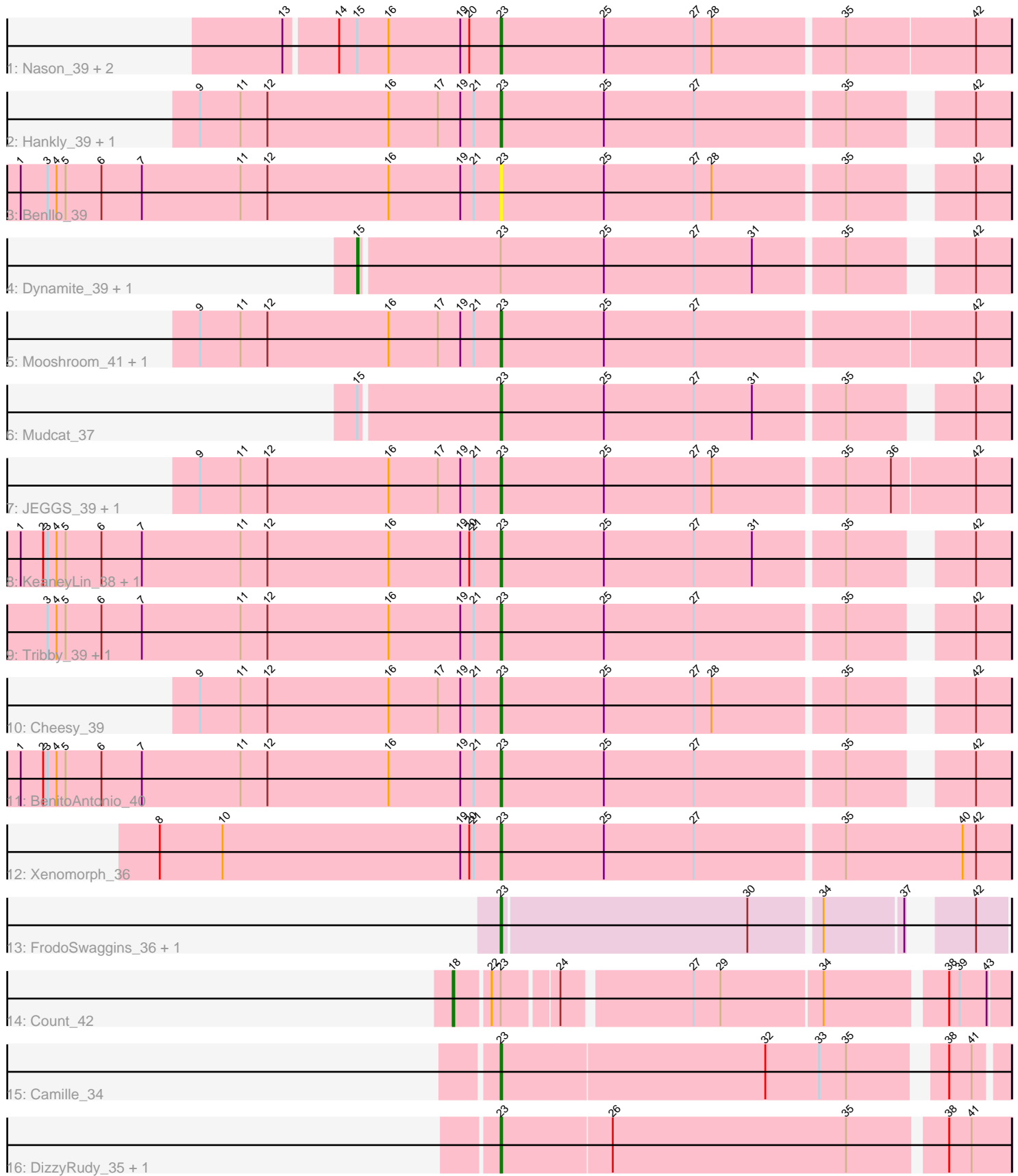


# Pham 81304



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 81304 Report

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

Pham number 81304 has 26 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Nason\_39, Elsa\_39, Arcadia\_39
- Track 2 : Hankly\_39, Circum\_41
- Track 3 : Benllo\_39
- Track 4 : Dynamite\_39, NapoleonB\_39
- Track 5 : Mooshroom\_41, Kardesai\_41
- Track 6 : Mudcat\_37
- Track 7 : JEGGS\_39, Heisenberger\_39
- Track 8 : KeaneyLin\_38, GoCrazy\_38
- Track 9 : Tribby\_39, Correa\_37
- Track 10 : Cheesy\_39
- Track 11 : BenitoAntonio\_40
- Track 12 : Xenomorph\_36
- Track 13 : FrodoSwaggins\_36, Popy\_36
- Track 14 : Count\_42
- Track 15 : Camille\_34
- Track 16 : DizzyRudy\_35, Damascus\_34

### ***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 21 of the 24 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Arcadia\_39, BenitoAntonio\_40, Benllo\_39, Camille\_34, Cheesy\_39, Circum\_41, Correa\_37, Damascus\_34, DizzyRudy\_35, Elsa\_39, FrodoSwaggins\_36, GoCrazy\_38, Hankly\_39, Heisenberger\_39, JEGGS\_39, Kardesai\_41, KeaneyLin\_38, Mooshroom\_41, Mudcat\_37, Nason\_39, Popy\_36, Tribby\_39, Xenomorph\_36,

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

- Count\_42, Dynamite\_39, NapoleonB\_39,

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

-

## Summary by start number:

Start 15:

- Found in 6 of 26 ( 23.1% ) of genes in pham
- Manual Annotations of this start: 2 of 24
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Dynamite\_39 (AM), NapoleonB\_39 (AM),

Start 18:

- Found in 1 of 26 ( 3.8% ) 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: Count\_42 (EL),

Start 23:

- Found in 26 of 26 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 21 of 24
- Called 88.5% of time when present
- Phage (with cluster) where this start called: Arcadia\_39 (AM), BenitoAntonio\_40 (AM), Benllo\_39 (AM), Camille\_34 (EL), Cheesy\_39 (AM), Circum\_41 (AM), Correa\_37 (AM), Damascus\_34 (EL), DizzyRudy\_35 (EL), Elsa\_39 (AM), FrodoSwaggins\_36 (BI1), GoCrazy\_38 (AM), Hankly\_39 (AM), Heisenberger\_39 (AM), JEGGS\_39 (AM), Kardesai\_41 (AM), KeaneyLin\_38 (AM), Mooshroom\_41 (AM), Mudcat\_37 (AM), Nason\_39 (AM), Popy\_36 (BI1), Tribby\_39 (AM), Xenomorph\_36 (AM),

## Summary by clusters:

There are 3 clusters represented in this pham: EL, AM, BI1,

Info for manual annotations of cluster AM:

- Start number 15 was manually annotated 2 times for cluster AM.
- Start number 23 was manually annotated 16 times for cluster AM.

Info for manual annotations of cluster BI1:

- Start number 23 was manually annotated 2 times for cluster BI1.

Info for manual annotations of cluster EL:

- Start number 18 was manually annotated 1 time for cluster EL.
- Start number 23 was manually annotated 3 times for cluster EL.

## Gene Information:

Gene: Arcadia\_39 Start: 28602, Stop: 28934, Start Num: 23

Candidate Starts for Arcadia\_39:

(13, 28461), (14, 28494), (Start: 15 @28506 has 2 MA's), (16, 28527), (19, 28575), (20, 28581), (Start: 23 @28602 has 21 MA's), (25, 28671), (27, 28731), (28, 28743), (35, 28827), (42, 28911),

Gene: BenitoAntonio\_40 Start: 28407, Stop: 28721, Start Num: 23

Candidate Starts for BenitoAntonio\_40:

(1, 28086), (2, 28101), (3, 28104), (4, 28110), (5, 28116), (6, 28140), (7, 28167), (11, 28233), (12, 28251), (16, 28332), (19, 28380), (21, 28389), (Start: 23 @28407 has 21 MA's), (25, 28476), (27, 28536), (35, 28632), (42, 28698),

Gene: Benllo\_39 Start: 29085, Stop: 29399, Start Num: 23

Candidate Starts for Benllo\_39:

(1, 28764), (3, 28782), (4, 28788), (5, 28794), (6, 28818), (7, 28845), (11, 28911), (12, 28929), (16, 29010), (19, 29058), (21, 29067), (Start: 23 @29085 has 21 MA's), (25, 29154), (27, 29214), (28, 29226), (35, 29310), (42, 29376),

Gene: Camille\_34 Start: 25326, Stop: 25643, Start Num: 23

Candidate Starts for Camille\_34:

(Start: 23 @25326 has 21 MA's), (32, 25500), (33, 25536), (35, 25554), (38, 25608), (41, 25623),

Gene: Cheesy\_39 Start: 28256, Stop: 28570, Start Num: 23

Candidate Starts for Cheesy\_39:

(9, 28055), (11, 28082), (12, 28100), (16, 28181), (17, 28214), (19, 28229), (21, 28238), (Start: 23 @28256 has 21 MA's), (25, 28325), (27, 28385), (28, 28397), (35, 28481), (42, 28547),

Gene: Circum\_41 Start: 28916, Stop: 29230, Start Num: 23

Candidate Starts for Circum\_41:

(9, 28715), (11, 28742), (12, 28760), (16, 28841), (17, 28874), (19, 28889), (21, 28898), (Start: 23 @28916 has 21 MA's), (25, 28985), (27, 29045), (35, 29141), (42, 29207),

Gene: Correa\_37 Start: 27444, Stop: 27758, Start Num: 23

Candidate Starts for Correa\_37:

(3, 27141), (4, 27147), (5, 27153), (6, 27177), (7, 27204), (11, 27270), (12, 27288), (16, 27369), (19, 27417), (21, 27426), (Start: 23 @27444 has 21 MA's), (25, 27513), (27, 27573), (35, 27669), (42, 27735),

Gene: Count\_42 Start: 33292, Stop: 33627, Start Num: 18

Candidate Starts for Count\_42:

(Start: 18 @33292 has 1 MA's), (22, 33313), (Start: 23 @33319 has 21 MA's), (24, 33352), (27, 33433), (29, 33451), (34, 33517), (38, 33589), (39, 33595), (43, 33613),

Gene: Damascus\_34 Start: 26234, Stop: 26563, Start Num: 23

Candidate Starts for Damascus\_34:

(Start: 23 @26234 has 21 MA's), (26, 26306), (35, 26462), (38, 26522), (41, 26537),

Gene: DizzyRudy\_35 Start: 26150, Stop: 26479, Start Num: 23

Candidate Starts for DizzyRudy\_35:

(Start: 23 @26150 has 21 MA's), (26, 26222), (35, 26378), (38, 26438), (41, 26453),

Gene: Dynamite\_39 Start: 28382, Stop: 28786, Start Num: 15

Candidate Starts for Dynamite\_39:

(Start: 15 @28382 has 2 MA's), (Start: 23 @28472 has 21 MA's), (25, 28541), (27, 28601), (31, 28640), (35, 28697), (42, 28763),

Gene: Elsa\_39 Start: 28602, Stop: 28934, Start Num: 23

Candidate Starts for Elsa\_39:

(13, 28461), (14, 28494), (Start: 15 @28506 has 2 MA's), (16, 28527), (19, 28575), (20, 28581), (Start: 23 @28602 has 21 MA's), (25, 28671), (27, 28731), (28, 28743), (35, 28827), (42, 28911),

Gene: FrodoSwaggins\_36 Start: 28306, Stop: 28611, Start Num: 23

Candidate Starts for FrodoSwaggins\_36:

(Start: 23 @28306 has 21 MA's), (30, 28468), (34, 28513), (37, 28564), (42, 28591),

Gene: GoCrazy\_38 Start: 28394, Stop: 28708, Start Num: 23

Candidate Starts for GoCrazy\_38:

(1, 28073), (2, 28088), (3, 28091), (4, 28097), (5, 28103), (6, 28127), (7, 28154), (11, 28220), (12, 28238), (16, 28319), (19, 28367), (20, 28373), (21, 28376), (Start: 23 @28394 has 21 MA's), (25, 28463), (27, 28523), (31, 28562), (35, 28619), (42, 28685),

Gene: Hankly\_39 Start: 27939, Stop: 28253, Start Num: 23

Candidate Starts for Hankly\_39:

(9, 27738), (11, 27765), (12, 27783), (16, 27864), (17, 27897), (19, 27912), (21, 27921), (Start: 23 @27939 has 21 MA's), (25, 28008), (27, 28068), (35, 28164), (42, 28230),

Gene: Heisenberger\_39 Start: 28249, Stop: 28581, Start Num: 23

Candidate Starts for Heisenberger\_39:

(9, 28048), (11, 28075), (12, 28093), (16, 28174), (17, 28207), (19, 28222), (21, 28231), (Start: 23 @28249 has 21 MA's), (25, 28318), (27, 28378), (28, 28390), (35, 28474), (36, 28504), (42, 28558),

Gene: JEGGS\_39 Start: 28303, Stop: 28635, Start Num: 23

Candidate Starts for JEGGS\_39:

(9, 28102), (11, 28129), (12, 28147), (16, 28228), (17, 28261), (19, 28276), (21, 28285), (Start: 23 @28303 has 21 MA's), (25, 28372), (27, 28432), (28, 28444), (35, 28528), (36, 28558), (42, 28612),

Gene: Kardesai\_41 Start: 28969, Stop: 29301, Start Num: 23

Candidate Starts for Kardesai\_41:

(9, 28768), (11, 28795), (12, 28813), (16, 28894), (17, 28927), (19, 28942), (21, 28951), (Start: 23 @28969 has 21 MA's), (25, 29038), (27, 29098), (42, 29278),

Gene: KeaneyLin\_38 Start: 28394, Stop: 28708, Start Num: 23

Candidate Starts for KeaneyLin\_38:

(1, 28073), (2, 28088), (3, 28091), (4, 28097), (5, 28103), (6, 28127), (7, 28154), (11, 28220), (12, 28238), (16, 28319), (19, 28367), (20, 28373), (21, 28376), (Start: 23 @28394 has 21 MA's), (25, 28463), (27, 28523), (31, 28562), (35, 28619), (42, 28685),

Gene: Mooshroom\_41 Start: 28969, Stop: 29301, Start Num: 23

Candidate Starts for Mooshroom\_41:

(9, 28768), (11, 28795), (12, 28813), (16, 28894), (17, 28927), (19, 28942), (21, 28951), (Start: 23 @28969 has 21 MA's), (25, 29038), (27, 29098), (42, 29278),

Gene: Mudcat\_37 Start: 29680, Stop: 29994, Start Num: 23

Candidate Starts for Mudcat\_37:

(Start: 15 @29590 has 2 MA's), (Start: 23 @29680 has 21 MA's), (25, 29749), (27, 29809), (31, 29848), (35, 29905), (42, 29971),

Gene: NapoleonB\_39 Start: 28382, Stop: 28786, Start Num: 15

Candidate Starts for NapoleonB\_39:

(Start: 15 @28382 has 2 MA's), (Start: 23 @28472 has 21 MA's), (25, 28541), (27, 28601), (31, 28640), (35, 28697), (42, 28763),

Gene: Nason\_39 Start: 28602, Stop: 28934, Start Num: 23

Candidate Starts for Nason\_39:

(13, 28461), (14, 28494), (Start: 15 @28506 has 2 MA's), (16, 28527), (19, 28575), (20, 28581), (Start: 23 @28602 has 21 MA's), (25, 28671), (27, 28731), (28, 28743), (35, 28827), (42, 28911),

Gene: Popy\_36 Start: 28306, Stop: 28611, Start Num: 23

Candidate Starts for Popy\_36:

(Start: 23 @28306 has 21 MA's), (30, 28468), (34, 28513), (37, 28564), (42, 28591),

Gene: Tribby\_39 Start: 28277, Stop: 28591, Start Num: 23

Candidate Starts for Tribby\_39:

(3, 27974), (4, 27980), (5, 27986), (6, 28010), (7, 28037), (11, 28103), (12, 28121), (16, 28202), (19, 28250), (21, 28259), (Start: 23 @28277 has 21 MA's), (25, 28346), (27, 28406), (35, 28502), (42, 28568),

Gene: Xenomorph\_36 Start: 28235, Stop: 28570, Start Num: 23

Candidate Starts for Xenomorph\_36:

(8, 28007), (10, 28049), (19, 28208), (20, 28214), (21, 28217), (Start: 23 @28235 has 21 MA's), (25, 28304), (27, 28364), (35, 28460), (40, 28538), (42, 28547),