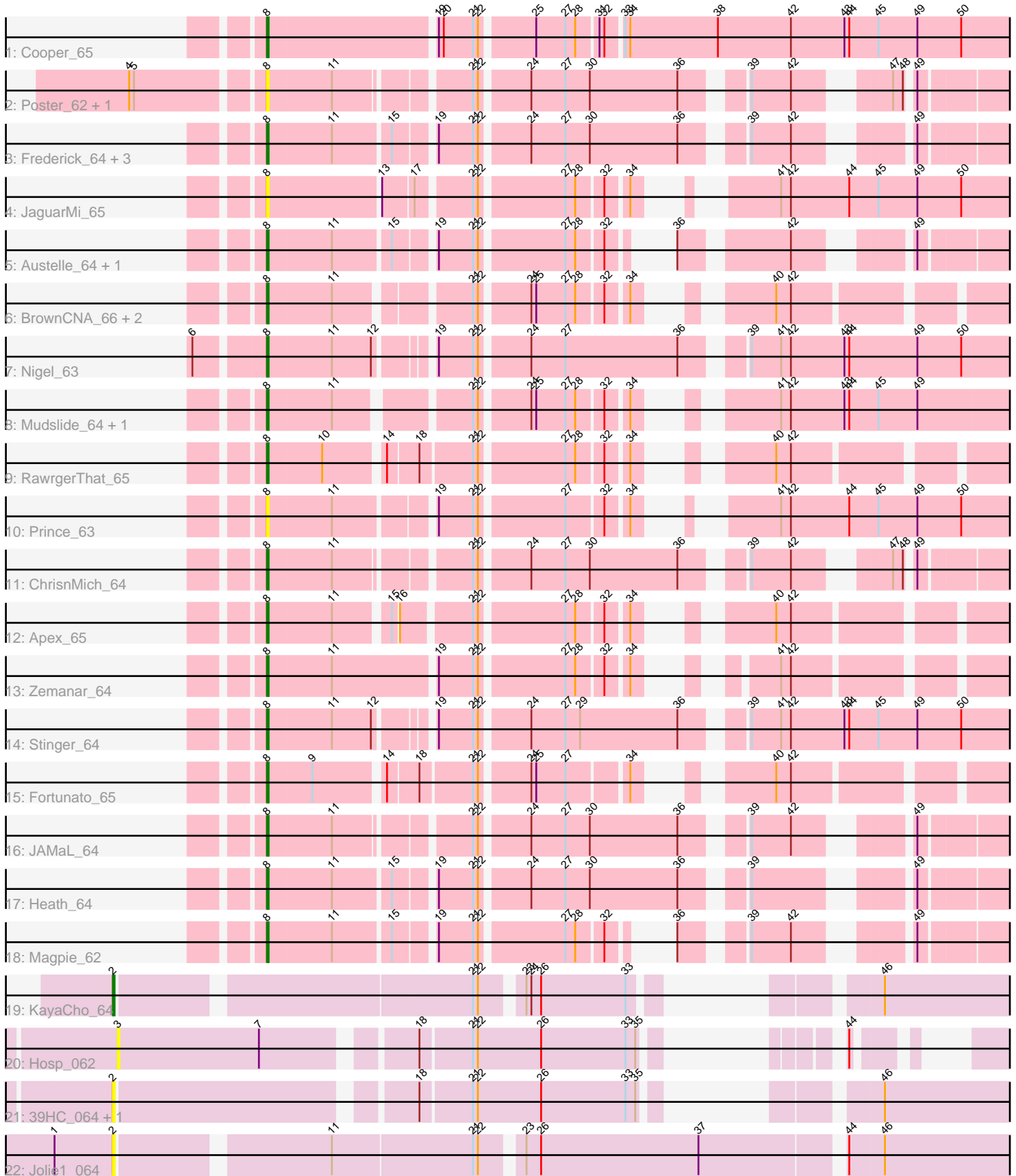


# Pham 139955



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 139955 Report

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

Pham number 139955 has 31 members, 10 are drafts.

Phages represented in each track:

- Track 1 : Cooper\_65
- Track 2 : Poster\_62, Nanao\_63
- Track 3 : Frederick\_64, Hydro\_65, BobbyK\_63, Hangman\_65
- Track 4 : JaguarMi\_65
- Track 5 : Austelle\_64, VioletZ\_66
- Track 6 : BrownCNA\_66, Mithril\_64, Lolalove\_66
- Track 7 : Nigel\_63
- Track 8 : Mudslide\_64, Waleliano\_64
- Track 9 : RawrgerThat\_65
- Track 10 : Prince\_63
- Track 11 : ChrisnMich\_64
- Track 12 : Apex\_65
- Track 13 : Zemanar\_64
- Track 14 : Stinger\_64
- Track 15 : Fortunato\_65
- Track 16 : JAMaL\_64
- Track 17 : Heath\_64
- Track 18 : Magpie\_62
- Track 19 : KayaCho\_64
- Track 20 : Hosp\_062
- Track 21 : 39HC\_064, 40BC\_064
- Track 22 : Jolie1\_064

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

The start number called the most often in the published annotations is 8, it was called in 20 of the 21 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Apex\_65, Austelle\_64, BobbyK\_63, BrownCNA\_66, ChrisnMich\_64, Cooper\_65, Fortunato\_65, Frederick\_64, Hangman\_65, Heath\_64, Hydro\_65, JAMaL\_64, JaguarMi\_65, Lolalove\_66, Magpie\_62, Mithril\_64, Mudslide\_64, Nanao\_63, Nigel\_63, Poster\_62, Prince\_63, RawrgerThat\_65, Stinger\_64, VioletZ\_66, Waleliano\_64, Zemanar\_64,

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

- 

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

- 39HC\_064, 40BC\_064, Hosp\_062, Jolie1\_064, KayaCho\_64,

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

Start 2:

- Found in 4 of 31 ( 12.9% ) of genes in pham
- Manual Annotations of this start: 1 of 21
- Called 100.0% of time when present
- Phage (with cluster) where this start called: 39HC\_064 (B6), 40BC\_064 (B6), Jolie1\_064 (B6), KayaCho\_64 (B6),

Start 3:

- Found in 1 of 31 ( 3.2% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Hosp\_062 (B6),

Start 8:

- Found in 26 of 31 ( 83.9% ) of genes in pham
- Manual Annotations of this start: 20 of 21
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Apex\_65 (B4), Austelle\_64 (B4), BobbyK\_63 (B4), BrownCNA\_66 (B4), ChrisnMich\_64 (B4), Cooper\_65 (B4), Fortunato\_65 (B4), Frederick\_64 (B4), Hangman\_65 (B4), Heath\_64 (B4), Hydro\_65 (B4), JAMaL\_64 (B4), JaguarMi\_65 (B4), Lolalove\_66 (B4), Magpie\_62 (B4), Mithril\_64 (B4), Mudslide\_64 (B4), Nanao\_63 (B4), Nigel\_63 (B4), Poster\_62 (B4), Prince\_63 (B4), RawrgerThat\_65 (B4), Stinger\_64 (B4), VioletZ\_66 (B4), Waleliano\_64 (B4), Zemanar\_64 (B4),

### **Summary by clusters:**

There are 2 clusters represented in this pham: B4, B6,

Info for manual annotations of cluster B4:

- Start number 8 was manually annotated 20 times for cluster B4.

Info for manual annotations of cluster B6:

- Start number 2 was manually annotated 1 time for cluster B6.

### **Gene Information:**

Gene: 39HC\_064 Start: 57054, Stop: 57509, Start Num: 2

Candidate Starts for 39HC\_064:

(Start: 2 @57054 has 1 MA's), (18, 57222), (21, 57252), (22, 57255), (26, 57294), (33, 57345), (35, 57351), (46, 57420),

Gene: 40BC\_064 Start: 57054, Stop: 57509, Start Num: 2

Candidate Starts for 40BC\_064:

(Start: 2 @57054 has 1 MA's), (18, 57222), (21, 57252), (22, 57255), (26, 57294), (33, 57345), (35, 57351), (46, 57420),

Gene: Apex\_65 Start: 58788, Stop: 59168, Start Num: 8

Candidate Starts for Apex\_65:

(Start: 8 @58788 has 20 MA's), (11, 58827), (15, 58857), (16, 58860), (21, 58899), (22, 58902), (27, 58950), (28, 58956), (32, 58971), (34, 58983), (40, 59031), (42, 59040),

Gene: Austelle\_64 Start: 59242, Stop: 59613, Start Num: 8

Candidate Starts for Austelle\_64:

(Start: 8 @59242 has 20 MA's), (11, 59281), (15, 59314), (19, 59335), (21, 59356), (22, 59359), (27, 59407), (28, 59413), (32, 59428), (36, 59440), (42, 59497), (49, 59548),

Gene: BobbyK\_63 Start: 58550, Stop: 58954, Start Num: 8

Candidate Starts for BobbyK\_63:

(Start: 8 @58550 has 20 MA's), (11, 58589), (15, 58622), (19, 58643), (21, 58664), (22, 58667), (24, 58694), (27, 58715), (30, 58730), (36, 58784), (39, 58814), (42, 58838), (49, 58889),

Gene: BrownCNA\_66 Start: 58951, Stop: 59331, Start Num: 8

Candidate Starts for BrownCNA\_66:

(Start: 8 @58951 has 20 MA's), (11, 58990), (21, 59062), (22, 59065), (24, 59092), (25, 59095), (27, 59113), (28, 59119), (32, 59134), (34, 59146), (40, 59194), (42, 59203),

Gene: ChrisnMich\_64 Start: 57655, Stop: 58056, Start Num: 8

Candidate Starts for ChrisnMich\_64:

(Start: 8 @57655 has 20 MA's), (11, 57694), (21, 57766), (22, 57769), (24, 57796), (27, 57817), (30, 57832), (36, 57886), (39, 57916), (42, 57940), (47, 57982), (48, 57988), (49, 57991),

Gene: Cooper\_65 Start: 58044, Stop: 58496, Start Num: 8

Candidate Starts for Cooper\_65:

(Start: 8 @58044 has 20 MA's), (19, 58143), (20, 58146), (21, 58164), (22, 58167), (25, 58197), (27, 58215), (28, 58221), (31, 58233), (32, 58236), (33, 58245), (34, 58248), (38, 58302), (42, 58347), (43, 58380), (44, 58383), (45, 58401), (49, 58425), (50, 58452),

Gene: Fortunato\_65 Start: 58649, Stop: 59032, Start Num: 8

Candidate Starts for Fortunato\_65:

(Start: 8 @58649 has 20 MA's), (9, 58676), (14, 58715), (18, 58733), (21, 58763), (22, 58766), (24, 58793), (25, 58796), (27, 58814), (34, 58847), (40, 58895), (42, 58904),

Gene: Frederick\_64 Start: 58650, Stop: 59054, Start Num: 8

Candidate Starts for Frederick\_64:

(Start: 8 @58650 has 20 MA's), (11, 58689), (15, 58722), (19, 58743), (21, 58764), (22, 58767), (24, 58794), (27, 58815), (30, 58830), (36, 58884), (39, 58914), (42, 58938), (49, 58989),

Gene: Hangman\_65 Start: 58849, Stop: 59253, Start Num: 8

Candidate Starts for Hangman\_65:

(Start: 8 @58849 has 20 MA's), (11, 58888), (15, 58921), (19, 58942), (21, 58963), (22, 58966), (24, 58993), (27, 59014), (30, 59029), (36, 59083), (39, 59113), (42, 59137), (49, 59188),

Gene: Heath\_64 Start: 58476, Stop: 58880, Start Num: 8

Candidate Starts for Heath\_64:

(Start: 8 @58476 has 20 MA's), (11, 58515), (15, 58548), (19, 58569), (21, 58590), (22, 58593), (24, 58620), (27, 58641), (30, 58656), (36, 58710), (39, 58740), (49, 58815),

Gene: Hosp\_062 Start: 55163, Stop: 55570, Start Num: 3

Candidate Starts for Hosp\_062:

(3, 55163), (7, 55250), (18, 55331), (21, 55361), (22, 55364), (26, 55403), (33, 55454), (35, 55460), (44, 55502),

Gene: Hydro\_65 Start: 58787, Stop: 59191, Start Num: 8

Candidate Starts for Hydro\_65:

(Start: 8 @58787 has 20 MA's), (11, 58826), (15, 58859), (19, 58880), (21, 58901), (22, 58904), (24, 58931), (27, 58952), (30, 58967), (36, 59021), (39, 59051), (42, 59075), (49, 59126),

Gene: JAMaL\_64 Start: 58680, Stop: 59081, Start Num: 8

Candidate Starts for JAMaL\_64:

(Start: 8 @58680 has 20 MA's), (11, 58719), (21, 58791), (22, 58794), (24, 58821), (27, 58842), (30, 58857), (36, 58911), (39, 58941), (42, 58965), (49, 59016),

Gene: JaguarMi\_65 Start: 59865, Stop: 60263, Start Num: 8

Candidate Starts for JaguarMi\_65:

(Start: 8 @59865 has 20 MA's), (13, 59931), (17, 59949), (21, 59979), (22, 59982), (27, 60030), (28, 60036), (32, 60051), (34, 60063), (41, 60108), (42, 60114), (44, 60150), (45, 60168), (49, 60192), (50, 60219),

Gene: Jolie1\_064 Start: 57168, Stop: 57692, Start Num: 2

Candidate Starts for Jolie1\_064:

(1, 57132), (Start: 2 @57168 has 1 MA's), (11, 57288), (21, 57372), (22, 57375), (23, 57396), (26, 57405), (37, 57501), (44, 57582), (46, 57603),

Gene: KayaCho\_64 Start: 57186, Stop: 57644, Start Num: 2

Candidate Starts for KayaCho\_64:

(Start: 2 @57186 has 1 MA's), (21, 57390), (22, 57393), (23, 57414), (24, 57417), (26, 57423), (33, 57474), (46, 57549),

Gene: Lolalove\_66 Start: 58810, Stop: 59190, Start Num: 8

Candidate Starts for Lolalove\_66:

(Start: 8 @58810 has 20 MA's), (11, 58849), (21, 58921), (22, 58924), (24, 58951), (25, 58954), (27, 58972), (28, 58978), (32, 58993), (34, 59005), (40, 59053), (42, 59062),

Gene: Magpie\_62 Start: 58576, Stop: 58944, Start Num: 8

Candidate Starts for Magpie\_62:

(Start: 8 @58576 has 20 MA's), (11, 58615), (15, 58648), (19, 58669), (21, 58690), (22, 58693), (27, 58741), (28, 58747), (32, 58762), (36, 58774), (39, 58804), (42, 58828), (49, 58879),

Gene: Mithril\_64 Start: 58806, Stop: 59186, Start Num: 8

Candidate Starts for Mithril\_64:

(Start: 8 @58806 has 20 MA's), (11, 58845), (21, 58917), (22, 58920), (24, 58947), (25, 58950), (27, 58968), (28, 58974), (32, 58989), (34, 59001), (40, 59049), (42, 59058),

Gene: Mudslide\_64 Start: 58881, Stop: 59282, Start Num: 8

Candidate Starts for Mudslide\_64:

(Start: 8 @58881 has 20 MA's), (11, 58920), (21, 58992), (22, 58995), (24, 59022), (25, 59025), (27, 59043), (28, 59049), (32, 59064), (34, 59076), (41, 59127), (42, 59133), (43, 59166), (44, 59169), (45,

59187), (49, 59211),

Gene: Nanao\_63 Start: 57676, Stop: 58077, Start Num: 8

Candidate Starts for Nanao\_63:

(4, 57601), (5, 57604), (Start: 8 @57676 has 20 MA's), (11, 57715), (21, 57787), (22, 57790), (24, 57817), (27, 57838), (30, 57853), (36, 57907), (39, 57937), (42, 57961), (47, 58003), (48, 58009), (49, 58012),

Gene: Nigel\_63 Start: 57675, Stop: 58109, Start Num: 8

Candidate Starts for Nigel\_63:

(6, 57636), (Start: 8 @57675 has 20 MA's), (11, 57714), (12, 57738), (19, 57765), (21, 57786), (22, 57789), (24, 57816), (27, 57837), (36, 57906), (39, 57936), (41, 57954), (42, 57960), (43, 57993), (44, 57996), (49, 58038), (50, 58065),

Gene: Poster\_62 Start: 57677, Stop: 58078, Start Num: 8

Candidate Starts for Poster\_62:

(4, 57602), (5, 57605), (Start: 8 @57677 has 20 MA's), (11, 57716), (21, 57788), (22, 57791), (24, 57818), (27, 57839), (30, 57854), (36, 57908), (39, 57938), (42, 57962), (47, 58004), (48, 58010), (49, 58013),

Gene: Prince\_63 Start: 58785, Stop: 59183, Start Num: 8

Candidate Starts for Prince\_63:

(Start: 8 @58785 has 20 MA's), (11, 58824), (19, 58878), (21, 58899), (22, 58902), (27, 58950), (32, 58971), (34, 58983), (41, 59028), (42, 59034), (44, 59070), (45, 59088), (49, 59112), (50, 59139),

Gene: RawrgerThat\_65 Start: 58627, Stop: 59010, Start Num: 8

Candidate Starts for RawrgerThat\_65:

(Start: 8 @58627 has 20 MA's), (10, 58660), (14, 58693), (18, 58711), (21, 58741), (22, 58744), (27, 58792), (28, 58798), (32, 58813), (34, 58825), (40, 58873), (42, 58882),

Gene: Stinger\_64 Start: 57598, Stop: 58032, Start Num: 8

Candidate Starts for Stinger\_64:

(Start: 8 @57598 has 20 MA's), (11, 57637), (12, 57661), (19, 57688), (21, 57709), (22, 57712), (24, 57739), (27, 57760), (29, 57769), (36, 57829), (39, 57859), (41, 57877), (42, 57883), (43, 57916), (44, 57919), (45, 57937), (49, 57961), (50, 57988),

Gene: VioletZ\_66 Start: 58743, Stop: 59114, Start Num: 8

Candidate Starts for VioletZ\_66:

(Start: 8 @58743 has 20 MA's), (11, 58782), (15, 58815), (19, 58836), (21, 58857), (22, 58860), (27, 58908), (28, 58914), (32, 58929), (36, 58941), (42, 58998), (49, 59049),

Gene: Waleliano\_64 Start: 58683, Stop: 59084, Start Num: 8

Candidate Starts for Waleliano\_64:

(Start: 8 @58683 has 20 MA's), (11, 58722), (21, 58794), (22, 58797), (24, 58824), (25, 58827), (27, 58845), (28, 58851), (32, 58866), (34, 58878), (41, 58929), (42, 58935), (43, 58968), (44, 58971), (45, 58989), (49, 59013),

Gene: Zemanar\_64 Start: 58518, Stop: 58901, Start Num: 8

Candidate Starts for Zemanar\_64:

(Start: 8 @58518 has 20 MA's), (11, 58557), (19, 58617), (21, 58638), (22, 58641), (27, 58689), (28, 58695), (32, 58710), (34, 58722), (41, 58767), (42, 58773),