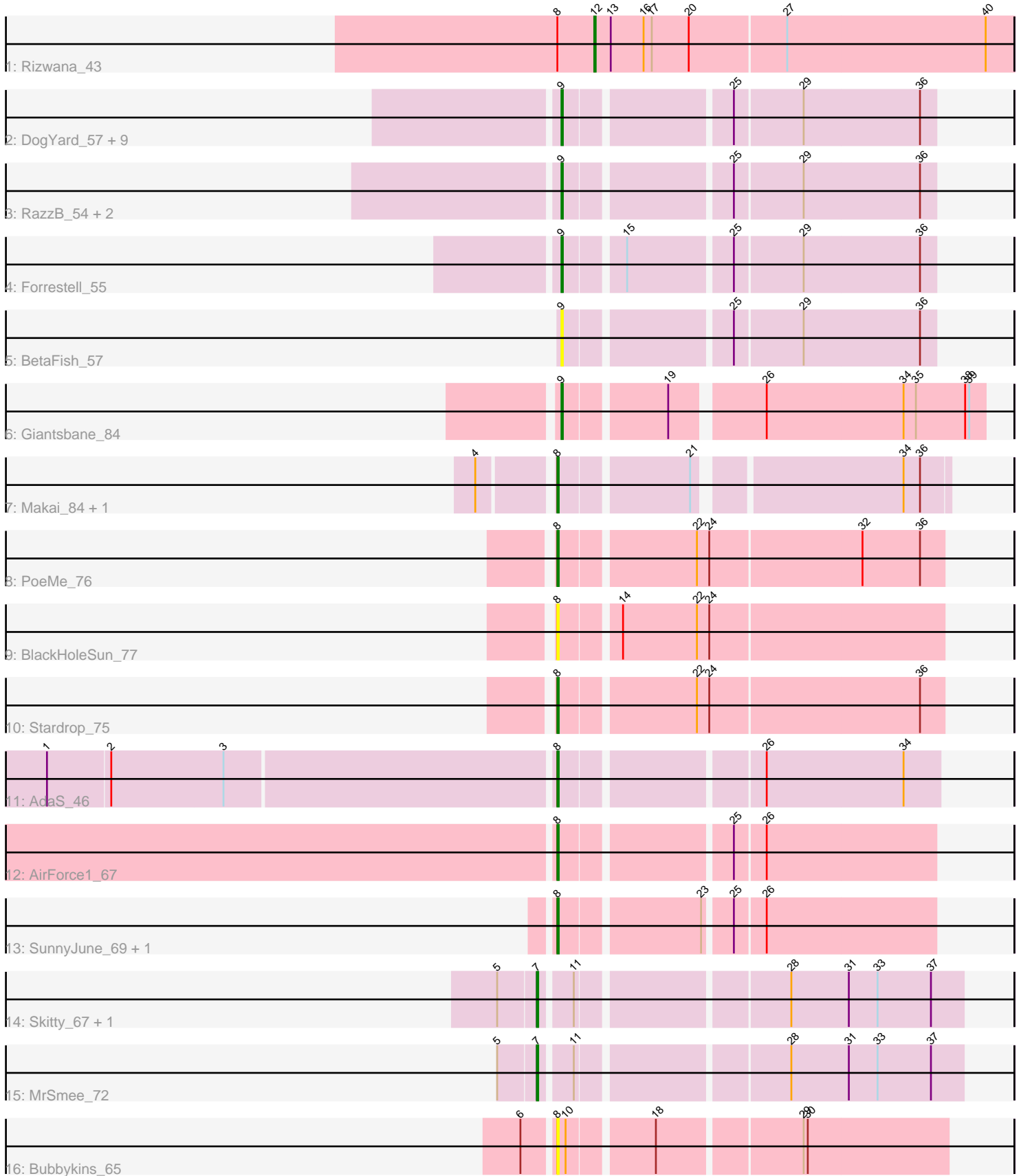


# Pham 309035



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 309035 Report

This analysis was run 06/27/26 on database version 652.

Pham number 309035 has 30 members, 8 are drafts.

Phages represented in each track:

- Track 1 : Rizwana\_43
- Track 2 : DogYard\_57, Beagle\_58, Pointis\_56, Pureglobe5\_59, Popstraw\_54, Kubulix\_58, Hive\_55, RIPWilbur\_55, Odyssey395\_60, PhuzzTulsa\_55
- Track 3 : RazzB\_54, MellowYellow\_55, NyleyClemson\_53
- Track 4 : Forrestell\_55
- Track 5 : BetaFish\_57
- Track 6 : Giantsbane\_84
- Track 7 : Makai\_84, Truckee\_81
- Track 8 : PoeMe\_76
- Track 9 : BlackHoleSun\_77
- Track 10 : Stardrop\_75
- Track 11 : AdaS\_46
- Track 12 : AirForce1\_67
- Track 13 : SunnyJune\_69, Jinkies\_62
- Track 14 : Skitty\_67, Merpity\_74
- Track 15 : MrSmee\_72
- Track 16 : Bubbykins\_65

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

The start number called the most often in the published annotations is 9, it was called in 12 of the 22 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Beagle\_58, BetaFish\_57, DogYard\_57, Forrestell\_55, Giantsbane\_84, Hive\_55, Kubulix\_58, MellowYellow\_55, NyleyClemson\_53, Odyssey395\_60, PhuzzTulsa\_55, Pointis\_56, Popstraw\_54, Pureglobe5\_59, RIPWilbur\_55, RazzB\_54,

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

- 

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

- AdaS\_46, AirForce1\_67, BlackHoleSun\_77, Bubbykins\_65, Jinkies\_62, Makai\_84, Merpity\_74, MrSmee\_72, PoeMe\_76, Rizwana\_43, Skitty\_67, Stardrop\_75,

SunnyJune\_69, Truckee\_81,

### Summary by start number:

Start 7:

- Found in 3 of 30 ( 10.0% ) of genes in pham
- Manual Annotations of this start: 2 of 22
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Merpity\_74 (FQ1), MrSmee\_72 (FQ1), Skitty\_67 (FQ1),

Start 8:

- Found in 11 of 30 ( 36.7% ) of genes in pham
- Manual Annotations of this start: 7 of 22
- Called 90.9% of time when present
- Phage (with cluster) where this start called: AdaS\_46 (AY), AirForce1\_67 (FL), BlackHoleSun\_77 (AU6), Bubbykins\_65 (UNK), Jinkies\_62 (FL), Makai\_84 (AU5), PoeMe\_76 (AU6), Stardrop\_75 (AU6), SunnyJune\_69 (FL), Truckee\_81 (AU5),

Start 9:

- Found in 16 of 30 ( 53.3% ) of genes in pham
- Manual Annotations of this start: 12 of 22
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Beagle\_58 (AP2), BetaFish\_57 (AP2), DogYard\_57 (AP2), Forrestell\_55 (AP2), Giantsbane\_84 (AU2), Hive\_55 (AP2), Kubulix\_58 (AP2), MellowYellow\_55 (AP2), NyleyClemson\_53 (AP2), Odyssey395\_60 (AP2), PhuzzTulsa\_55 (AP2), Pointis\_56 (AP2), Popstraw\_54 (AP2), Pureglobe5\_59 (AP2), RIPWilbur\_55 (AP2), RazzB\_54 (AP2),

Start 12:

- Found in 1 of 30 ( 3.3% ) of genes in pham
- Manual Annotations of this start: 1 of 22
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Rizwana\_43 (AP1),

### Summary by clusters:

There are 9 clusters represented in this pham: UNK, AP2, AP1, AU2, AU5, AU6, AY, FQ1, FL,

Info for manual annotations of cluster AP1:

- Start number 12 was manually annotated 1 time for cluster AP1.

Info for manual annotations of cluster AP2:

- Start number 9 was manually annotated 11 times for cluster AP2.

Info for manual annotations of cluster AU2:

- Start number 9 was manually annotated 1 time for cluster AU2.

Info for manual annotations of cluster AU5:

- Start number 8 was manually annotated 2 times for cluster AU5.

Info for manual annotations of cluster AU6:

- Start number 8 was manually annotated 2 times for cluster AU6.

Info for manual annotations of cluster AY:

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

Info for manual annotations of cluster FL:

- Start number 8 was manually annotated 2 times for cluster FL.

Info for manual annotations of cluster FQ1:

- Start number 7 was manually annotated 2 times for cluster FQ1.

### ***Gene Information:***

Gene: AdaS\_46 Start: 29027, Stop: 29287, Start Num: 8

Candidate Starts for AdaS\_46:

(1, 28667), (2, 28712), (3, 28793), (Start: 8 @29027 has 7 MA's), (26, 29162), (34, 29261),

Gene: AirForce1\_67 Start: 41280, Stop: 41537, Start Num: 8

Candidate Starts for AirForce1\_67:

(Start: 8 @41280 has 7 MA's), (25, 41394), (26, 41415),

Gene: Beagle\_58 Start: 40124, Stop: 39870, Start Num: 9

Candidate Starts for Beagle\_58:

(Start: 9 @40124 has 12 MA's), (25, 40013), (29, 39965), (36, 39881),

Gene: BetaFish\_57 Start: 40608, Stop: 40354, Start Num: 9

Candidate Starts for BetaFish\_57:

(Start: 9 @40608 has 12 MA's), (25, 40497), (29, 40449), (36, 40365),

Gene: BlackHoleSun\_77 Start: 46206, Stop: 46475, Start Num: 8

Candidate Starts for BlackHoleSun\_77:

(Start: 8 @46206 has 7 MA's), (14, 46245), (22, 46299), (24, 46308),

Gene: Bubbykins\_65 Start: 47243, Stop: 47509, Start Num: 8

Candidate Starts for Bubbykins\_65:

(6, 47222), (Start: 8 @47243 has 7 MA's), (10, 47249), (18, 47306), (29, 47405), (30, 47408),

Gene: DogYard\_57 Start: 40041, Stop: 39787, Start Num: 9

Candidate Starts for DogYard\_57:

(Start: 9 @40041 has 12 MA's), (25, 39930), (29, 39882), (36, 39798),

Gene: Forrestell\_55 Start: 38685, Stop: 38431, Start Num: 9

Candidate Starts for Forrestell\_55:

(Start: 9 @38685 has 12 MA's), (15, 38646), (25, 38574), (29, 38526), (36, 38442),

Gene: Giantsbane\_84 Start: 50534, Stop: 50821, Start Num: 9

Candidate Starts for Giantsbane\_84:

(Start: 9 @50534 has 12 MA's), (19, 50603), (26, 50663), (34, 50762), (35, 50771), (38, 50807), (39, 50810),

Gene: Hive\_55 Start: 40222, Stop: 39968, Start Num: 9  
Candidate Starts for Hive\_55:  
(Start: 9 @40222 has 12 MA's), (25, 40111), (29, 40063), (36, 39979),

Gene: Jinkies\_62 Start: 41367, Stop: 41624, Start Num: 8  
Candidate Starts for Jinkies\_62:  
(Start: 8 @41367 has 7 MA's), (23, 41463), (25, 41481), (26, 41502),

Gene: Kubulix\_58 Start: 39974, Stop: 39720, Start Num: 9  
Candidate Starts for Kubulix\_58:  
(Start: 9 @39974 has 12 MA's), (25, 39863), (29, 39815), (36, 39731),

Gene: Makai\_84 Start: 52282, Stop: 52539, Start Num: 8  
Candidate Starts for Makai\_84:  
(4, 52234), (Start: 8 @52282 has 7 MA's), (21, 52369), (34, 52507), (36, 52519),

Gene: MellowYellow\_55 Start: 39146, Stop: 38892, Start Num: 9  
Candidate Starts for MellowYellow\_55:  
(Start: 9 @39146 has 12 MA's), (25, 39035), (29, 38987), (36, 38903),

Gene: Merpity\_74 Start: 38792, Stop: 39079, Start Num: 7  
Candidate Starts for Merpity\_74:  
(5, 38765), (Start: 7 @38792 has 2 MA's), (11, 38813), (28, 38954), (31, 38996), (33, 39017), (37, 39056),

Gene: MrSmee\_72 Start: 38364, Stop: 38651, Start Num: 7  
Candidate Starts for MrSmee\_72:  
(5, 38337), (Start: 7 @38364 has 2 MA's), (11, 38385), (28, 38526), (31, 38568), (33, 38589), (37, 38628),

Gene: NyleyClemson\_53 Start: 38761, Stop: 38507, Start Num: 9  
Candidate Starts for NyleyClemson\_53:  
(Start: 9 @38761 has 12 MA's), (25, 38650), (29, 38602), (36, 38518),

Gene: Odyssey395\_60 Start: 40348, Stop: 40094, Start Num: 9  
Candidate Starts for Odyssey395\_60:  
(Start: 9 @40348 has 12 MA's), (25, 40237), (29, 40189), (36, 40105),

Gene: PhuzzTulsa\_55 Start: 40126, Stop: 39872, Start Num: 9  
Candidate Starts for PhuzzTulsa\_55:  
(Start: 9 @40126 has 12 MA's), (25, 40015), (29, 39967), (36, 39883),

Gene: PoeMe\_76 Start: 46538, Stop: 46807, Start Num: 8  
Candidate Starts for PoeMe\_76:  
(Start: 8 @46538 has 7 MA's), (22, 46631), (24, 46640), (32, 46748), (36, 46790),

Gene: Pointis\_56 Start: 40164, Stop: 39910, Start Num: 9  
Candidate Starts for Pointis\_56:  
(Start: 9 @40164 has 12 MA's), (25, 40053), (29, 40005), (36, 39921),

Gene: Popstraw\_54 Start: 39950, Stop: 39696, Start Num: 9  
Candidate Starts for Popstraw\_54:  
(Start: 9 @39950 has 12 MA's), (25, 39839), (29, 39791), (36, 39707),

Gene: Pureglobe5\_59 Start: 40595, Stop: 40341, Start Num: 9  
Candidate Starts for Pureglobe5\_59:  
(Start: 9 @40595 has 12 MA's), (25, 40484), (29, 40436), (36, 40352),

Gene: RIPWilbur\_55 Start: 39465, Stop: 39211, Start Num: 9  
Candidate Starts for RIPWilbur\_55:  
(Start: 9 @39465 has 12 MA's), (25, 39354), (29, 39306), (36, 39222),

Gene: RazzB\_54 Start: 38892, Stop: 38638, Start Num: 9  
Candidate Starts for RazzB\_54:  
(Start: 9 @38892 has 12 MA's), (25, 38781), (29, 38733), (36, 38649),

Gene: Rizwana\_43 Start: 38133, Stop: 37831, Start Num: 12  
Candidate Starts for Rizwana\_43:  
(Start: 8 @38160 has 7 MA's), (Start: 12 @38133 has 1 MA's), (13, 38121), (16, 38097), (17, 38091),  
(20, 38064), (27, 37995), (40, 37851),

Gene: Skitty\_67 Start: 36615, Stop: 36902, Start Num: 7  
Candidate Starts for Skitty\_67:  
(5, 36588), (Start: 7 @36615 has 2 MA's), (11, 36636), (28, 36777), (31, 36819), (33, 36840), (37,  
36879),

Gene: Stardrop\_75 Start: 46542, Stop: 46811, Start Num: 8  
Candidate Starts for Stardrop\_75:  
(Start: 8 @46542 has 7 MA's), (22, 46635), (24, 46644), (36, 46794),

Gene: SunnyJune\_69 Start: 41270, Stop: 41527, Start Num: 8  
Candidate Starts for SunnyJune\_69:  
(Start: 8 @41270 has 7 MA's), (23, 41366), (25, 41384), (26, 41405),

Gene: Truckee\_81 Start: 51975, Stop: 52232, Start Num: 8  
Candidate Starts for Truckee\_81:  
(4, 51927), (Start: 8 @51975 has 7 MA's), (21, 52062), (34, 52200), (36, 52212),