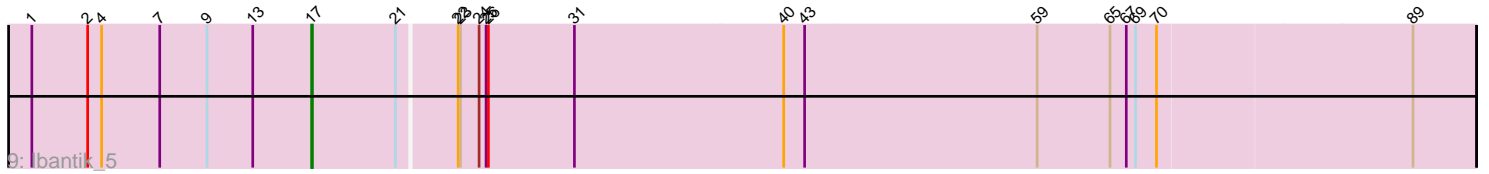
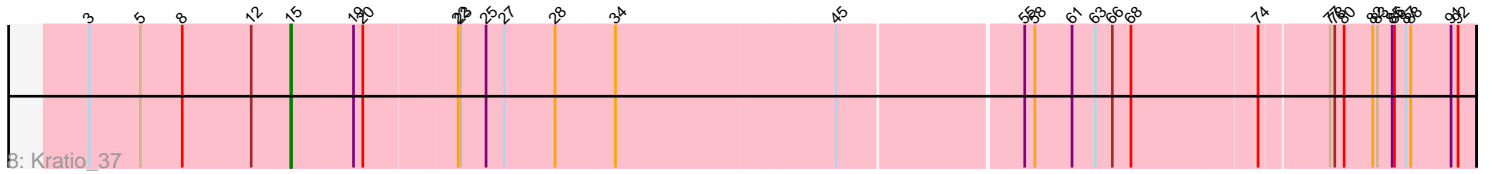
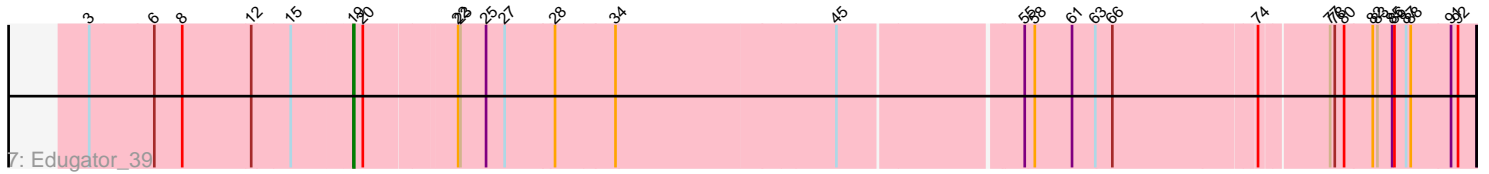
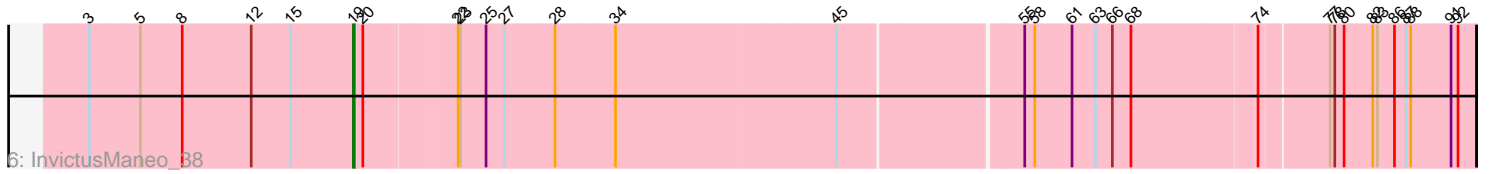
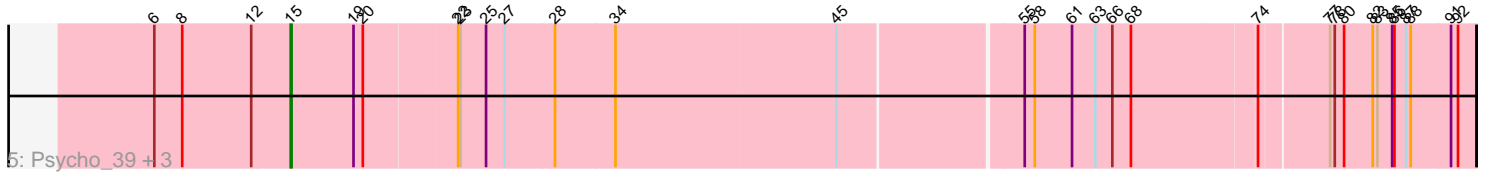
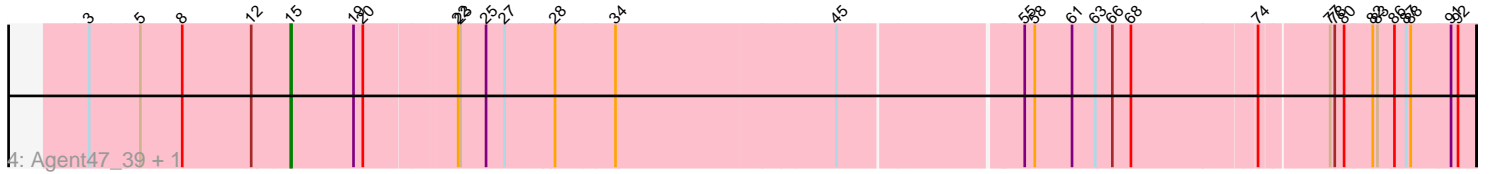
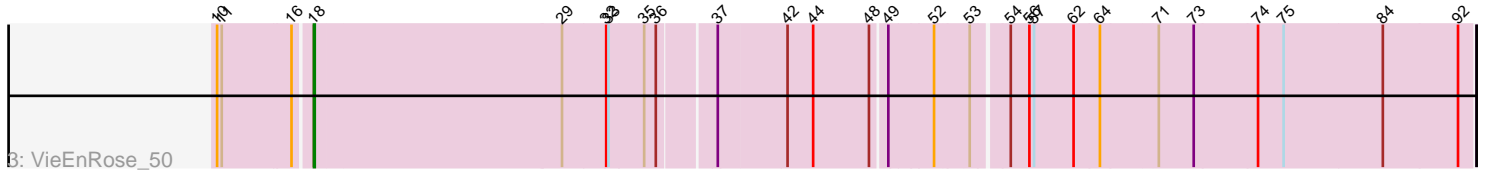
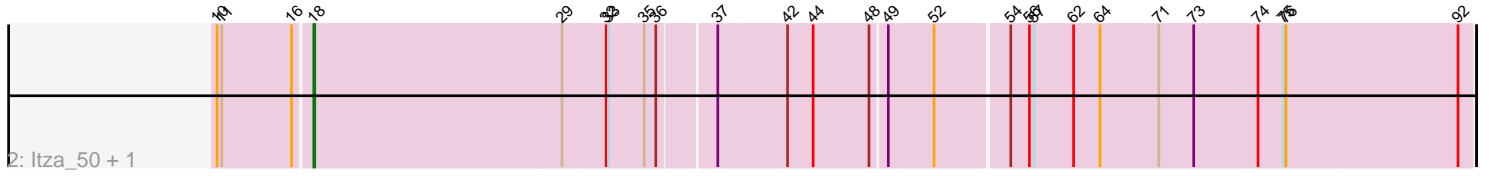
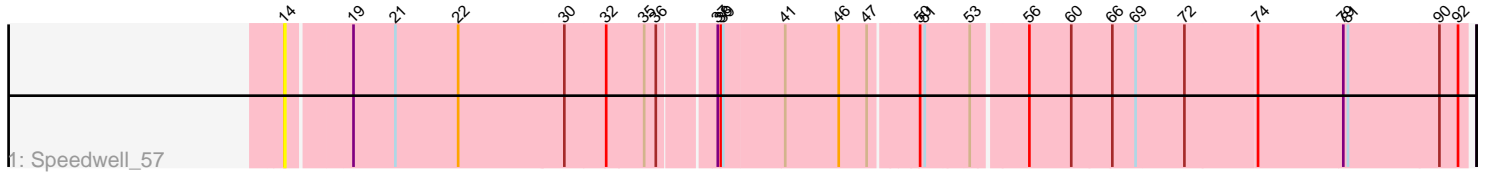


# Pham 194418



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 194418 Report

This analysis was run 11/02/24 on database version 579.

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 194418 has 14 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Speedwell\_57
- Track 2 : Itza\_50, Urza\_50
- Track 3 : VieEnRose\_50
- Track 4 : Agent47\_39, Collard\_38
- Track 5 : Psycho\_39, Dadosky\_39, AlleyCat\_39, Larva\_39
- Track 6 : InvictusManeo\_38
- Track 7 : Edugator\_39
- Track 8 : Kratio\_37
- Track 9 : Ibantik\_5

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

The start number called the most often in the published annotations is 15, it was called in 7 of the 13 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Agent47\_39, AlleyCat\_39, Collard\_38, Dadosky\_39, Kratio\_37, Larva\_39, Psycho\_39,

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

- Edugator\_39, InvictusManeo\_38,

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

- Ibantik\_5, Itza\_50, Speedwell\_57, Urza\_50, VieEnRose\_50,

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

Start 14:

- Found in 1 of 14 ( 7.1% ) of genes in pham
- No Manual Annotations of this start.

- Called 100.0% of time when present
- Phage (with cluster) where this start called: Speedwell\_57 (BD3),

Start 15:

- Found in 9 of 14 ( 64.3% ) of genes in pham
- Manual Annotations of this start: 7 of 13
- Called 77.8% of time when present
- Phage (with cluster) where this start called: Agent47\_39 (K5), AlleyCat\_39 (K5), Collard\_38 (K5), Dadosky\_39 (K5), Kratio\_37 (K5), Larva\_39 (K5), Psycho\_39 (K5),

Start 17:

- Found in 1 of 14 ( 7.1% ) of genes in pham
- Manual Annotations of this start: 1 of 13
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ibantik\_5 (singleton),

Start 18:

- Found in 3 of 14 ( 21.4% ) of genes in pham
- Manual Annotations of this start: 3 of 13
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Itza\_50 (BD6), Urza\_50 (BD6), VieEnRose\_50 (BD6),

Start 19:

- Found in 10 of 14 ( 71.4% ) of genes in pham
- Manual Annotations of this start: 2 of 13
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Edugator\_39 (K5), InvictusManeo\_38 (K5),

### **Summary by clusters:**

There are 4 clusters represented in this pham: singleton, BD6, BD3, K5,

Info for manual annotations of cluster BD6:

- Start number 18 was manually annotated 3 times for cluster BD6.

Info for manual annotations of cluster K5:

- Start number 15 was manually annotated 7 times for cluster K5.
- Start number 19 was manually annotated 2 times for cluster K5.

### **Gene Information:**

Gene: Agent47\_39 Start: 31420, Stop: 32865, Start Num: 15

Candidate Starts for Agent47\_39:

(3, 31168), (5, 31231), (8, 31285), (12, 31372), (Start: 15 @31420 has 7 MA's), (Start: 19 @31495 has 2 MA's), (20, 31507), (22, 31618), (23, 31621), (25, 31654), (27, 31678), (28, 31741), (34, 31816), (45, 32092), (55, 32314), (58, 32326), (61, 32374), (63, 32404), (66, 32425), (68, 32449), (74, 32602), (77, 32683), (78, 32689), (80, 32701), (82, 32737), (83, 32743), (86, 32764), (87, 32779), (88, 32785), (91, 32833), (92, 32842),

Gene: AlleyCat\_39 Start: 31272, Stop: 32717, Start Num: 15

Candidate Starts for AlleyCat\_39:

(6, 31101), (8, 31137), (12, 31224), (Start: 15 @31272 has 7 MA's), (Start: 19 @31347 has 2 MA's), (20, 31359), (22, 31470), (23, 31473), (25, 31506), (27, 31530), (28, 31593), (34, 31668), (45, 31944), (55, 32166), (58, 32178), (61, 32226), (63, 32256), (66, 32277), (68, 32301), (74, 32454), (77, 32535), (78, 32541), (80, 32553), (82, 32589), (83, 32595), (85, 32613), (86, 32616), (87, 32631), (88, 32637), (91, 32685), (92, 32694),

Gene: Collard\_38 Start: 31381, Stop: 32826, Start Num: 15

Candidate Starts for Collard\_38:

(3, 31129), (5, 31192), (8, 31246), (12, 31333), (Start: 15 @31381 has 7 MA's), (Start: 19 @31456 has 2 MA's), (20, 31468), (22, 31579), (23, 31582), (25, 31615), (27, 31639), (28, 31702), (34, 31777), (45, 32053), (55, 32275), (58, 32287), (61, 32335), (63, 32365), (66, 32386), (68, 32410), (74, 32563), (77, 32644), (78, 32650), (80, 32662), (82, 32698), (83, 32704), (86, 32725), (87, 32740), (88, 32746), (91, 32794), (92, 32803),

Gene: Dadosky\_39 Start: 31274, Stop: 32719, Start Num: 15

Candidate Starts for Dadosky\_39:

(6, 31103), (8, 31139), (12, 31226), (Start: 15 @31274 has 7 MA's), (Start: 19 @31349 has 2 MA's), (20, 31361), (22, 31472), (23, 31475), (25, 31508), (27, 31532), (28, 31595), (34, 31670), (45, 31946), (55, 32168), (58, 32180), (61, 32228), (63, 32258), (66, 32279), (68, 32303), (74, 32456), (77, 32537), (78, 32543), (80, 32555), (82, 32591), (83, 32597), (85, 32615), (86, 32618), (87, 32633), (88, 32639), (91, 32687), (92, 32696),

Gene: Edugator\_39 Start: 31774, Stop: 33144, Start Num: 19

Candidate Starts for Edugator\_39:

(3, 31447), (6, 31528), (8, 31564), (12, 31651), (Start: 15 @31699 has 7 MA's), (Start: 19 @31774 has 2 MA's), (20, 31786), (22, 31897), (23, 31900), (25, 31933), (27, 31957), (28, 32020), (34, 32095), (45, 32371), (55, 32593), (58, 32605), (61, 32653), (63, 32683), (66, 32704), (74, 32881), (77, 32962), (78, 32968), (80, 32980), (82, 33016), (83, 33022), (85, 33040), (86, 33043), (87, 33058), (88, 33064), (91, 33112), (92, 33121),

Gene: Ibantik\_5 Start: 2018, Stop: 3472, Start Num: 17

Candidate Starts for Ibantik\_5:

(1, 1661), (2, 1733), (4, 1751), (7, 1826), (9, 1886), (13, 1943), (Start: 17 @2018 has 1 MA's), (21, 2126), (22, 2195), (23, 2198), (24, 2222), (25, 2231), (26, 2234), (31, 2345), (40, 2612), (43, 2639), (59, 2936), (65, 3026), (67, 3047), (69, 3059), (70, 3083), (89, 3395),

Gene: InvictusManeo\_38 Start: 31499, Stop: 32869, Start Num: 19

Candidate Starts for InvictusManeo\_38:

(3, 31172), (5, 31235), (8, 31289), (12, 31376), (Start: 15 @31424 has 7 MA's), (Start: 19 @31499 has 2 MA's), (20, 31511), (22, 31622), (23, 31625), (25, 31658), (27, 31682), (28, 31745), (34, 31820), (45, 32096), (55, 32318), (58, 32330), (61, 32378), (63, 32408), (66, 32429), (68, 32453), (74, 32606), (77, 32687), (78, 32693), (80, 32705), (82, 32741), (83, 32747), (86, 32768), (87, 32783), (88, 32789), (91, 32837), (92, 32846),

Gene: Itza\_50 Start: 33245, Stop: 34663, Start Num: 18

Candidate Starts for Itza\_50:

(10, 33131), (11, 33137), (16, 33224), (Start: 18 @33245 has 3 MA's), (29, 33557), (32, 33611), (33, 33614), (35, 33659), (36, 33674), (37, 33740), (42, 33824), (44, 33857), (48, 33929), (49, 33947), (52, 34001), (54, 34082), (56, 34106), (57, 34112), (62, 34163), (64, 34196), (71, 34265), (73, 34310), (74, 34391), (75, 34424), (76, 34427), (92, 34646),

Gene: Kratio\_37 Start: 30972, Stop: 32417, Start Num: 15

Candidate Starts for Kratio\_37:

(3, 30720), (5, 30783), (8, 30837), (12, 30924), (Start: 15 @30972 has 7 MA's), (Start: 19 @31047 has 2 MA's), (20, 31059), (22, 31170), (23, 31173), (25, 31206), (27, 31230), (28, 31293), (34, 31368), (45, 31644), (55, 31866), (58, 31878), (61, 31926), (63, 31956), (66, 31977), (68, 32001), (74, 32154), (77, 32235), (78, 32241), (80, 32253), (82, 32289), (83, 32295), (85, 32313), (86, 32316), (87, 32331), (88, 32337), (91, 32385), (92, 32394),

Gene: Larva\_39 Start: 31141, Stop: 32586, Start Num: 15

Candidate Starts for Larva\_39:

(6, 30970), (8, 31006), (12, 31093), (Start: 15 @31141 has 7 MA's), (Start: 19 @31216 has 2 MA's), (20, 31228), (22, 31339), (23, 31342), (25, 31375), (27, 31399), (28, 31462), (34, 31537), (45, 31813), (55, 32035), (58, 32047), (61, 32095), (63, 32125), (66, 32146), (68, 32170), (74, 32323), (77, 32404), (78, 32410), (80, 32422), (82, 32458), (83, 32464), (85, 32482), (86, 32485), (87, 32500), (88, 32506), (91, 32554), (92, 32563),

Gene: Psycho\_39 Start: 31271, Stop: 32716, Start Num: 15

Candidate Starts for Psycho\_39:

(6, 31100), (8, 31136), (12, 31223), (Start: 15 @31271 has 7 MA's), (Start: 19 @31346 has 2 MA's), (20, 31358), (22, 31469), (23, 31472), (25, 31505), (27, 31529), (28, 31592), (34, 31667), (45, 31943), (55, 32165), (58, 32177), (61, 32225), (63, 32255), (66, 32276), (68, 32300), (74, 32453), (77, 32534), (78, 32540), (80, 32552), (82, 32588), (83, 32594), (85, 32612), (86, 32615), (87, 32630), (88, 32636), (91, 32684), (92, 32693),

Gene: Speedwell\_57 Start: 37976, Stop: 39418, Start Num: 14

Candidate Starts for Speedwell\_57:

(14, 37976), (Start: 19 @38051 has 2 MA's), (21, 38105), (22, 38186), (30, 38321), (32, 38372), (35, 38420), (36, 38435), (37, 38501), (38, 38504), (39, 38507), (41, 38582), (46, 38651), (47, 38687), (50, 38744), (51, 38750), (53, 38801), (56, 38867), (60, 38921), (66, 38972), (69, 39002), (72, 39062), (74, 39152), (79, 39260), (81, 39266), (90, 39383), (92, 39407),

Gene: Urza\_50 Start: 33266, Stop: 34684, Start Num: 18

Candidate Starts for Urza\_50:

(10, 33152), (11, 33158), (16, 33245), (Start: 18 @33266 has 3 MA's), (29, 33578), (32, 33632), (33, 33635), (35, 33680), (36, 33695), (37, 33761), (42, 33845), (44, 33878), (48, 33950), (49, 33968), (52, 34022), (54, 34103), (56, 34127), (57, 34133), (62, 34184), (64, 34217), (71, 34286), (73, 34331), (74, 34412), (75, 34445), (76, 34448), (92, 34667),

Gene: VieEnRose\_50 Start: 33329, Stop: 34747, Start Num: 18

Candidate Starts for VieEnRose\_50:

(10, 33215), (11, 33221), (16, 33308), (Start: 18 @33329 has 3 MA's), (29, 33641), (32, 33695), (33, 33698), (35, 33743), (36, 33758), (37, 33824), (42, 33908), (44, 33941), (48, 34013), (49, 34031), (52, 34085), (53, 34124), (54, 34166), (56, 34190), (57, 34196), (62, 34247), (64, 34280), (71, 34349), (73, 34394), (74, 34475), (75, 34508), (84, 34634), (92, 34730),