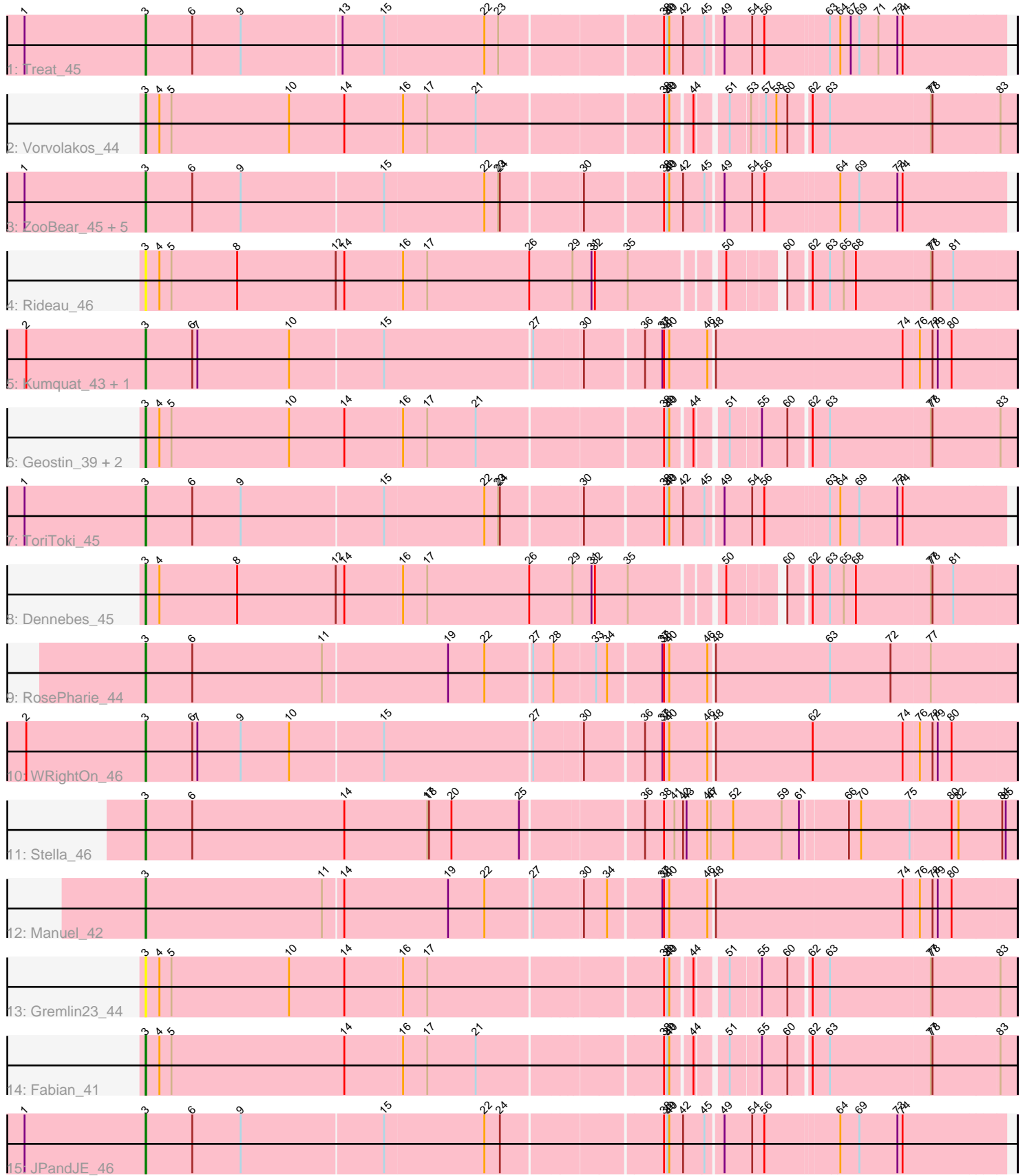


## Pham 4008



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 4008 Report

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

Pham number 4008 has 23 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Treat\_45
- Track 2 : Vorvolakos\_44
- Track 3 : ZooBear\_45, Romero\_45, Olicious\_45, Immanuel3\_45, Percastrophe\_45, HaugeAnator\_45
- Track 4 : Rideau\_46
- Track 5 : Kumquat\_43, Zeigle\_43
- Track 6 : Geostin\_39, RetrieverFever\_44, FlowerPower\_44
- Track 7 : ToriToki\_45
- Track 8 : Dennebes\_45
- Track 9 : RosePharie\_44
- Track 10 : WRightOn\_46
- Track 11 : Stella\_46
- Track 12 : Manuel\_42
- Track 13 : Gremlin23\_44
- Track 14 : Fabian\_41
- Track 15 : JPandJE\_46

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

Genes that call this "Most Annotated" start:

- Dennebes\_45, Fabian\_41, FlowerPower\_44, Geostin\_39, Gremlin23\_44, HaugeAnator\_45, Immanuel3\_45, JPandJE\_46, Kumquat\_43, Manuel\_42, Olicious\_45, Percastrophe\_45, RetrieverFever\_44, Rideau\_46, Romero\_45, RosePharie\_44, Stella\_46, ToriToki\_45, Treat\_45, Vorvolakos\_44, WRightOn\_46, Zeigle\_43, ZooBear\_45,

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

- 

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

-

## Summary by start number:

Start 3:

- Found in 23 of 23 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 21 of 21
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Dennebes\_45 (BF), Fabian\_41 (BF), FlowerPower\_44 (BF), Geostin\_39 (BF), Gremlin23\_44 (BF), HaugeAnator\_45 (BF), Immanuel3\_45 (BF), JPandJE\_46 (BF), Kumquat\_43 (BF), Manuel\_42 (BF), Olicious\_45 (BF), Percastrophe\_45 (BF), RetrieverFever\_44 (BF), Rideau\_46 (BF), Romero\_45 (BF), RosePharie\_44 (BF), Stella\_46 (BF), ToriToki\_45 (BF), Treat\_45 (BF), Vorvolakos\_44 (BF), WRightOn\_46 (BF), Zeigle\_43 (BF), ZooBear\_45 (BF),

## Summary by clusters:

There is one cluster represented in this pham: BF

Info for manual annotations of cluster BF:

- Start number 3 was manually annotated 21 times for cluster BF.

## Gene Information:

Gene: Dennebes\_45 Start: 23440, Stop: 24864, Start Num: 3

Candidate Starts for Dennebes\_45:

(Start: 3 @23440 has 21 MA's), (4, 23464), (8, 23599), (12, 23770), (14, 23785), (16, 23884), (17, 23926), (26, 24103), (29, 24178), (31, 24211), (32, 24217), (35, 24274), (50, 24409), (60, 24487), (62, 24520), (63, 24547), (65, 24571), (68, 24592), (77, 24718), (78, 24721), (81, 24757),

Gene: Fabian\_41 Start: 23427, Stop: 24848, Start Num: 3

Candidate Starts for Fabian\_41:

(Start: 3 @23427 has 21 MA's), (4, 23451), (5, 23472), (14, 23772), (16, 23871), (17, 23913), (21, 23997), (38, 24297), (39, 24303), (40, 24306), (44, 24339), (51, 24381), (55, 24429), (60, 24471), (62, 24504), (63, 24531), (77, 24702), (78, 24705), (83, 24819),

Gene: FlowerPower\_44 Start: 23427, Stop: 24848, Start Num: 3

Candidate Starts for FlowerPower\_44:

(Start: 3 @23427 has 21 MA's), (4, 23451), (5, 23472), (10, 23676), (14, 23772), (16, 23871), (17, 23913), (21, 23997), (38, 24297), (39, 24303), (40, 24306), (44, 24339), (51, 24381), (55, 24429), (60, 24471), (62, 24504), (63, 24531), (77, 24702), (78, 24705), (83, 24819),

Gene: Geostin\_39 Start: 23427, Stop: 24848, Start Num: 3

Candidate Starts for Geostin\_39:

(Start: 3 @23427 has 21 MA's), (4, 23451), (5, 23472), (10, 23676), (14, 23772), (16, 23871), (17, 23913), (21, 23997), (38, 24297), (39, 24303), (40, 24306), (44, 24339), (51, 24381), (55, 24429), (60, 24471), (62, 24504), (63, 24531), (77, 24702), (78, 24705), (83, 24819),

Gene: Gremlin23\_44 Start: 23427, Stop: 24848, Start Num: 3

Candidate Starts for Gremlin23\_44:

(Start: 3 @23427 has 21 MA's), (4, 23451), (5, 23472), (10, 23676), (14, 23772), (16, 23871), (17, 23913), (38, 24297), (39, 24303), (40, 24306), (44, 24339), (51, 24381), (55, 24429), (60, 24471), (62,

24504), (63, 24531), (77, 24702), (78, 24705), (83, 24819),

Gene: HaugeAnator\_45 Start: 24018, Stop: 25451, Start Num: 3

Candidate Starts for HaugeAnator\_45:

(1, 23808), (Start: 3 @24018 has 21 MA's), (6, 24099), (9, 24183), (15, 24426), (22, 24597), (23, 24621), (24, 24624), (30, 24756), (38, 24885), (39, 24891), (40, 24894), (42, 24918), (45, 24954), (49, 24981), (54, 25029), (56, 25050), (64, 25170), (69, 25203), (73, 25269), (74, 25278),

Gene: Immanuel3\_45 Start: 24022, Stop: 25455, Start Num: 3

Candidate Starts for Immanuel3\_45:

(1, 23812), (Start: 3 @24022 has 21 MA's), (6, 24103), (9, 24187), (15, 24430), (22, 24601), (23, 24625), (24, 24628), (30, 24760), (38, 24889), (39, 24895), (40, 24898), (42, 24922), (45, 24958), (49, 24985), (54, 25033), (56, 25054), (64, 25174), (69, 25207), (73, 25273), (74, 25282),

Gene: JPandJE\_46 Start: 24486, Stop: 25919, Start Num: 3

Candidate Starts for JPandJE\_46:

(1, 24276), (Start: 3 @24486 has 21 MA's), (6, 24567), (9, 24651), (15, 24894), (22, 25065), (24, 25092), (38, 25353), (39, 25359), (40, 25362), (42, 25386), (45, 25422), (49, 25449), (54, 25497), (56, 25518), (64, 25638), (69, 25671), (73, 25737), (74, 25746),

Gene: Kumquat\_43 Start: 23550, Stop: 25010, Start Num: 3

Candidate Starts for Kumquat\_43:

(2, 23343), (Start: 3 @23550 has 21 MA's), (6, 23631), (7, 23640), (10, 23799), (15, 23958), (27, 24210), (30, 24288), (36, 24384), (37, 24414), (38, 24417), (40, 24426), (46, 24492), (48, 24498), (74, 24819), (76, 24846), (78, 24867), (79, 24876), (80, 24900),

Gene: Manuel\_42 Start: 23628, Stop: 25091, Start Num: 3

Candidate Starts for Manuel\_42:

(Start: 3 @23628 has 21 MA's), (11, 23934), (14, 23967), (19, 24147), (22, 24210), (27, 24288), (30, 24369), (34, 24408), (37, 24495), (38, 24498), (40, 24507), (46, 24573), (48, 24579), (74, 24900), (76, 24927), (78, 24948), (79, 24957), (80, 24981),

Gene: Olicious\_45 Start: 24018, Stop: 25451, Start Num: 3

Candidate Starts for Olicious\_45:

(1, 23808), (Start: 3 @24018 has 21 MA's), (6, 24099), (9, 24183), (15, 24426), (22, 24597), (23, 24621), (24, 24624), (30, 24756), (38, 24885), (39, 24891), (40, 24894), (42, 24918), (45, 24954), (49, 24981), (54, 25029), (56, 25050), (64, 25170), (69, 25203), (73, 25269), (74, 25278),

Gene: Percastrophe\_45 Start: 23952, Stop: 25385, Start Num: 3

Candidate Starts for Percastrophe\_45:

(1, 23742), (Start: 3 @23952 has 21 MA's), (6, 24033), (9, 24117), (15, 24360), (22, 24531), (23, 24555), (24, 24558), (30, 24690), (38, 24819), (39, 24825), (40, 24828), (42, 24852), (45, 24888), (49, 24915), (54, 24963), (56, 24984), (64, 25104), (69, 25137), (73, 25203), (74, 25212),

Gene: RetrieverFever\_44 Start: 23427, Stop: 24848, Start Num: 3

Candidate Starts for RetrieverFever\_44:

(Start: 3 @23427 has 21 MA's), (4, 23451), (5, 23472), (10, 23676), (14, 23772), (16, 23871), (17, 23913), (21, 23997), (38, 24297), (39, 24303), (40, 24306), (44, 24339), (51, 24381), (55, 24429), (60, 24471), (62, 24504), (63, 24531), (77, 24702), (78, 24705), (83, 24819),

Gene: Rideau\_46 Start: 23440, Stop: 24864, Start Num: 3

Candidate Starts for Rideau\_46:

(Start: 3 @23440 has 21 MA's), (4, 23464), (5, 23485), (8, 23599), (12, 23770), (14, 23785), (16, 23884), (17, 23926), (26, 24103), (29, 24178), (31, 24211), (32, 24217), (35, 24274), (50, 24409), (60, 24487), (62, 24520), (63, 24547), (65, 24571), (68, 24592), (77, 24718), (78, 24721), (81, 24757),

Gene: Romero\_45 Start: 24011, Stop: 25444, Start Num: 3

Candidate Starts for Romero\_45:

(1, 23801), (Start: 3 @24011 has 21 MA's), (6, 24092), (9, 24176), (15, 24419), (22, 24590), (23, 24614), (24, 24617), (30, 24749), (38, 24878), (39, 24884), (40, 24887), (42, 24911), (45, 24947), (49, 24974), (54, 25022), (56, 25043), (64, 25163), (69, 25196), (73, 25262), (74, 25271),

Gene: RosePharie\_44 Start: 24128, Stop: 25594, Start Num: 3

Candidate Starts for RosePharie\_44:

(Start: 3 @24128 has 21 MA's), (6, 24209), (11, 24434), (19, 24647), (22, 24710), (27, 24788), (28, 24821), (33, 24890), (34, 24908), (37, 24995), (38, 24998), (40, 25007), (46, 25073), (48, 25079), (63, 25277), (72, 25382), (77, 25448),

Gene: Stella\_46 Start: 24101, Stop: 25570, Start Num: 3

Candidate Starts for Stella\_46:

(Start: 3 @24101 has 21 MA's), (6, 24182), (14, 24446), (17, 24590), (18, 24593), (20, 24632), (25, 24749), (36, 24941), (38, 24974), (41, 24992), (42, 25007), (43, 25013), (46, 25049), (47, 25055), (52, 25094), (59, 25178), (61, 25208), (66, 25286), (70, 25304), (75, 25388), (80, 25457), (82, 25469), (84, 25544), (85, 25550),

Gene: ToriToki\_45 Start: 24011, Stop: 25444, Start Num: 3

Candidate Starts for ToriToki\_45:

(1, 23801), (Start: 3 @24011 has 21 MA's), (6, 24092), (9, 24176), (15, 24419), (22, 24590), (23, 24614), (24, 24617), (30, 24749), (38, 24878), (39, 24884), (40, 24887), (42, 24911), (45, 24947), (49, 24974), (54, 25022), (56, 25043), (63, 25148), (64, 25163), (69, 25196), (73, 25262), (74, 25271),

Gene: Treat\_45 Start: 23955, Stop: 25388, Start Num: 3

Candidate Starts for Treat\_45:

(1, 23745), (Start: 3 @23955 has 21 MA's), (6, 24036), (9, 24120), (13, 24291), (15, 24363), (22, 24534), (23, 24558), (38, 24822), (39, 24828), (40, 24831), (42, 24855), (45, 24891), (49, 24918), (54, 24966), (56, 24987), (63, 25092), (64, 25107), (67, 25125), (69, 25140), (71, 25173), (73, 25206), (74, 25215),

Gene: Vorvolakos\_44 Start: 23426, Stop: 24847, Start Num: 3

Candidate Starts for Vorvolakos\_44:

(Start: 3 @23426 has 21 MA's), (4, 23450), (5, 23471), (10, 23675), (14, 23771), (16, 23870), (17, 23912), (21, 23996), (38, 24296), (39, 24302), (40, 24305), (44, 24338), (51, 24380), (53, 24413), (57, 24434), (58, 24452), (60, 24470), (62, 24503), (63, 24530), (77, 24701), (78, 24704), (83, 24818),

Gene: WRightOn\_46 Start: 23706, Stop: 25166, Start Num: 3

Candidate Starts for WRightOn\_46:

(2, 23499), (Start: 3 @23706 has 21 MA's), (6, 23787), (7, 23796), (9, 23871), (10, 23955), (15, 24114), (27, 24366), (30, 24444), (36, 24540), (37, 24570), (38, 24573), (40, 24582), (46, 24648), (48, 24654), (62, 24822), (74, 24975), (76, 25002), (78, 25023), (79, 25032), (80, 25056),

Gene: Zeigle\_43 Start: 23550, Stop: 25010, Start Num: 3

Candidate Starts for Zeigle\_43:

(2, 23343), (Start: 3 @23550 has 21 MA's), (6, 23631), (7, 23640), (10, 23799), (15, 23958), (27, 24210), (30, 24288), (36, 24384), (37, 24414), (38, 24417), (40, 24426), (46, 24492), (48, 24498), (74, 24819), (76, 24846), (78, 24867), (79, 24876), (80, 24900),

Gene: ZooBear\_45 Start: 24018, Stop: 25451, Start Num: 3

Candidate Starts for ZooBear\_45:

(1, 23808), (Start: 3 @24018 has 21 MA's), (6, 24099), (9, 24183), (15, 24426), (22, 24597), (23, 24621), (24, 24624), (30, 24756), (38, 24885), (39, 24891), (40, 24894), (42, 24918), (45, 24954), (49, 24981), (54, 25029), (56, 25050), (64, 25170), (69, 25203), (73, 25269), (74, 25278),