia\_71
- Track 4 : Pipp\_76
- Track 5 : Toast\_72, PCoral7\_72
- Track 6 : Frokostdame\_77
- Track 7 : Wisp\_71
- Track 8 : Blino\_74, CarolAnn\_73
- Track 9 : Lysidious\_75
- Track 10 : William\_75
- Track 11 : JuJu\_81
- Track 12 : Fairfaxidum\_75
- Track 13 : Obliviate\_71, Archis\_74, ZiggyZoo\_73
- Track 14 : BlingBling\_69
- Track 15 : Fenry\_72, Samba\_73
- Track 16 : Petra\_77
- Track 17 : PrincePatrick\_73
- Track 18 : UmaThurman\_73
- Track 19 : Zarbodnamra\_76
- Track 20 : Murp\_70
- Track 21 : KappaFarmDelta\_72

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

The start number called the most often in the published annotations is 24, it was called in 21 of the 25 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Archis\_74, Begonia\_71, BlingBling\_69, Blino\_74, CarolAnn\_73, Fenry\_72, Frokostdame\_77, JuJu\_81, KappaFarmDelta\_72, Lysidious\_75, Malachai\_71, Mellie\_69, Murp\_70, Obliviate\_71, Petra\_77, Pipp\_76, Samba\_73, UmaThurman\_73, Wisp\_71, Wocket\_71, Zarbodnamra\_76, ZiggyZoo\_73,

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

- 

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

- Fairfaxidum\_75, PCoral7\_72, PrincePatrick\_73, Toast\_72, William\_75,

### Summary by start number:

Start 24:

- Found in 22 of 27 ( 81.5% ) of genes in pham
- Manual Annotations of this start: 21 of 25
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Archis\_74 (CV), Begonia\_71 (CV), BlingBling\_69 (CV), Blino\_74 (CV), CarolAnn\_73 (CV), Fenry\_72 (CV), Frokostdame\_77 (CV), JuJu\_81 (CV), KappaFarmDelta\_72 (CV), Lysidious\_75 (CV), Malachai\_71 (CV), Mellie\_69 (CV), Murp\_70 (CV), Obliviate\_71 (CV), Petra\_77 (CV), Pipp\_76 (CV), Samba\_73 (CV), UmaThurman\_73 (CV), Wisp\_71 (CV), Wocket\_71 (CV), Zarbodnamra\_76 (CV), ZiggyZoo\_73 (CV),

Start 25:

- Found in 5 of 27 ( 18.5% ) of genes in pham
- Manual Annotations of this start: 4 of 25
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Fairfaxidum\_75 (CV), PCoral7\_72 (CV), PrincePatrick\_73 (CV), Toast\_72 (CV), William\_75 (CV),

### Summary by clusters:

There is one cluster represented in this pham: CV

Info for manual annotations of cluster CV:

- Start number 24 was manually annotated 21 times for cluster CV.
- Start number 25 was manually annotated 4 times for cluster CV.

### Gene Information:

Gene: Archis\_74 Start: 44249, Stop: 44539, Start Num: 24

Candidate Starts for Archis\_74:

(2, 43502), (3, 43508), (4, 43514), (6, 43559), (17, 43997), (18, 44024), (19, 44087), (20, 44111), (22, 44186), (23, 44195), (Start: 24 @44249 has 21 MA's), (30, 44330), (31, 44333), (37, 44429), (40, 44525), (41, 44528),

Gene: Begonia\_71 Start: 47012, Stop: 47395, Start Num: 24

Candidate Starts for Begonia\_71:

(6, 46322), (17, 46760), (18, 46787), (19, 46850), (20, 46874), (22, 46949), (23, 46958), (Start: 24 @47012 has 21 MA's), (30, 47093), (31, 47096), (44, 47372),

Gene: BlingBling\_69 Start: 45058, Stop: 45348, Start Num: 24

Candidate Starts for BlingBling\_69:

(1, 44296), (7, 44398), (9, 44434), (14, 44623), (17, 44806), (18, 44833), (19, 44896), (20, 44920), (22, 44995), (23, 45004), (Start: 24 @45058 has 21 MA's), (30, 45139), (31, 45142), (37, 45238),

Gene: Blino\_74 Start: 49739, Stop: 50029, Start Num: 24

Candidate Starts for Blino\_74:

(Start: 24 @49739 has 21 MA's), (27, 49763), (30, 49820), (31, 49823), (37, 49919), (39, 49985), (40, 50015), (41, 50018),

Gene: CarolAnn\_73 Start: 49738, Stop: 50028, Start Num: 24

Candidate Starts for CarolAnn\_73:

(Start: 24 @49738 has 21 MA's), (27, 49762), (30, 49819), (31, 49822), (37, 49918), (39, 49984), (40, 50014), (41, 50017),

Gene: Fairfaxidum\_75 Start: 46200, Stop: 46478, Start Num: 25

Candidate Starts for Fairfaxidum\_75:

(17, 45948), (20, 46062), (21, 46071), (22, 46137), (23, 46146), (Start: 25 @46200 has 4 MA's), (29, 46257), (35, 46329), (36, 46341), (39, 46434), (40, 46464),

Gene: Fenry\_72 Start: 45849, Stop: 46232, Start Num: 24

Candidate Starts for Fenry\_72:

(Start: 24 @45849 has 21 MA's), (27, 45873), (30, 45930), (31, 45933), (44, 46209),

Gene: Frokostdame\_77 Start: 48052, Stop: 48336, Start Num: 24

Candidate Starts for Frokostdame\_77:

(16, 47665), (17, 47800), (19, 47890), (20, 47914), (22, 47989), (Start: 24 @48052 has 21 MA's), (31, 48136), (35, 48190), (40, 48322),

Gene: JuJu\_81 Start: 49884, Stop: 50174, Start Num: 24

Candidate Starts for JuJu\_81:

(2, 49137), (3, 49143), (4, 49149), (6, 49194), (17, 49632), (18, 49659), (22, 49821), (23, 49830), (Start: 24 @49884 has 21 MA's), (30, 49965), (31, 49968), (37, 50064), (40, 50160), (41, 50163),

Gene: KappaFarmDelta\_72 Start: 44721, Stop: 45011, Start Num: 24

Candidate Starts for KappaFarmDelta\_72:

(2, 43974), (3, 43980), (4, 43986), (6, 44031), (17, 44469), (18, 44496), (20, 44583), (22, 44658), (23, 44667), (Start: 24 @44721 has 21 MA's), (27, 44745), (30, 44802), (31, 44805), (37, 44901), (39, 44967), (40, 44997), (41, 45000),

Gene: Lysidious\_75 Start: 46689, Stop: 46979, Start Num: 24

Candidate Starts for Lysidious\_75:

(1, 45927), (5, 45975), (7, 46029), (9, 46065), (17, 46437), (18, 46464), (19, 46527), (22, 46626), (23, 46635), (Start: 24 @46689 has 21 MA's), (27, 46713), (30, 46770), (31, 46773), (37, 46869),

Gene: Malachai\_71 Start: 47012, Stop: 47395, Start Num: 24

Candidate Starts for Malachai\_71:

(6, 46322), (17, 46760), (18, 46787), (19, 46850), (20, 46874), (22, 46949), (23, 46958), (Start: 24 @47012 has 21 MA's), (30, 47093), (31, 47096), (44, 47372),

Gene: Mellie\_69 Start: 43931, Stop: 44218, Start Num: 24

Candidate Starts for Mellie\_69:

(2, 43196), (3, 43202), (4, 43208), (6, 43253), (15, 43514), (17, 43679), (19, 43769), (20, 43793), (22, 43868), (23, 43877), (Start: 24 @43931 has 21 MA's), (29, 43994), (30, 44012), (31, 44015), (40, 44204),

Gene: Murp\_70 Start: 47087, Stop: 47377, Start Num: 24

Candidate Starts for Murp\_70:

(Start: 24 @47087 has 21 MA's), (31, 47171), (37, 47267), (40, 47363), (41, 47366),

Gene: Obliviate\_71 Start: 44250, Stop: 44540, Start Num: 24

Candidate Starts for Obliviate\_71:

(2, 43503), (3, 43509), (4, 43515), (6, 43560), (17, 43998), (18, 44025), (19, 44088), (20, 44112), (22, 44187), (23, 44196), (Start: 24 @44250 has 21 MA's), (30, 44331), (31, 44334), (37, 44430), (40, 44526), (41, 44529),

Gene: PCoral7\_72 Start: 44973, Stop: 45266, Start Num: 25

Candidate Starts for PCoral7\_72:

(10, 44433), (11, 44436), (13, 44520), (17, 44721), (19, 44811), (22, 44910), (23, 44919), (Start: 25 @44973 has 4 MA's), (26, 44991), (28, 45003), (29, 45030), (35, 45102), (36, 45114), (38, 45177), (42, 45249),

Gene: Petra\_77 Start: 46403, Stop: 46696, Start Num: 24

Candidate Starts for Petra\_77:

(Start: 24 @46403 has 21 MA's), (27, 46427), (30, 46484), (31, 46487), (33, 46505), (37, 46586), (40, 46682), (41, 46685),

Gene: Pipp\_76 Start: 46298, Stop: 46588, Start Num: 24

Candidate Starts for Pipp\_76:

(2, 45551), (3, 45557), (4, 45563), (6, 45608), (12, 45788), (17, 46046), (18, 46073), (19, 46136), (20, 46160), (22, 46235), (23, 46244), (Start: 24 @46298 has 21 MA's), (27, 46322), (30, 46379), (31, 46382), (37, 46478), (40, 46574),

Gene: PrincePatrick\_73 Start: 44032, Stop: 44385, Start Num: 25

Candidate Starts for PrincePatrick\_73:

(10, 43492), (11, 43495), (13, 43579), (17, 43780), (19, 43870), (20, 43894), (23, 43978), (Start: 25 @44032 has 4 MA's), (26, 44050), (28, 44062), (29, 44089), (30, 44104), (35, 44161), (43, 44362),

Gene: Samba\_73 Start: 47177, Stop: 47560, Start Num: 24

Candidate Starts for Samba\_73:

(Start: 24 @47177 has 21 MA's), (27, 47201), (30, 47258), (31, 47261), (44, 47537),

Gene: Toast\_72 Start: 44973, Stop: 45266, Start Num: 25

Candidate Starts for Toast\_72:

(10, 44433), (11, 44436), (13, 44520), (17, 44721), (19, 44811), (22, 44910), (23, 44919), (Start: 25 @44973 has 4 MA's), (26, 44991), (28, 45003), (29, 45030), (35, 45102), (36, 45114), (38, 45177), (42, 45249),

Gene: UmaThurman\_73 Start: 45529, Stop: 45819, Start Num: 24

Candidate Starts for UmaThurman\_73:

(1, 44767), (7, 44869), (9, 44905), (14, 45094), (17, 45277), (18, 45304), (19, 45367), (20, 45391), (22, 45466), (23, 45475), (Start: 24 @45529 has 21 MA's), (31, 45613), (37, 45709), (40, 45805),

Gene: William\_75 Start: 46380, Stop: 46739, Start Num: 25

Candidate Starts for William\_75:

(10, 45840), (11, 45843), (13, 45927), (17, 46128), (19, 46218), (22, 46317), (23, 46326), (Start: 25 @46380 has 4 MA's), (26, 46398), (28, 46410), (29, 46437), (32, 46461), (35, 46509), (36, 46521), (37, 46548), (39, 46614), (43, 46716),

Gene: Wisp\_71 Start: 44861, Stop: 45244, Start Num: 24

Candidate Starts for Wisp\_71:

(8, 44210), (14, 44426), (17, 44609), (18, 44636), (19, 44699), (20, 44723), (22, 44798), (23, 44807),  
(Start: 24 @44861 has 21 MA's), (30, 44942), (31, 44945), (44, 45221),

Gene: Wocket\_71 Start: 45215, Stop: 45496, Start Num: 24

Candidate Starts for Wocket\_71:

(22, 45152), (23, 45161), (Start: 24 @45215 has 21 MA's), (29, 45275), (34, 45320), (36, 45359), (39,  
45452), (40, 45482),

Gene: Zarbodnamra\_76 Start: 45341, Stop: 45631, Start Num: 24

Candidate Starts for Zarbodnamra\_76:

(Start: 24 @45341 has 21 MA's), (27, 45365), (30, 45422), (31, 45425), (37, 45521), (40, 45617), (41,  
45620),

Gene: ZiggyZoo\_73 Start: 46713, Stop: 47003, Start Num: 24

Candidate Starts for ZiggyZoo\_73:

(2, 45966), (3, 45972), (4, 45978), (6, 46023), (17, 46461), (18, 46488), (19, 46551), (20, 46575), (22,  
46650), (23, 46659), (Start: 24 @46713 has 21 MA's), (30, 46794), (31, 46797), (37, 46893), (40,  
46989), (41, 46992),