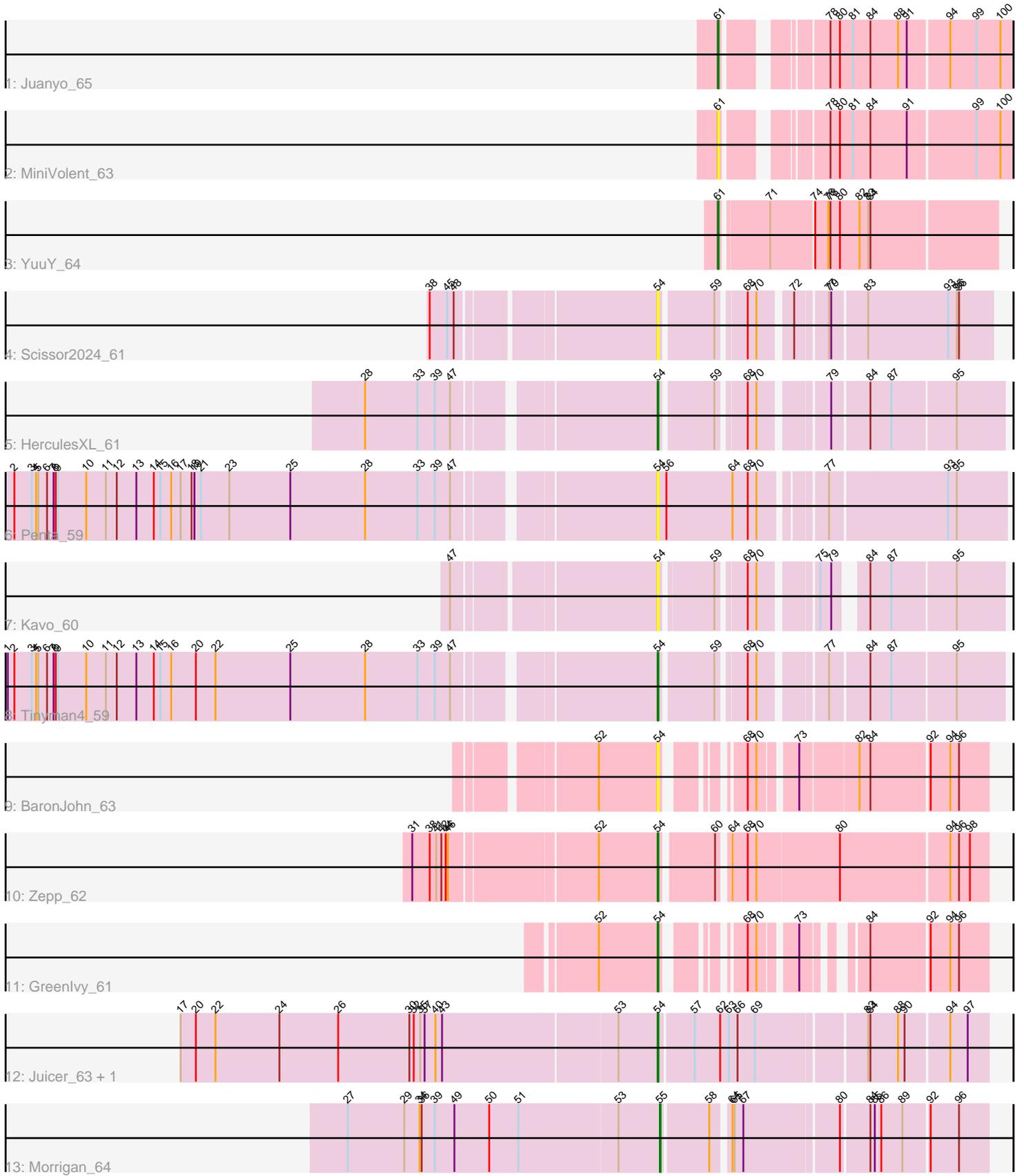


Pham 289866



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 289866 Report

This analysis was run 03/28/26 on database version 641.

Pham number 289866 has 14 members, 5 are drafts.

Phages represented in each track:

- Track 1 : Juanyo\_65
- Track 2 : MiniVolent\_63
- Track 3 : YuuY\_64
- Track 4 : Scissor2024\_61
- Track 5 : HerculesXL\_61
- Track 6 : Penta\_59
- Track 7 : Kavo\_60
- Track 8 : Tinyman4\_59
- Track 9 : BaronJohn\_63
- Track 10 : Zepp\_62
- Track 11 : Greenlvy\_61
- Track 12 : Juicer\_63, Jemerald\_63
- Track 13 : Morigan\_64

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

The start number called the most often in the published annotations is 54, it was called in 6 of the 9 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- BaronJohn\_63, Greenlvy\_61, HerculesXL\_61, Jemerald\_63, Juicer\_63, Kavo\_60, Penta\_59, Scissor2024\_61, Tinyman4\_59, Zepp\_62,

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

- 

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

- Juanyo\_65, MiniVolent\_63, Morigan\_64, YuuY\_64,

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

Start 54:

- Found in 10 of 14 ( 71.4% ) of genes in pham
- Manual Annotations of this start: 6 of 9

- Called 100.0% of time when present
- Phage (with cluster) where this start called: BaronJohn\_63 (EA5), Greenlvy\_61 (EA5), HerculesXL\_61 (EA11), Jemerald\_63 (EA6), Juicer\_63 (EA6), Kavo\_60 (EA11), Penta\_59 (EA11), Scissor2024\_61 (EA11), Tinyman4\_59 (EA11), Zepp\_62 (EA5),

Start 55:

- Found in 1 of 14 ( 7.1% ) of genes in pham
- Manual Annotations of this start: 1 of 9
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Morrigan\_64 (EA6),

Start 61:

- Found in 3 of 14 ( 21.4% ) of genes in pham
- Manual Annotations of this start: 2 of 9
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Juanyo\_65 (EA10), MiniVolent\_63 (EA10), YuuY\_64 (EA10),

### **Summary by clusters:**

There are 4 clusters represented in this pham: EA5, EA11, EA10, EA6,

Info for manual annotations of cluster EA10:

- Start number 61 was manually annotated 2 times for cluster EA10.

Info for manual annotations of cluster EA11:

- Start number 54 was manually annotated 2 times for cluster EA11.

Info for manual annotations of cluster EA5:

- Start number 54 was manually annotated 2 times for cluster EA5.

Info for manual annotations of cluster EA6:

- Start number 54 was manually annotated 2 times for cluster EA6.
- Start number 55 was manually annotated 1 time for cluster EA6.

### **Gene Information:**

Gene: BaronJohn\_63 Start: 39818, Stop: 40186, Start Num: 54

Candidate Starts for BaronJohn\_63:

(52, 39737), (Start: 54 @39818 has 6 MA's), (68, 39890), (70, 39902), (73, 39944), (82, 40019), (84, 40034), (92, 40109), (94, 40136), (96, 40148),

Gene: Greenlvy\_61 Start: 39603, Stop: 39938, Start Num: 54

Candidate Starts for Greenlvy\_61:

(52, 39522), (Start: 54 @39603 has 6 MA's), (68, 39675), (70, 39687), (73, 39729), (84, 39786), (92, 39861), (94, 39888), (96, 39900),

Gene: HerculesXL\_61 Start: 38678, Stop: 39088, Start Num: 54

Candidate Starts for HerculesXL\_61:

(28, 38312), (33, 38384), (39, 38408), (47, 38429), (Start: 54 @38678 has 6 MA's), (59, 38744), (68, 38777), (70, 38789), (79, 38867), (84, 38915), (87, 38942), (95, 39026),

Gene: Jemerald\_63 Start: 40506, Stop: 40928, Start Num: 54

Candidate Starts for Jemerald\_63:

(17, 39861), (20, 39882), (22, 39909), (24, 39996), (26, 40077), (30, 40173), (32, 40179), (35, 40188), (37, 40194), (40, 40209), (43, 40218), (53, 40452), (Start: 54 @40506 has 6 MA's), (57, 40551), (62, 40584), (63, 40596), (66, 40608), (69, 40632), (83, 40773), (84, 40776), (88, 40812), (90, 40821), (94, 40878), (97, 40902),

Gene: Juanyo\_65 Start: 40605, Stop: 40952, Start Num: 61

Candidate Starts for Juanyo\_65:

(Start: 61 @40605 has 2 MA's), (78, 40710), (80, 40722), (81, 40740), (84, 40764), (88, 40800), (91, 40812), (94, 40866), (99, 40902), (100, 40935),

Gene: Juicer\_63 Start: 40506, Stop: 40928, Start Num: 54

Candidate Starts for Juicer\_63:

(17, 39861), (20, 39882), (22, 39909), (24, 39996), (26, 40077), (30, 40173), (32, 40179), (35, 40188), (37, 40194), (40, 40209), (43, 40218), (53, 40452), (Start: 54 @40506 has 6 MA's), (57, 40551), (62, 40584), (63, 40596), (66, 40608), (69, 40632), (83, 40773), (84, 40776), (88, 40812), (90, 40821), (94, 40878), (97, 40902),

Gene: Kavo\_60 Start: 38739, Stop: 39128, Start Num: 54

Candidate Starts for Kavo\_60:

(47, 38481), (Start: 54 @38739 has 6 MA's), (59, 38802), (68, 38835), (70, 38847), (75, 38910), (79, 38925), (84, 38955), (87, 38982), (95, 39066),

Gene: MiniVolent\_63 Start: 40572, Stop: 40919, Start Num: 61

Candidate Starts for MiniVolent\_63:

(Start: 61 @40572 has 2 MA's), (78, 40677), (80, 40689), (81, 40707), (84, 40731), (91, 40779), (99, 40869), (100, 40902),

Gene: Morrigan\_64 Start: 39803, Stop: 40204, Start Num: 55

Candidate Starts for Morrigan\_64:

(27, 39377), (29, 39455), (34, 39476), (36, 39479), (39, 39497), (49, 39524), (50, 39572), (51, 39611), (53, 39746), (Start: 55 @39803 has 1 MA's), (58, 39863), (64, 39881), (65, 39884), (67, 39896), (80, 40019), (84, 40055), (85, 40061), (86, 40067), (89, 40094), (92, 40127), (96, 40166),

Gene: Penta\_59 Start: 38887, Stop: 39330, Start Num: 54

Candidate Starts for Penta\_59:

(2, 38041), (3, 38065), (4, 38071), (5, 38074), (6, 38086), (7, 38095), (8, 38098), (9, 38101), (10, 38140), (11, 38167), (12, 38182), (13, 38209), (14, 38233), (15, 38242), (16, 38257), (17, 38269), (18, 38284), (19, 38287), (21, 38296), (23, 38335), (25, 38419), (28, 38521), (33, 38593), (39, 38617), (47, 38638), (Start: 54 @38887 has 6 MA's), (56, 38899), (64, 38989), (68, 39010), (70, 39022), (77, 39094), (93, 39250), (95, 39262),

Gene: Scissor2024\_61 Start: 38650, Stop: 39051, Start Num: 54

Candidate Starts for Scissor2024\_61:

(38, 38365), (45, 38389), (48, 38398), (Start: 54 @38650 has 6 MA's), (59, 38716), (68, 38749), (70, 38761), (72, 38797), (77, 38836), (79, 38839), (83, 38884), (93, 38992), (95, 39004), (96, 39007),

Gene: Tinyman4\_59 Start: 38673, Stop: 39083, Start Num: 54

Candidate Starts for Tinyman4\_59:

(1, 37818), (2, 37827), (3, 37851), (4, 37857), (5, 37860), (6, 37872), (7, 37881), (8, 37884), (9, 37887), (10, 37926), (11, 37953), (12, 37968), (13, 37995), (14, 38019), (15, 38028), (16, 38043), (20, 38076), (22, 38103), (25, 38205), (28, 38307), (33, 38379), (39, 38403), (47, 38424), (Start: 54 @38673 has 6 MA's), (59, 38739), (68, 38772), (70, 38784), (77, 38859), (84, 38910), (87, 38937), (95, 39021),

Gene: YuuY\_64 Start: 40548, Stop: 40904, Start Num: 61

Candidate Starts for YuuY\_64:

(Start: 61 @40548 has 2 MA's), (71, 40605), (74, 40662), (76, 40680), (78, 40683), (80, 40695), (82, 40722), (83, 40734), (84, 40737),

Gene: Zepp\_62 Start: 39460, Stop: 39873, Start Num: 54

Candidate Starts for Zepp\_62:

(31, 39142), (38, 39166), (41, 39175), (42, 39181), (44, 39187), (46, 39190), (52, 39379), (Start: 54 @39460 has 6 MA's), (60, 39526), (64, 39535), (68, 39556), (70, 39568), (80, 39679), (94, 39823), (96, 39835), (98, 39850),