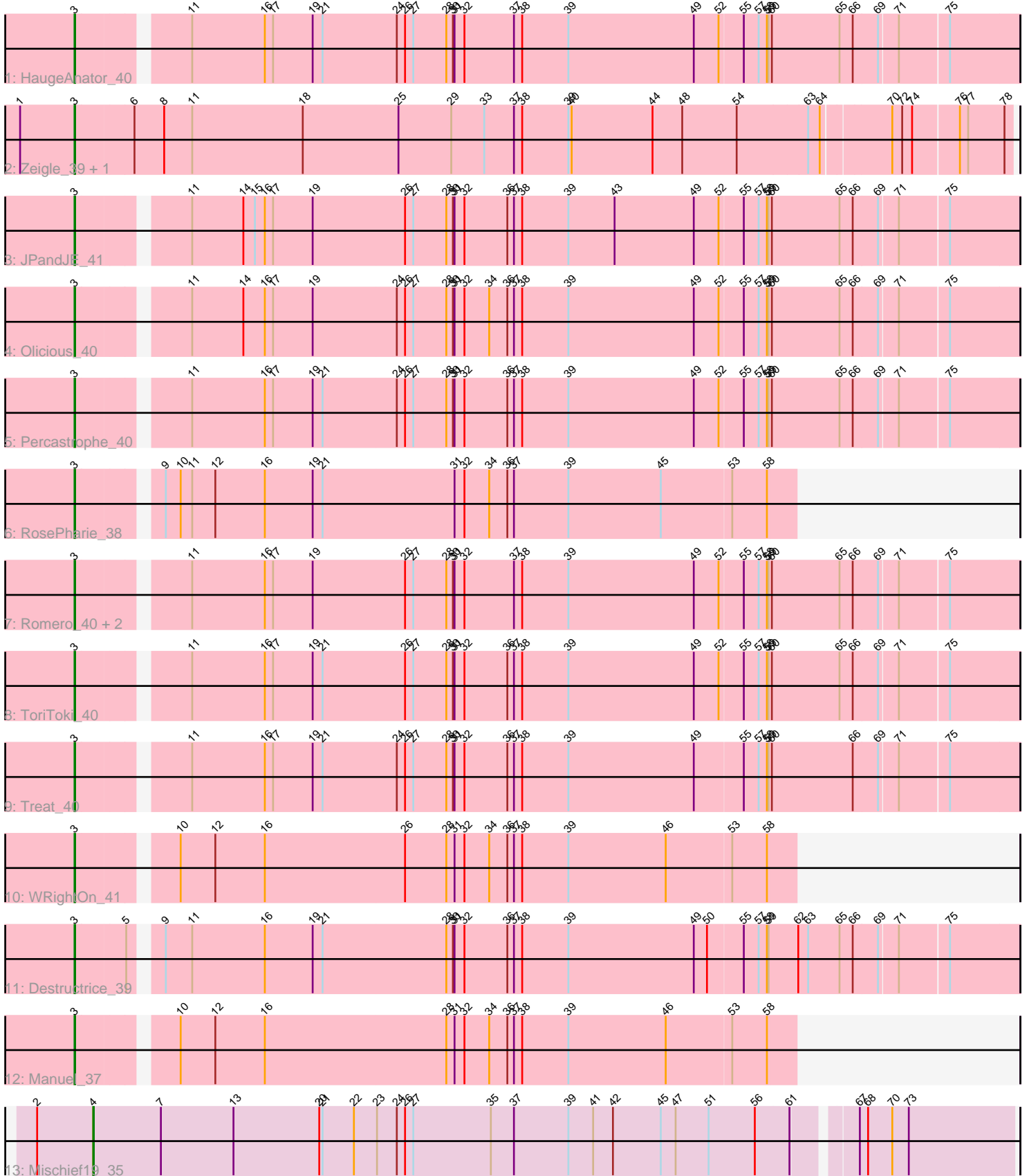


Pham 305364



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 305364 Report

This analysis was run 06/08/26 on database version 649.

WARNING: Pham size does not match number of genes in report. Either unphamerated genes have been added (by you) or starterator has removed genes due to invalid start codon.

Pham number 305364 has 16 members, 0 are drafts.

Phages represented in each track:

- Track 1 : HaugeAnator\_40
- Track 2 : Zeigle\_39, Kumquat\_39
- Track 3 : JPandJE\_41
- Track 4 : Olicious\_40
- Track 5 : Percastrophe\_40
- Track 6 : RosePharie\_38
- Track 7 : Romero\_40, Immanuel3\_40, ZooBear\_40
- Track 8 : ToriToki\_40
- Track 9 : Treat\_40
- Track 10 : WRightOn\_41
- Track 11 : Destructrice\_39
- Track 12 : Manuel\_37
- Track 13 : Mischief19\_35

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

The start number called the most often in the published annotations is 3, it was called in 15 of the 16 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Destructrice\_39, HaugeAnator\_40, Immanuel3\_40, JPandJE\_41, Kumquat\_39, Manuel\_37, Olicious\_40, Percastrophe\_40, Romero\_40, RosePharie\_38, ToriToki\_40, Treat\_40, WRightOn\_41, Zeigle\_39, ZooBear\_40,

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

- 

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

- Mischief19\_35,

## Summary by start number:

### Start 3:

- Found in 15 of 16 ( 93.8% ) of genes in pham
- Manual Annotations of this start: 15 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Destructrice\_39 (BF), HaugeAnator\_40 (BF), Immanuel3\_40 (BF), JPandJE\_41 (BF), Kumquat\_39 (BF), Manuel\_37 (BF), Olicious\_40 (BF), Percastrophe\_40 (BF), Romero\_40 (BF), RosePharie\_38 (BF), ToriToki\_40 (BF), Treat\_40 (BF), WRightOn\_41 (BF), Zeigle\_39 (BF), ZooBear\_40 (BF),

### Start 4:

- Found in 1 of 16 ( 6.2% ) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Mischief19\_35 (BG),

## Summary by clusters:

There are 2 clusters represented in this pham: BF, BG,

Info for manual annotations of cluster BF:

- Start number 3 was manually annotated 15 times for cluster BF.

Info for manual annotations of cluster BG:

- Start number 4 was manually annotated 1 time for cluster BG.

## Gene Information:

Gene: Destructrice\_39 Start: 20312, Stop: 21973, Start Num: 3

Candidate Starts for Destructrice\_39:

(Start: 3 @20312 has 15 MA's), (5, 20399), (9, 20441), (11, 20489), (16, 20621), (19, 20708), (21, 20726), (28, 20948), (30, 20960), (31, 20963), (32, 20981), (36, 21059), (37, 21071), (38, 21086), (39, 21170), (49, 21398), (50, 21422), (55, 21485), (57, 21512), (58, 21527), (59, 21530), (62, 21584), (63, 21602), (65, 21659), (66, 21683), (69, 21728), (71, 21761), (75, 21848),

Gene: HaugeAnator\_40 Start: 20353, Stop: 22014, Start Num: 3

Candidate Starts for HaugeAnator\_40:

(Start: 3 @20353 has 15 MA's), (11, 20530), (16, 20662), (17, 20677), (19, 20749), (21, 20767), (24, 20899), (26, 20914), (27, 20929), (28, 20989), (30, 21001), (31, 21004), (32, 21022), (37, 21112), (38, 21127), (39, 21211), (49, 21439), (52, 21484), (55, 21526), (57, 21553), (58, 21568), (59, 21571), (60, 21577), (65, 21700), (66, 21724), (69, 21769), (71, 21802), (75, 21889),

Gene: Immanuel3\_40 Start: 20357, Stop: 22018, Start Num: 3

Candidate Starts for Immanuel3\_40:

(Start: 3 @20357 has 15 MA's), (11, 20534), (16, 20666), (17, 20681), (19, 20753), (26, 20918), (27, 20933), (28, 20993), (30, 21005), (31, 21008), (32, 21026), (37, 21116), (38, 21131), (39, 21215), (49, 21443), (52, 21488), (55, 21530), (57, 21557), (58, 21572), (59, 21575), (60, 21581), (65, 21704), (66, 21728), (69, 21773), (71, 21806), (75, 21893),

Gene: JPandJE\_41 Start: 20824, Stop: 22485, Start Num: 3

Candidate Starts for JPandJE\_41:

(Start: 3 @20824 has 15 MA's), (11, 21001), (14, 21094), (15, 21115), (16, 21133), (17, 21148), (19, 21220), (26, 21385), (27, 21400), (28, 21460), (30, 21472), (31, 21475), (32, 21493), (36, 21571), (37, 21583), (38, 21598), (39, 21682), (43, 21766), (49, 21910), (52, 21955), (55, 21997), (57, 22024), (58, 22039), (59, 22042), (60, 22048), (65, 22171), (66, 22195), (69, 22240), (71, 22273), (75, 22360),

Gene: Kumquat\_39 Start: 20339, Stop: 22009, Start Num: 3

Candidate Starts for Kumquat\_39:

(1, 20240), (Start: 3 @20339 has 15 MA's), (6, 20441), (8, 20495), (11, 20546), (18, 20747), (25, 20918), (29, 21014), (33, 21074), (37, 21128), (38, 21143), (39, 21227), (40, 21233), (44, 21380), (48, 21434), (54, 21533), (63, 21659), (64, 21680), (70, 21797), (72, 21815), (74, 21833), (76, 21914), (77, 21929), (78, 21995),

Gene: Manuel\_37 Start: 20371, Stop: 21636, Start Num: 3

Candidate Starts for Manuel\_37:

(Start: 3 @20371 has 15 MA's), (10, 20527), (12, 20590), (16, 20680), (28, 21007), (31, 21022), (32, 21040), (34, 21085), (36, 21118), (37, 21130), (38, 21145), (39, 21229), (46, 21406), (53, 21523), (58, 21586),

Gene: Mischief19\_35 Start: 35508, Stop: 37142, Start Num: 4

Candidate Starts for Mischief19\_35:

(2, 35406), (Start: 4 @35508 has 1 MA's), (7, 35628), (13, 35760), (20, 35916), (21, 35922), (22, 35979), (23, 36021), (24, 36057), (26, 36072), (27, 36087), (35, 36228), (37, 36270), (39, 36369), (41, 36414), (42, 36450), (45, 36537), (47, 36564), (51, 36624), (56, 36708), (61, 36768), (67, 36864), (68, 36879), (70, 36921), (73, 36951),

Gene: Olicious\_40 Start: 20353, Stop: 22014, Start Num: 3

Candidate Starts for Olicious\_40:

(Start: 3 @20353 has 15 MA's), (11, 20530), (14, 20623), (16, 20662), (17, 20677), (19, 20749), (24, 20899), (26, 20914), (27, 20929), (28, 20989), (30, 21001), (31, 21004), (32, 21022), (34, 21067), (36, 21100), (37, 21112), (38, 21127), (39, 21211), (49, 21439), (52, 21484), (55, 21526), (57, 21553), (58, 21568), (59, 21571), (60, 21577), (65, 21700), (66, 21724), (69, 21769), (71, 21802), (75, 21889),

Gene: Percastrophe\_40 Start: 20287, Stop: 21948, Start Num: 3

Candidate Starts for Percastrophe\_40:

(Start: 3 @20287 has 15 MA's), (11, 20464), (16, 20596), (17, 20611), (19, 20683), (21, 20701), (24, 20833), (26, 20848), (27, 20863), (28, 20923), (30, 20935), (31, 20938), (32, 20956), (36, 21034), (37, 21046), (38, 21061), (39, 21145), (49, 21373), (52, 21418), (55, 21460), (57, 21487), (58, 21502), (59, 21505), (60, 21511), (65, 21634), (66, 21658), (69, 21703), (71, 21736), (75, 21823),

Gene: Romero\_40 Start: 20346, Stop: 22007, Start Num: 3

Candidate Starts for Romero\_40:

(Start: 3 @20346 has 15 MA's), (11, 20523), (16, 20655), (17, 20670), (19, 20742), (26, 20907), (27, 20922), (28, 20982), (30, 20994), (31, 20997), (32, 21015), (37, 21105), (38, 21120), (39, 21204), (49, 21432), (52, 21477), (55, 21519), (57, 21546), (58, 21561), (59, 21564), (60, 21570), (65, 21693), (66, 21717), (69, 21762), (71, 21795), (75, 21882),

Gene: RosePharie\_38 Start: 20387, Stop: 21652, Start Num: 3

Candidate Starts for RosePharie\_38:

(Start: 3 @20387 has 15 MA's), (9, 20516), (10, 20543), (11, 20564), (12, 20606), (16, 20696), (19, 20783), (21, 20801), (31, 21038), (32, 21056), (34, 21101), (36, 21134), (37, 21146), (39, 21245), (45, 21413), (53, 21539), (58, 21602),

Gene: ToriToki\_40 Start: 20346, Stop: 22007, Start Num: 3

Candidate Starts for ToriToki\_40:

(Start: 3 @20346 has 15 MA's), (11, 20523), (16, 20655), (17, 20670), (19, 20742), (21, 20760), (26, 20907), (27, 20922), (28, 20982), (30, 20994), (31, 20997), (32, 21015), (36, 21093), (37, 21105), (38, 21120), (39, 21204), (49, 21432), (52, 21477), (55, 21519), (57, 21546), (58, 21561), (59, 21564), (60, 21570), (65, 21693), (66, 21717), (69, 21762), (71, 21795), (75, 21882),

Gene: Treat\_40 Start: 20290, Stop: 21951, Start Num: 3

Candidate Starts for Treat\_40:

(Start: 3 @20290 has 15 MA's), (11, 20467), (16, 20599), (17, 20614), (19, 20686), (21, 20704), (24, 20836), (26, 20851), (27, 20866), (28, 20926), (30, 20938), (31, 20941), (32, 20959), (36, 21037), (37, 21049), (38, 21064), (39, 21148), (49, 21376), (55, 21463), (57, 21490), (58, 21505), (59, 21508), (60, 21514), (66, 21661), (69, 21706), (71, 21739), (75, 21826),

Gene: WRightOn\_41 Start: 20449, Stop: 21714, Start Num: 3

Candidate Starts for WRightOn\_41:

(Start: 3 @20449 has 15 MA's), (10, 20605), (12, 20668), (16, 20758), (26, 21010), (28, 21085), (31, 21100), (32, 21118), (34, 21163), (36, 21196), (37, 21208), (38, 21223), (39, 21307), (46, 21484), (53, 21601), (58, 21664),

Gene: Zeigle\_39 Start: 20339, Stop: 22009, Start Num: 3

Candidate Starts for Zeigle\_39:

(1, 20240), (Start: 3 @20339 has 15 MA's), (6, 20441), (8, 20495), (11, 20546), (18, 20747), (25, 20918), (29, 21014), (33, 21074), (37, 21128), (38, 21143), (39, 21227), (40, 21233), (44, 21380), (48, 21434), (54, 21533), (63, 21659), (64, 21680), (70, 21797), (72, 21815), (74, 21833), (76, 21914), (77, 21929), (78, 21995),

Gene: ZooBear\_40 Start: 20353, Stop: 22014, Start Num: 3

Candidate Starts for ZooBear\_40:

(Start: 3 @20353 has 15 MA's), (11, 20530), (16, 20662), (17, 20677), (19, 20749), (26, 20914), (27, 20929), (28, 20989), (30, 21001), (31, 21004), (32, 21022), (37, 21112), (38, 21127), (39, 21211), (49, 21439), (52, 21484), (55, 21526), (57, 21553), (58, 21568), (59, 21571), (60, 21577), (65, 21700), (66, 21724), (69, 21769), (71, 21802), (75, 21889),