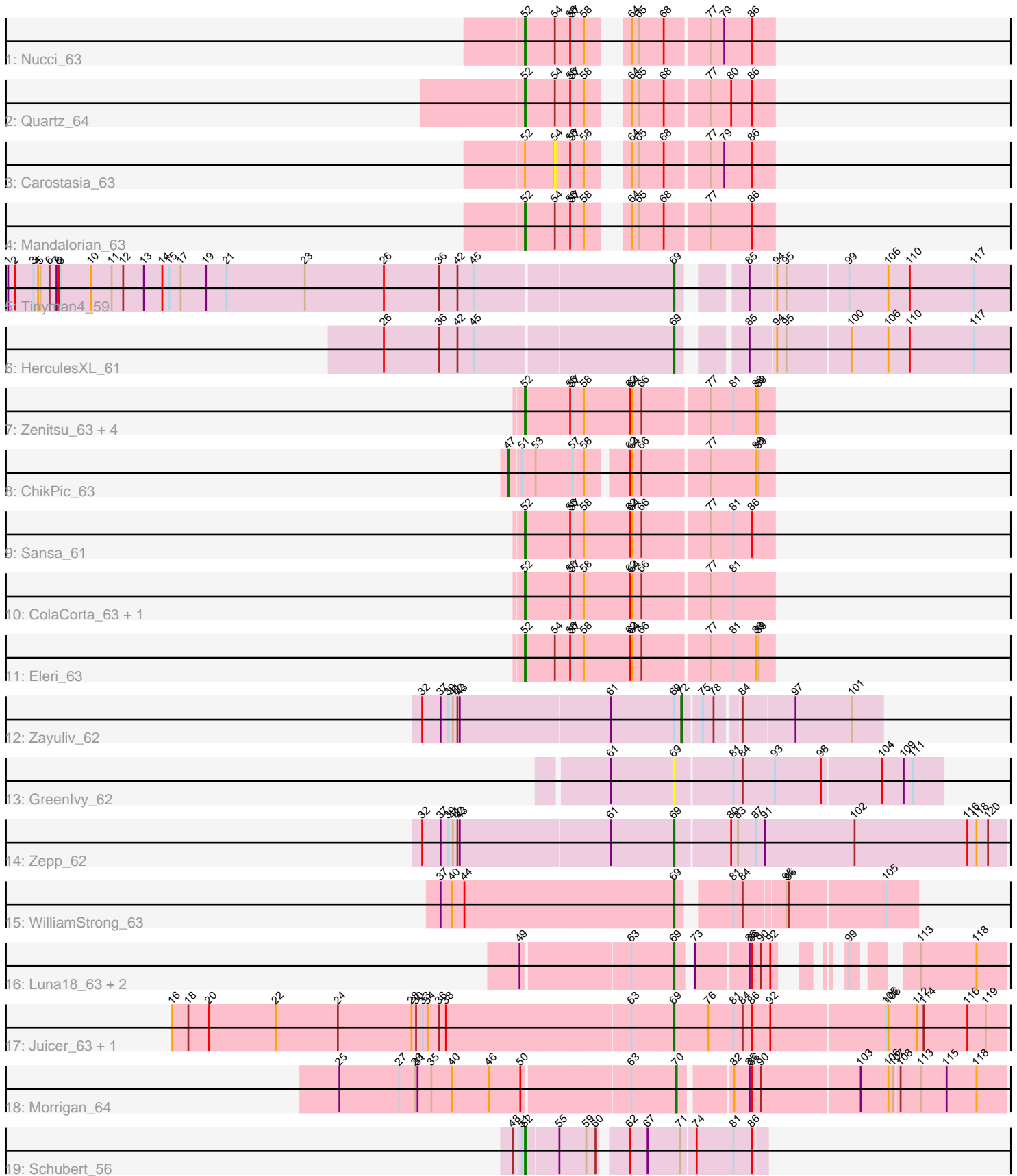


Pham 158114



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 158114 Report

This analysis was run 04/13/24 on database version 558.

Pham number 158114 has 27 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Nucci_63
- Track 2 : Quartz_64
- Track 3 : Carostasia_63
- Track 4 : Mandalorian_63
- Track 5 : Tinyman4_59
- Track 6 : HerculesXL_61
- Track 7 : Zenitsu_63, MCubed_63, Saratos_63, Shamu_63, Glamour_62
- Track 8 : ChikPic_63
- Track 9 : Sansa_61
- Track 10 : ColaCorta_63, Andromedas_63
- Track 11 : Eleri_63
- Track 12 : Zayuliv_62
- Track 13 : Greenlvy_62
- Track 14 : Zepp_62
- Track 15 : WilliamStrong_63
- Track 16 : Luna18_63, KatChan_62, Chepli_63
- Track 17 : Juicer_63, Jemerald_63
- Track 18 : Morigan_64
- Track 19 : Schubert_56

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

The start number called the most often in the published annotations is 52, it was called in 13 of the 25 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Andromedas_63, ColaCorta_63, Eleri_63, Glamour_62, MCubed_63, Mandalorian_63, Nucci_63, Quartz_64, Sansa_61, Saratos_63, Schubert_56, Shamu_63, Zenitsu_63,

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

- Carostasia_63,

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

- Chepli_63, ChikPic_63, GreenIvy_62, HerculesXL_61, Jemerald_63, Juicer_63, KatChan_62, Luna18_63, Morrigan_64, Tinyman4_59, WilliamStrong_63, Zayuliv_62, Zepp_62,

Summary by start number:

Start 47:

- Found in 1 of 27 (3.7%) of genes in pham
- Manual Annotations of this start: 1 of 25
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ChikPic_63 (EA2),

Start 52:

- Found in 14 of 27 (51.9%) of genes in pham
- Manual Annotations of this start: 13 of 25
- Called 92.9% of time when present
- Phage (with cluster) where this start called: Andromedas_63 (EA2), ColaCorta_63 (EA2), Eleri_63 (EA2), Glamour_62 (EA2), MCubed_63 (EA2), Mandalorian_63 (EA10), Nucci_63 (EA10), Quartz_64 (EA10), Sansa_61 (EA2), Saratos_63 (EA2), Schubert_56 (EA8), Shamu_63 (EA2), Zenitsu_63 (EA2),

Start 54:

- Found in 5 of 27 (18.5%) of genes in pham
- No Manual Annotations of this start.
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Carostasia_63 (EA10),

Start 69:

- Found in 11 of 27 (40.7%) of genes in pham
- Manual Annotations of this start: 9 of 25
- Called 90.9% of time when present
- Phage (with cluster) where this start called: Chepli_63 (EA6), GreenIvy_62 (EA5), HerculesXL_61 (EA11), Jemerald_63 (EA6), Juicer_63 (EA6), KatChan_62 (EA6), Luna18_63 (EA6), Tinyman4_59 (EA11), WilliamStrong_63 (EA6), Zepp_62 (EA5),

Start 70:

- Found in 1 of 27 (3.7%) of genes in pham
- Manual Annotations of this start: 1 of 25
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Morrigan_64 (EA6),

Start 72:

- Found in 1 of 27 (3.7%) of genes in pham
- Manual Annotations of this start: 1 of 25
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Zayuliv_62 (EA5),

Summary by clusters:

There are 6 clusters represented in this pham: EA11, EA10, EA8, EA2, EA5, EA6,

Info for manual annotations of cluster EA10:

- Start number 52 was manually annotated 3 times for cluster EA10.

Info for manual annotations of cluster EA11:

- Start number 69 was manually annotated 2 times for cluster EA11.

Info for manual annotations of cluster EA2:

- Start number 47 was manually annotated 1 time for cluster EA2.
- Start number 52 was manually annotated 9 times for cluster EA2.

Info for manual annotations of cluster EA5:

- Start number 69 was manually annotated 1 time for cluster EA5.
- Start number 72 was manually annotated 1 time for cluster EA5.

Info for manual annotations of cluster EA6:

- Start number 69 was manually annotated 6 times for cluster EA6.
- Start number 70 was manually annotated 1 time for cluster EA6.

Info for manual annotations of cluster EA8:

- Start number 52 was manually annotated 1 time for cluster EA8.

Gene Information:

Gene: Andromedas_63 Start: 39976, Stop: 40287, Start Num: 52

Candidate Starts for Andromedas_63:

(Start: 52 @39976 has 13 MA's), (56, 40033), (57, 40036), (58, 40048), (62, 40108), (64, 40111), (66, 40123), (77, 40204), (81, 40234),

Gene: Carostasia_63 Start: 40062, Stop: 40301, Start Num: 54

Candidate Starts for Carostasia_63:

(Start: 52 @40023 has 13 MA's), (54, 40062), (56, 40080), (57, 40083), (58, 40095), (64, 40125), (65, 40134), (68, 40164), (77, 40218), (79, 40236), (86, 40272),

Gene: Chepli_63 Start: 39731, Stop: 40042, Start Num: 69

Candidate Starts for Chepli_63:

(49, 39542), (63, 39677), (Start: 69 @39731 has 9 MA's), (73, 39746), (85, 39809), (86, 39812), (90, 39824), (92, 39836), (99, 39872), (113, 39932), (118, 40004),

Gene: ChikPic_63 Start: 39809, Stop: 40126, Start Num: 47

Candidate Starts for ChikPic_63:

(Start: 47 @39809 has 1 MA's), (51, 39824), (53, 39842), (57, 39890), (58, 39902), (62, 39947), (64, 39950), (66, 39962), (77, 40043), (88, 40103), (89, 40106),

Gene: ColaCorta_63 Start: 39976, Stop: 40287, Start Num: 52

Candidate Starts for ColaCorta_63:

(Start: 52 @39976 has 13 MA's), (56, 40033), (57, 40036), (58, 40048), (62, 40108), (64, 40111), (66, 40123), (77, 40204), (81, 40234),

Gene: Eleri_63 Start: 39848, Stop: 40159, Start Num: 52

Candidate Starts for Eleri_63:

(Start: 52 @39848 has 13 MA's), (54, 39887), (56, 39905), (57, 39908), (58, 39920), (62, 39980), (64, 39983), (66, 39995), (77, 40076), (81, 40106), (88, 40136), (89, 40139),

Gene: Glamour_62 Start: 39706, Stop: 40017, Start Num: 52

Candidate Starts for Glamour_62:

(Start: 52 @39706 has 13 MA's), (56, 39763), (57, 39766), (58, 39778), (62, 39838), (64, 39841), (66, 39853), (77, 39934), (81, 39964), (88, 39994), (89, 39997),

Gene: Greenlvy_62 Start: 39603, Stop: 39938, Start Num: 69

Candidate Starts for Greenlvy_62:

(61, 39522), (Start: 69 @39603 has 9 MA's), (81, 39675), (84, 39687), (93, 39729), (98, 39786), (104, 39861), (109, 39888), (111, 39900),

Gene: HerculesXL_61 Start: 38678, Stop: 39088, Start Num: 69

Candidate Starts for HerculesXL_61:

(26, 38312), (36, 38384), (42, 38408), (45, 38429), (Start: 69 @38678 has 9 MA's), (85, 38744), (94, 38777), (95, 38789), (100, 38867), (106, 38915), (110, 38942), (117, 39026),

Gene: Jemerald_63 Start: 40506, Stop: 40928, Start Num: 69

Candidate Starts for Jemerald_63:

(16, 39861), (18, 39882), (20, 39909), (22, 39996), (24, 40077), (28, 40173), (30, 40179), (33, 40188), (34, 40194), (36, 40209), (38, 40218), (63, 40452), (Start: 69 @40506 has 9 MA's), (76, 40551), (81, 40584), (84, 40596), (86, 40608), (92, 40632), (105, 40773), (106, 40776), (112, 40812), (114, 40821), (116, 40878), (119, 40902),

Gene: Juicer_63 Start: 40506, Stop: 40928, Start Num: 69

Candidate Starts for Juicer_63:

(16, 39861), (18, 39882), (20, 39909), (22, 39996), (24, 40077), (28, 40173), (30, 40179), (33, 40188), (34, 40194), (36, 40209), (38, 40218), (63, 40452), (Start: 69 @40506 has 9 MA's), (76, 40551), (81, 40584), (84, 40596), (86, 40608), (92, 40632), (105, 40773), (106, 40776), (112, 40812), (114, 40821), (116, 40878), (119, 40902),

Gene: KatChan_62 Start: 39748, Stop: 40059, Start Num: 69

Candidate Starts for KatChan_62:

(49, 39559), (63, 39694), (Start: 69 @39748 has 9 MA's), (73, 39763), (85, 39826), (86, 39829), (90, 39841), (92, 39853), (99, 39889), (113, 39949), (118, 40021),

Gene: Luna18_63 Start: 39748, Stop: 40059, Start Num: 69

Candidate Starts for Luna18_63:

(49, 39559), (63, 39694), (Start: 69 @39748 has 9 MA's), (73, 39763), (85, 39826), (86, 39829), (90, 39841), (92, 39853), (99, 39889), (113, 39949), (118, 40021),

Gene: MCubed_63 Start: 39863, Stop: 40174, Start Num: 52

Candidate Starts for MCubed_63:

(Start: 52 @39863 has 13 MA's), (56, 39920), (57, 39923), (58, 39935), (62, 39995), (64, 39998), (66, 40010), (77, 40091), (81, 40121), (88, 40151), (89, 40154),

Gene: Mandalorian_63 Start: 40034, Stop: 40312, Start Num: 52

Candidate Starts for Mandalorian_63:

(Start: 52 @40034 has 13 MA's), (54, 40073), (56, 40091), (57, 40094), (58, 40106), (64, 40136), (65, 40145), (68, 40175), (77, 40229), (86, 40283),

Gene: Morrigan_64 Start: 39803, Stop: 40204, Start Num: 70

Candidate Starts for Morrigan_64:

(25, 39377), (27, 39455), (29, 39476), (31, 39479), (35, 39497), (40, 39524), (46, 39572), (50, 39611), (63, 39746), (Start: 70 @39803 has 1 MA's), (82, 39863), (85, 39881), (86, 39884), (90, 39896), (103,

40019), (106, 40055), (107, 40061), (108, 40067), (113, 40094), (115, 40127), (118, 40166),

Gene: Nucci_63 Start: 40003, Stop: 40281, Start Num: 52

Candidate Starts for Nucci_63:

(Start: 52 @40003 has 13 MA's), (54, 40042), (56, 40060), (57, 40063), (58, 40075), (64, 40105), (65, 40114), (68, 40144), (77, 40198), (79, 40216), (86, 40252),

Gene: Quartz_64 Start: 40147, Stop: 40425, Start Num: 52

Candidate Starts for Quartz_64:

(Start: 52 @40147 has 13 MA's), (54, 40186), (56, 40204), (57, 40207), (58, 40219), (64, 40249), (65, 40258), (68, 40288), (77, 40342), (80, 40369), (86, 40396),

Gene: Sansa_61 Start: 39788, Stop: 40099, Start Num: 52

Candidate Starts for Sansa_61:

(Start: 52 @39788 has 13 MA's), (56, 39845), (57, 39848), (58, 39860), (62, 39920), (64, 39923), (66, 39935), (77, 40016), (81, 40046), (86, 40070),

Gene: Saratos_63 Start: 39832, Stop: 40143, Start Num: 52

Candidate Starts for Saratos_63:

(Start: 52 @39832 has 13 MA's), (56, 39889), (57, 39892), (58, 39904), (62, 39964), (64, 39967), (66, 39979), (77, 40060), (81, 40090), (88, 40120), (89, 40123),

Gene: Schubert_56 Start: 38451, Stop: 38738, Start Num: 52

Candidate Starts for Schubert_56:

(48, 38439), (51, 38448), (Start: 52 @38451 has 13 MA's), (55, 38493), (59, 38526), (60, 38538), (62, 38568), (67, 38589), (71, 38631), (74, 38649), (81, 38697), (86, 38721),

Gene: Shamu_63 Start: 39721, Stop: 40032, Start Num: 52

Candidate Starts for Shamu_63:

(Start: 52 @39721 has 13 MA's), (56, 39778), (57, 39781), (58, 39793), (62, 39853), (64, 39856), (66, 39868), (77, 39949), (81, 39979), (88, 40009), (89, 40012),

Gene: Tinyman4_59 Start: 38673, Stop: 39083, Start Num: 69

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), (17, 38043), (19, 38076), (21, 38103), (23, 38205), (26, 38307), (36, 38379), (42, 38403), (45, 38424), (Start: 69 @38673 has 9 MA's), (85, 38739), (94, 38772), (95, 38784), (99, 38859), (106, 38910), (110, 38937), (117, 39021),

Gene: WilliamStrong_63 Start: 40172, Stop: 40447, Start Num: 69

Candidate Starts for WilliamStrong_63:

(37, 39875), (40, 39890), (44, 39905), (Start: 69 @40172 has 9 MA's), (81, 40229), (84, 40241), (95, 40292), (96, 40295), (105, 40406),

Gene: Zayuliv_62 Start: 39911, Stop: 40141, Start Num: 72

Candidate Starts for Zayuliv_62:

(32, 39584), (37, 39608), (39, 39617), (41, 39623), (42, 39629), (43, 39632), (61, 39821), (Start: 69 @39902 has 9 MA's), (Start: 72 @39911 has 1 MA's), (75, 39932), (78, 39944), (84, 39971), (97, 40031), (101, 40103),

Gene: Zenitsu_63 Start: 39868, Stop: 40179, Start Num: 52

Candidate Starts for Zenitsu_63:

(Start: 52 @39868 has 13 MA's), (56, 39925), (57, 39928), (58, 39940), (62, 40000), (64, 40003), (66, 40015), (77, 40096), (81, 40126), (88, 40156), (89, 40159),

Gene: Zepp_62 Start: 39460, Stop: 39873, Start Num: 69

Candidate Starts for Zepp_62:

(32, 39142), (37, 39166), (39, 39175), (41, 39181), (42, 39187), (43, 39190), (61, 39379), (Start: 69 @39460 has 9 MA's), (80, 39526), (83, 39535), (87, 39556), (91, 39568), (102, 39679), (116, 39823), (118, 39835), (120, 39850),