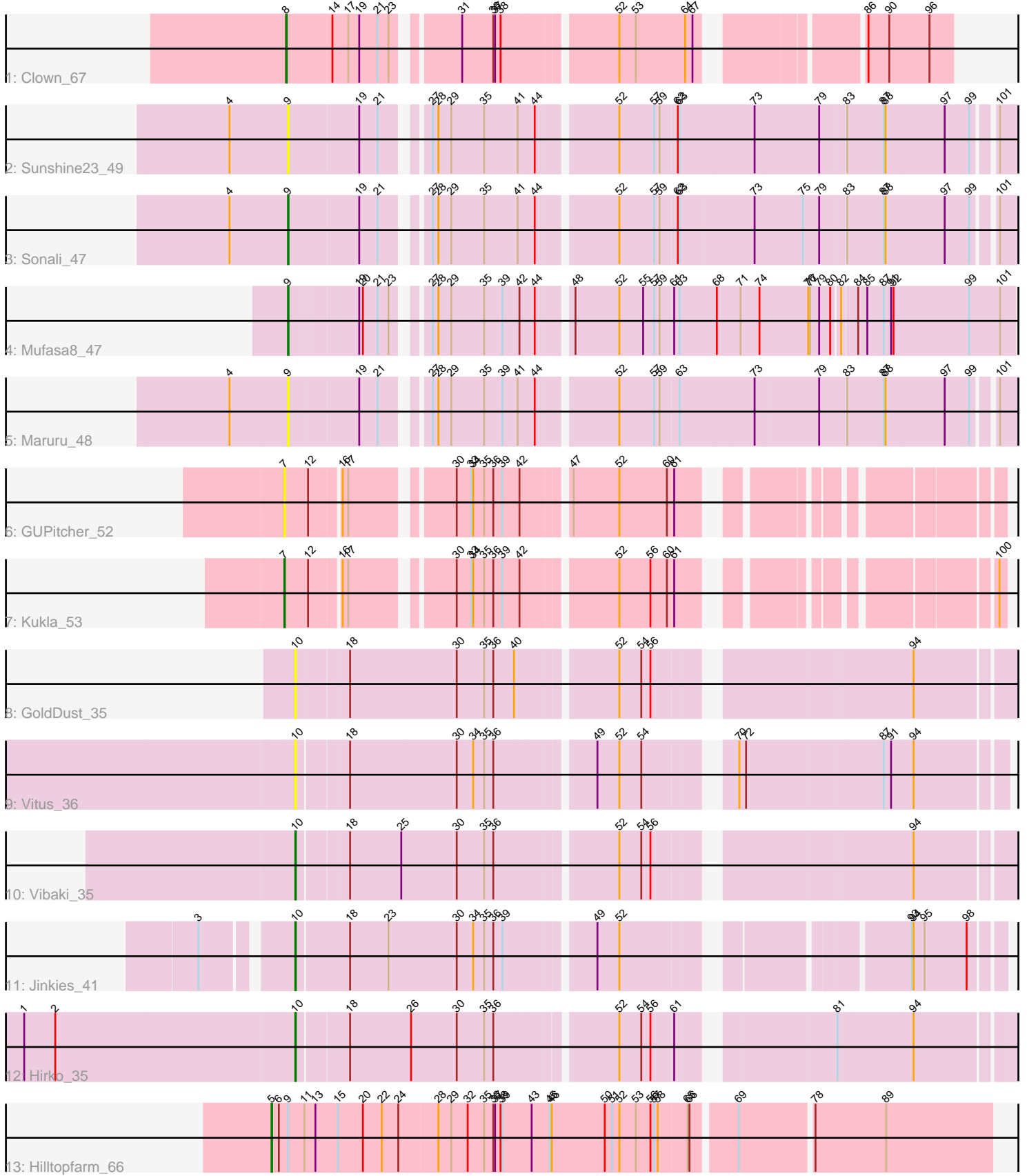


Pham 225012



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 225012 Report

This analysis was run 03/28/25 on database version 593.

Pham number 225012 has 13 members, 5 are drafts.

Phages represented in each track:

- Track 1 : Clown\_67
- Track 2 : Sunshine23\_49
- Track 3 : Sonali\_47
- Track 4 : Mufasa8\_47
- Track 5 : Maruru\_48
- Track 6 : GUPitcher\_52
- Track 7 : Kukla\_53
- Track 8 : GoldDust\_35
- Track 9 : Vitus\_36
- Track 10 : Vibaki\_35
- Track 11 : Jinkies\_41
- Track 12 : Hirko\_35
- Track 13 : Hilltopfarm\_66

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

The start number called the most often in the published annotations is 10, it was called in 3 of the 8 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- GoldDust\_35, Hirko\_35, Jinkies\_41, Vibaki\_35, Vitus\_36,

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

- 

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

- Clown\_67, GUPitcher\_52, Hilltopfarm\_66, Kukla\_53, Maruru\_48, Mufasa8\_47, Sonali\_47, Sunshine23\_49,

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

Start 5:

- Found in 1 of 13 ( 7.7% ) of genes in pham
- Manual Annotations of this start: 1 of 8

- Called 100.0% of time when present
- Phage (with cluster) where this start called: Hilltopfarm\_66 (Y),

Start 7:

- Found in 2 of 13 ( 15.4% ) of genes in pham
- Manual Annotations of this start: 1 of 8
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GUPitcher\_52 (FJ), Kukla\_53 (FJ),

Start 8:

- Found in 1 of 13 ( 7.7% ) of genes in pham
- Manual Annotations of this start: 1 of 8
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Clown\_67 (DC2),

Start 9:

- Found in 5 of 13 ( 38.5% ) of genes in pham
- Manual Annotations of this start: 2 of 8
- Called 80.0% of time when present
- Phage (with cluster) where this start called: Maruru\_48 (FG), Mufasa8\_47 (FG), Sonali\_47 (FG), Sunshine23\_49 (FG),

Start 10:

- Found in 5 of 13 ( 38.5% ) of genes in pham
- Manual Annotations of this start: 3 of 8
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GoldDust\_35 (FL), Hirko\_35 (FL), Jinkies\_41 (FL), Vibaki\_35 (FL), Vitus\_36 (FL),

### **Summary by clusters:**

There are 5 clusters represented in this pham: Y, DC2, FJ, FL, FG,

Info for manual annotations of cluster DC2:

- Start number 8 was manually annotated 1 time for cluster DC2.

Info for manual annotations of cluster FG:

- Start number 9 was manually annotated 2 times for cluster FG.

Info for manual annotations of cluster FJ:

- Start number 7 was manually annotated 1 time for cluster FJ.

Info for manual annotations of cluster FL:

- Start number 10 was manually annotated 3 times for cluster FL.

Info for manual annotations of cluster Y:

- Start number 5 was manually annotated 1 time for cluster Y.

### **Gene Information:**

Gene: Clown\_67 Start: 46683, Stop: 47642, Start Num: 8

Candidate Starts for Clown\_67:

(Start: 8 @46683 has 1 MA's), (14, 46755), (17, 46779), (19, 46797), (21, 46827), (23, 46845), (31, 46932), (36, 46983), (37, 46986), (38, 46995), (52, 47166), (53, 47193), (64, 47274), (67, 47286), (86, 47508), (90, 47541), (96, 47607),

Gene: GUPitcher\_52 Start: 34446, Stop: 35414, Start Num: 7

Candidate Starts for GUPitcher\_52:

(Start: 7 @34446 has 1 MA's), (12, 34479), (16, 34524), (17, 34533), (30, 34677), (33, 34701), (34, 34704), (35, 34722), (36, 34737), (39, 34752), (42, 34779), (47, 34845), (52, 34920), (60, 34998), (61, 35007),

Gene: GoldDust\_35 Start: 31181, Stop: 32251, Start Num: 10

Candidate Starts for GoldDust\_35:

(Start: 10 @31181 has 3 MA's), (18, 31256), (30, 31430), (35, 31475), (36, 31490), (40, 31523), (52, 31673), (54, 31709), (56, 31724), (94, 32099),

Gene: Hilltopfarm\_66 Start: 46161, Stop: 47291, Start Num: 5

Candidate Starts for Hilltopfarm\_66:

(Start: 5 @46161 has 1 MA's), (6, 46173), (Start: 9 @46188 has 2 MA's), (11, 46215), (13, 46233), (15, 46269), (20, 46308), (22, 46338), (24, 46365), (28, 46428), (29, 46449), (32, 46476), (35, 46503), (36, 46518), (37, 46521), (38, 46530), (39, 46533), (43, 46581), (45, 46611), (46, 46614), (50, 46701), (51, 46713), (52, 46725), (53, 46752), (56, 46776), (57, 46782), (58, 46788), (65, 46830), (66, 46833), (69, 46899), (78, 47010), (89, 47121),

Gene: Hirko\_35 Start: 30939, Stop: 32009, Start Num: 10

Candidate Starts for Hirko\_35:

(1, 30504), (2, 30555), (Start: 10 @30939 has 3 MA's), (18, 31017), (26, 31116), (30, 31191), (35, 31236), (36, 31251), (52, 31434), (54, 31470), (56, 31485), (61, 31521), (81, 31740), (94, 31860),

Gene: Jinkies\_41 Start: 32040, Stop: 33080, Start Num: 10

Candidate Starts for Jinkies\_41:

(3, 31914), (Start: 10 @32040 has 3 MA's), (18, 32124), (23, 32187), (30, 32298), (34, 32325), (35, 32343), (36, 32358), (39, 32373), (49, 32505), (52, 32541), (93, 32940), (94, 32943), (95, 32961), (98, 33030),

Gene: Kukla\_53 Start: 33677, Stop: 34645, Start Num: 7

Candidate Starts for Kukla\_53:

(Start: 7 @33677 has 1 MA's), (12, 33710), (16, 33755), (17, 33764), (30, 33908), (33, 33932), (34, 33935), (35, 33953), (36, 33968), (39, 33983), (42, 34010), (52, 34151), (56, 34202), (60, 34229), (61, 34238), (100, 34634),

Gene: Maruru\_48 Start: 37039, Stop: 38160, Start Num: 9

Candidate Starts for Maruru\_48:

(4, 36946), (Start: 9 @37039 has 2 MA's), (19, 37150), (21, 37180), (27, 37237), (28, 37246), (29, 37267), (35, 37321), (39, 37351), (41, 37375), (44, 37402), (52, 37522), (57, 37579), (59, 37588), (63, 37618), (73, 37738), (79, 37840), (83, 37882), (87, 37942), (88, 37945), (97, 38041), (99, 38080), (101, 38110),

Gene: Mufasa8\_47 Start: 35178, Stop: 36302, Start Num: 9

Candidate Starts for Mufasa8\_47:

(Start: 9 @35178 has 2 MA's), (19, 35280), (20, 35286), (21, 35310), (23, 35328), (27, 35367), (28, 35376), (29, 35397), (35, 35451), (39, 35481), (42, 35508), (44, 35532), (48, 35580), (52, 35652), (55, 35691), (57, 35709), (59, 35718), (61, 35739), (63, 35748), (68, 35808), (71, 35847), (74, 35877), (76,

35955), (77, 35958), (79, 35973), (80, 35991), (82, 36003), (84, 36027), (85, 36042), (87, 36069), (91, 36081), (92, 36084), (99, 36207), (101, 36258),

Gene: Sonali\_47 Start: 37499, Stop: 38617, Start Num: 9

Candidate Starts for Sonali\_47:

(4, 37409), (Start: 9 @37499 has 2 MA's), (19, 37613), (21, 37643), (27, 37700), (28, 37709), (29, 37730), (35, 37784), (41, 37838), (44, 37865), (52, 37985), (57, 38042), (59, 38051), (62, 38078), (63, 38081), (73, 38198), (75, 38276), (79, 38303), (83, 38342), (87, 38402), (88, 38405), (97, 38501), (99, 38540), (101, 38570),

Gene: Sunshine23\_49 Start: 37381, Stop: 38502, Start Num: 9

Candidate Starts for Sunshine23\_49:

(4, 37288), (Start: 9 @37381 has 2 MA's), (19, 37495), (21, 37525), (27, 37582), (28, 37591), (29, 37612), (35, 37666), (41, 37720), (44, 37747), (52, 37867), (57, 37924), (59, 37933), (62, 37960), (63, 37963), (73, 38083), (79, 38188), (83, 38227), (87, 38287), (88, 38290), (97, 38386), (99, 38425), (101, 38455),

Gene: Vibaki\_35 Start: 31085, Stop: 32152, Start Num: 10

Candidate Starts for Vibaki\_35:

(Start: 10 @31085 has 3 MA's), (18, 31157), (25, 31241), (30, 31331), (35, 31376), (36, 31391), (52, 31574), (54, 31610), (56, 31625), (94, 32000),

Gene: Vitus\_36 Start: 29804, Stop: 30862, Start Num: 10

Candidate Starts for Vitus\_36:

(Start: 10 @29804 has 3 MA's), (18, 29876), (30, 30050), (34, 30077), (35, 30095), (36, 30110), (49, 30257), (52, 30293), (54, 30329), (70, 30446), (72, 30455), (87, 30674), (91, 30686), (94, 30722),