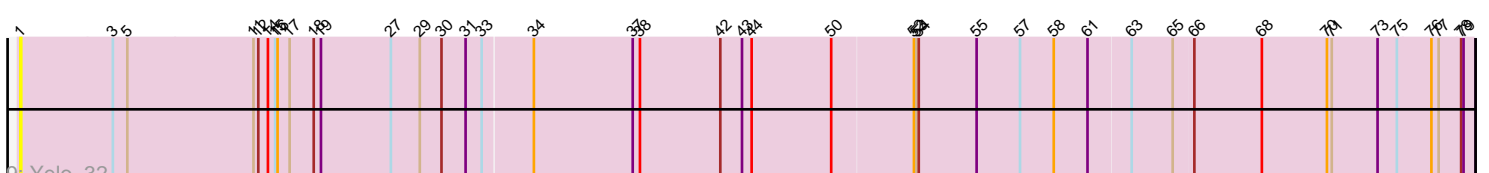
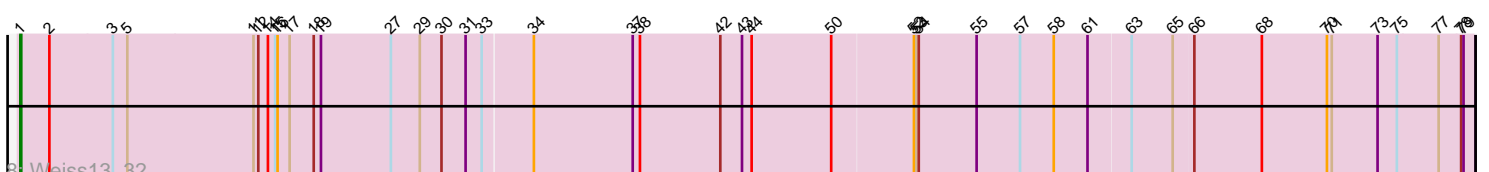
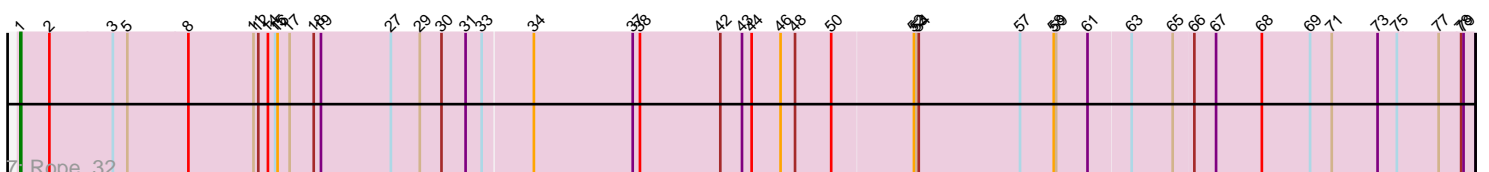
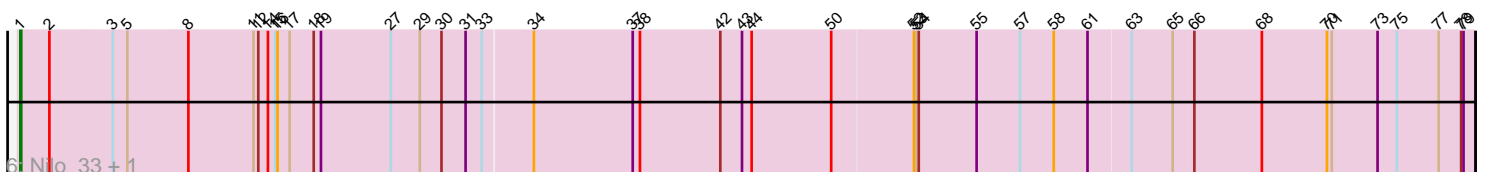
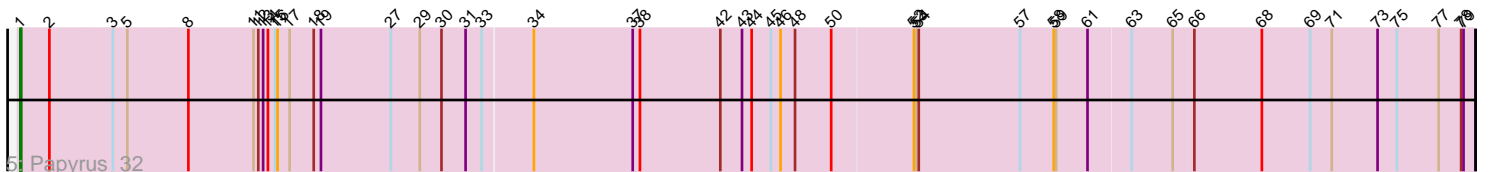
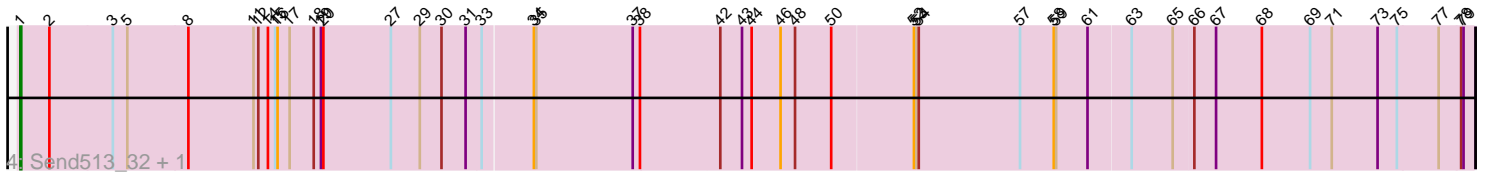
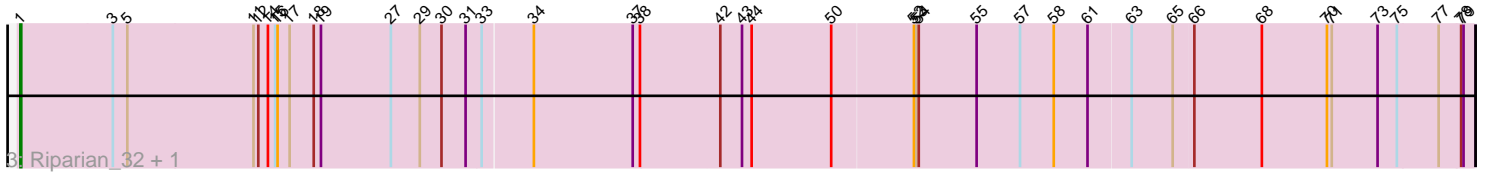
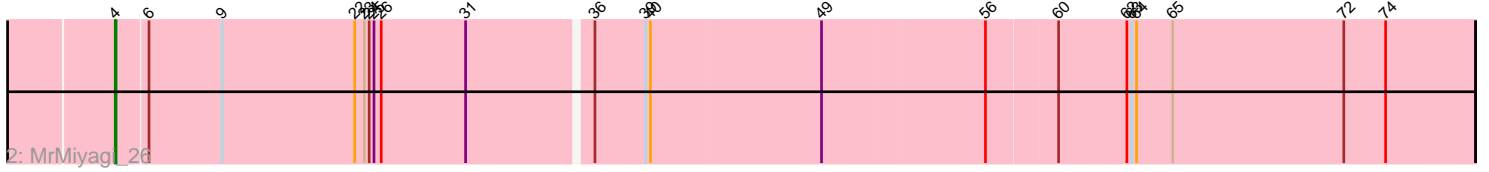
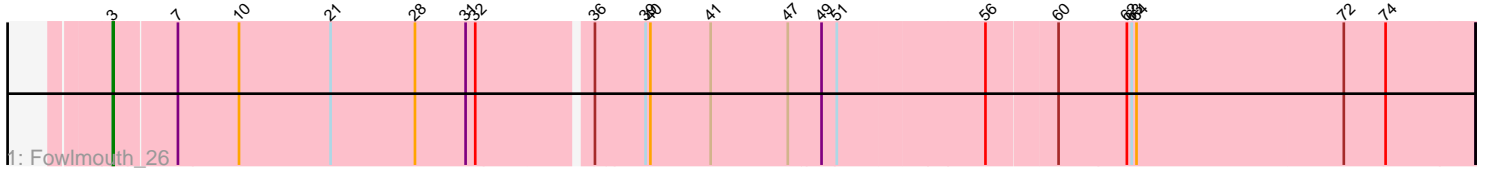


Pham 159521



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 159521 Report

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

Pham number 159521 has 12 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Fowlmouth\_26
- Track 2 : MrMiyagi\_26
- Track 3 : Riparian\_32, MontyDev\_32
- Track 4 : Send513\_32, Candle\_32
- Track 5 : Papyrus\_32
- Track 6 : Nilo\_33, Zenon\_33
- Track 7 : Rope\_32
- Track 8 : Weiss13\_32
- Track 9 : Yelo\_32

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

The start number called the most often in the published annotations is 1, it was called in 8 of the 10 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Candle\_32, MontyDev\_32, Nilo\_33, Papyrus\_32, Riparian\_32, Rope\_32, Send513\_32, Weiss13\_32, Yelo\_32, Zenon\_33,

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

- 

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

- Fowlmouth\_26, MrMiyagi\_26,

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

Start 1:

- Found in 10 of 12 ( 83.3% ) of genes in pham
- Manual Annotations of this start: 8 of 10
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Candle\_32 (R), MontyDev\_32 (R), Nilo\_33 (R), Papyrus\_32 (R), Riparian\_32 (R), Rope\_32 (R), Send513\_32 (R), Weiss13\_32 (R), Yelo\_32 (R), Zenon\_33 (R),

Start 3:

- Found in 11 of 12 ( 91.7% ) of genes in pham
- Manual Annotations of this start: 1 of 10
- Called 9.1% of time when present
- Phage (with cluster) where this start called: Fowlmouth\_26 (AC),

Start 4:

- Found in 1 of 12 ( 8.3% ) of genes in pham
- Manual Annotations of this start: 1 of 10
- Called 100.0% of time when present
- Phage (with cluster) where this start called: MrMiyagi\_26 (AC),

**Summary by clusters:**

There are 2 clusters represented in this pham: AC, R,

Info for manual annotations of cluster AC:

- Start number 3 was manually annotated 1 time for cluster AC.
- Start number 4 was manually annotated 1 time for cluster AC.

Info for manual annotations of cluster R:

- Start number 1 was manually annotated 8 times for cluster R.

**Gene Information:**

Gene: Candle\_32 Start: 30083, Stop: 31864, Start Num: 1

Candidate Starts for Candle\_32:

(Start: 1 @30083 has 8 MA's), (2, 30119), (Start: 3 @30197 has 1 MA's), (5, 30215), (8, 30290), (11, 30371), (12, 30377), (14, 30389), (15, 30398), (16, 30401), (17, 30416), (18, 30446), (19, 30455), (20, 30458), (27, 30542), (29, 30578), (30, 30605), (31, 30635), (33, 30653), (34, 30713), (35, 30716), (37, 30836), (38, 30845), (42, 30941), (43, 30968), (44, 30980), (46, 31016), (48, 31034), (50, 31079), (52, 31178), (53, 31181), (54, 31184), (57, 31310), (58, 31352), (59, 31355), (61, 31394), (63, 31445), (65, 31496), (66, 31520), (67, 31547), (68, 31604), (69, 31664), (71, 31691), (73, 31748), (75, 31772), (77, 31823), (78, 31850), (79, 31853),

Gene: Fowlmouth\_26 Start: 25255, Stop: 26895, Start Num: 3

Candidate Starts for Fowlmouth\_26:

(Start: 3 @25255 has 1 MA's), (7, 25330), (10, 25405), (21, 25519), (28, 25624), (31, 25687), (32, 25699), (36, 25828), (39, 25888), (40, 25894), (41, 25969), (47, 26065), (49, 26104), (51, 26122), (56, 26299), (60, 26383), (62, 26467), (63, 26473), (64, 26479), (72, 26734), (74, 26785),

Gene: MontyDev\_32 Start: 29730, Stop: 31511, Start Num: 1

Candidate Starts for MontyDev\_32:

(Start: 1 @29730 has 8 MA's), (Start: 3 @29844 has 1 MA's), (5, 29862), (11, 30018), (12, 30024), (14, 30036), (15, 30045), (16, 30048), (17, 30063), (18, 30093), (19, 30102), (27, 30189), (29, 30225), (30, 30252), (31, 30282), (33, 30300), (34, 30360), (37, 30483), (38, 30492), (42, 30588), (43, 30615), (44, 30627), (50, 30726), (52, 30825), (53, 30828), (54, 30831), (55, 30903), (57, 30957), (58, 30999), (61, 31041), (63, 31092), (65, 31143), (66, 31167), (68, 31251), (70, 31332), (71, 31338), (73, 31395), (75, 31419), (77, 31470), (78, 31497), (79, 31500),

Gene: MrMiyagi\_26 Start: 25272, Stop: 26906, Start Num: 4

Candidate Starts for MrMiyagi\_26:

(Start: 4 @25272 has 1 MA's), (6, 25308), (9, 25398), (22, 25563), (23, 25575), (24, 25581), (25, 25587), (26, 25596), (31, 25701), (36, 25842), (39, 25902), (40, 25908), (49, 26115), (56, 26310), (60, 26394), (62, 26478), (63, 26484), (64, 26490), (65, 26535), (72, 26745), (74, 26796),

Gene: Nilo\_33 Start: 30086, Stop: 31867, Start Num: 1

Candidate Starts for Nilo\_33:

(Start: 1 @30086 has 8 MA's), (2, 30122), (Start: 3 @30200 has 1 MA's), (5, 30218), (8, 30293), (11, 30374), (12, 30380), (14, 30392), (15, 30401), (16, 30404), (17, 30419), (18, 30449), (19, 30458), (27, 30545), (29, 30581), (30, 30608), (31, 30638), (33, 30656), (34, 30716), (37, 30839), (38, 30848), (42, 30944), (43, 30971), (44, 30983), (50, 31082), (52, 31181), (53, 31184), (54, 31187), (55, 31259), (57, 31313), (58, 31355), (61, 31397), (63, 31448), (65, 31499), (66, 31523), (68, 31607), (70, 31688), (71, 31694), (73, 31751), (75, 31775), (77, 31826), (78, 31853), (79, 31856),

Gene: Papyrus\_32 Start: 29745, Stop: 31526, Start Num: 1

Candidate Starts for Papyrus\_32:

(Start: 1 @29745 has 8 MA's), (2, 29781), (Start: 3 @29859 has 1 MA's), (5, 29877), (8, 29952), (11, 30033), (12, 30039), (13, 30045), (14, 30051), (15, 30060), (16, 30063), (17, 30078), (18, 30108), (19, 30117), (27, 30204), (29, 30240), (30, 30267), (31, 30297), (33, 30315), (34, 30375), (37, 30498), (38, 30507), (42, 30603), (43, 30630), (44, 30642), (45, 30666), (46, 30678), (48, 30696), (50, 30741), (52, 30840), (53, 30843), (54, 30846), (57, 30972), (58, 31014), (59, 31017), (61, 31056), (63, 31107), (65, 31158), (66, 31182), (68, 31266), (69, 31326), (71, 31353), (73, 31410), (75, 31434), (77, 31485), (78, 31512), (79, 31515),

Gene: Riparian\_32 Start: 29547, Stop: 31328, Start Num: 1

Candidate Starts for Riparian\_32:

(Start: 1 @29547 has 8 MA's), (Start: 3 @29661 has 1 MA's), (5, 29679), (11, 29835), (12, 29841), (14, 29853), (15, 29862), (16, 29865), (17, 29880), (18, 29910), (19, 29919), (27, 30006), (29, 30042), (30, 30069), (31, 30099), (33, 30117), (34, 30177), (37, 30300), (38, 30309), (42, 30405), (43, 30432), (44, 30444), (50, 30543), (52, 30642), (53, 30645), (54, 30648), (55, 30720), (57, 30774), (58, 30816), (61, 30858), (63, 30909), (65, 30960), (66, 30984), (68, 31068), (70, 31149), (71, 31155), (73, 31212), (75, 31236), (77, 31287), (78, 31314), (79, 31317),

Gene: Rope\_32 Start: 29727, Stop: 31508, Start Num: 1

Candidate Starts for Rope\_32:

(Start: 1 @29727 has 8 MA's), (2, 29763), (Start: 3 @29841 has 1 MA's), (5, 29859), (8, 29934), (11, 30015), (12, 30021), (14, 30033), (15, 30042), (16, 30045), (17, 30060), (18, 30090), (19, 30099), (27, 30186), (29, 30222), (30, 30249), (31, 30279), (33, 30297), (34, 30357), (37, 30480), (38, 30489), (42, 30585), (43, 30612), (44, 30624), (46, 30660), (48, 30678), (50, 30723), (52, 30822), (53, 30825), (54, 30828), (57, 30954), (58, 30996), (59, 30999), (61, 31038), (63, 31089), (65, 31140), (66, 31164), (67, 31191), (68, 31248), (69, 31308), (71, 31335), (73, 31392), (75, 31416), (77, 31467), (78, 31494), (79, 31497),

Gene: Send513\_32 Start: 30083, Stop: 31864, Start Num: 1

Candidate Starts for Send513\_32:

(Start: 1 @30083 has 8 MA's), (2, 30119), (Start: 3 @30197 has 1 MA's), (5, 30215), (8, 30290), (11, 30371), (12, 30377), (14, 30389), (15, 30398), (16, 30401), (17, 30416), (18, 30446), (19, 30455), (20, 30458), (27, 30542), (29, 30578), (30, 30605), (31, 30635), (33, 30653), (34, 30713), (35, 30716), (37, 30836), (38, 30845), (42, 30941), (43, 30968), (44, 30980), (46, 31016), (48, 31034), (50, 31079), (52, 31178), (53, 31181), (54, 31184), (57, 31310), (58, 31352), (59, 31355), (61, 31394), (63, 31445), (65, 31496), (66, 31520), (67, 31547), (68, 31604), (69, 31664), (71, 31691), (73, 31748), (75, 31772), (77, 31823), (78, 31850), (79, 31853),

Gene: Weiss13\_32 Start: 29779, Stop: 31560, Start Num: 1

Candidate Starts for Weiss13\_32:

(Start: 1 @29779 has 8 MA's), (2, 29815), (Start: 3 @29893 has 1 MA's), (5, 29911), (11, 30067), (12, 30073), (14, 30085), (15, 30094), (16, 30097), (17, 30112), (18, 30142), (19, 30151), (27, 30238), (29, 30274), (30, 30301), (31, 30331), (33, 30349), (34, 30409), (37, 30532), (38, 30541), (42, 30637), (43, 30664), (44, 30676), (50, 30775), (52, 30874), (53, 30877), (54, 30880), (55, 30952), (57, 31006), (58, 31048), (61, 31090), (63, 31141), (65, 31192), (66, 31216), (68, 31300), (70, 31381), (71, 31387), (73, 31444), (75, 31468), (77, 31519), (78, 31546), (79, 31549),

Gene: Yelo\_32 Start: 30072, Stop: 31853, Start Num: 1

Candidate Starts for Yelo\_32:

(Start: 1 @30072 has 8 MA's), (Start: 3 @30186 has 1 MA's), (5, 30204), (11, 30360), (12, 30366), (14, 30378), (15, 30387), (16, 30390), (17, 30405), (18, 30435), (19, 30444), (27, 30531), (29, 30567), (30, 30594), (31, 30624), (33, 30642), (34, 30702), (37, 30825), (38, 30834), (42, 30930), (43, 30957), (44, 30969), (50, 31068), (52, 31167), (53, 31170), (54, 31173), (55, 31245), (57, 31299), (58, 31341), (61, 31383), (63, 31434), (65, 31485), (66, 31509), (68, 31593), (70, 31674), (71, 31680), (73, 31737), (75, 31761), (76, 31803), (77, 31812), (78, 31839), (79, 31842),

Gene: Zenon\_33 Start: 30091, Stop: 31872, Start Num: 1

Candidate Starts for Zenon\_33:

(Start: 1 @30091 has 8 MA's), (2, 30127), (Start: 3 @30205 has 1 MA's), (5, 30223), (8, 30298), (11, 30379), (12, 30385), (14, 30397), (15, 30406), (16, 30409), (17, 30424), (18, 30454), (19, 30463), (27, 30550), (29, 30586), (30, 30613), (31, 30643), (33, 30661), (34, 30721), (37, 30844), (38, 30853), (42, 30949), (43, 30976), (44, 30988), (50, 31087), (52, 31186), (53, 31189), (54, 31192), (55, 31264), (57, 31318), (58, 31360), (61, 31402), (63, 31453), (65, 31504), (66, 31528), (68, 31612), (70, 31693), (71, 31699), (73, 31756), (75, 31780), (77, 31831), (78, 31858), (79, 31861),