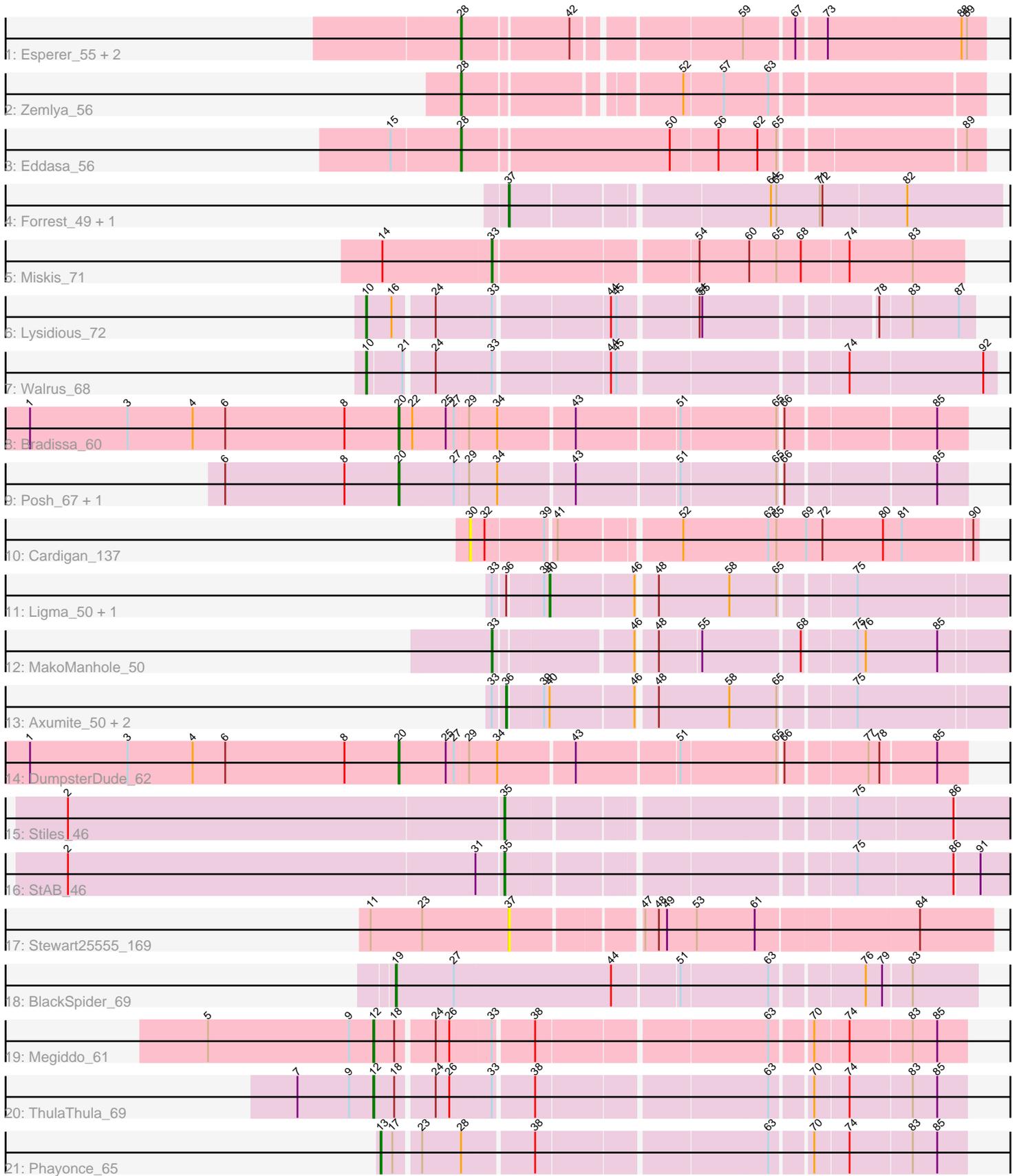


Pham 284088



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 284088 Report

This analysis was run 02/23/26 on database version 636.

Pham number 284088 has 28 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Esperer_55, Leviticus_55, Hydra_56
- Track 2 : Zemlya_56
- Track 3 : Eddasa_56
- Track 4 : Forrest_49, Jada_47
- Track 5 : Miskis_71
- Track 6 : Lysidious_72
- Track 7 : Walrus_68
- Track 8 : Bradissa_60
- Track 9 : Posh_67, Wrigley_69
- Track 10 : Cardigan_137
- Track 11 : Ligma_50, Fresco_50
- Track 12 : MakoManhole_50
- Track 13 : Axumite_50, Shatter_50, CharlottesWeb_49
- Track 14 : DumpsterDude_62
- Track 15 : Stiles_46
- Track 16 : StAB_46
- Track 17 : Stewart25555_169
- Track 18 : BlackSpider_69
- Track 19 : Megiddo_61
- Track 20 : ThulaThula_69
- Track 21 : Phayonce_65

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

The start number called the most often in the published annotations is 28, it was called in 5 of the 25 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Eddasa_56, Esperer_55, Hydra_56, Leviticus_55, Zemlya_56,

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

- Phayonce_65,

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

- Axumite_50, BlackSpider_69, Bradissa_60, Cardigan_137, CharlottesWeb_49, DumpsterDude_62, Forrest_49, Fresco_50, Jada_47, Ligma_50, Lysidious_72, MakoManhole_50, Megiddo_61, Miskis_71, Posh_67, Shatter_50, StAB_46, Stewart25555_169, Stiles_46, ThulaThula_69, Walrus_68, Wrigley_69,

Summary by start number:

Start 10:

- Found in 2 of 28 (7.1%) of genes in pham
- Manual Annotations of this start: 2 of 25
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Lysidious_72 (CV), Walrus_68 (CV),

Start 12:

- Found in 2 of 28 (7.1%) of genes in pham
- Manual Annotations of this start: 2 of 25
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Megiddo_61 (P1), ThulaThula_69 (P5),

Start 13:

- Found in 1 of 28 (3.6%) 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: Phayonce_65 (P5),

Start 19:

- Found in 1 of 28 (3.6%) 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: BlackSpider_69 (FN),

Start 20:

- Found in 4 of 28 (14.3%) of genes in pham
- Manual Annotations of this start: 4 of 25
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bradissa_60 (CY1), DumpsterDude_62 (DW), Posh_67 (CY4), Wrigley_69 (CY4),

Start 28:

- Found in 6 of 28 (21.4%) of genes in pham
- Manual Annotations of this start: 5 of 25
- Called 83.3% of time when present
- Phage (with cluster) where this start called: Eddasa_56 (BD1), Esperer_55 (BD1), Hydra_56 (BD1), Leviticus_55 (BD1), Zemlya_56 (BD1),

Start 30:

- Found in 1 of 28 (3.6%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cardigan_137 (DD),

Start 33:

- Found in 11 of 28 (39.3%) of genes in pham

- Manual Annotations of this start: 2 of 25
- Called 18.2% of time when present
- Phage (with cluster) where this start called: MakoManhole_50 (DR), Miskis_71 (CQ1),

Start 35:

- Found in 2 of 28 (7.1%) of genes in pham
- Manual Annotations of this start: 2 of 25
- Called 100.0% of time when present
- Phage (with cluster) where this start called: StAB_46 (EP), Stiles_46 (EP),

Start 36:

- Found in 5 of 28 (17.9%) of genes in pham
- Manual Annotations of this start: 2 of 25
- Called 60.0% of time when present
- Phage (with cluster) where this start called: Axumite_50 (DR), CharlottesWeb_49 (DR), Shatter_50 (DR),

Start 37:

- Found in 3 of 28 (10.7%) of genes in pham
- Manual Annotations of this start: 2 of 25
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Forrest_49 (BK1), Jada_47 (BK1), Stewart25555_169 (FC),

Start 40:

- Found in 5 of 28 (17.9%) of genes in pham
- Manual Annotations of this start: 2 of 25
- Called 40.0% of time when present
- Phage (with cluster) where this start called: Fresco_50 (DR), Ligma_50 (DR),

Summary by clusters:

There are 14 clusters represented in this pham: CY1, P1, P5, DD, CY4, CV, FC, BD1, BK1, DW, CQ1, DR, EP, FN,

Info for manual annotations of cluster BD1:

- Start number 28 was manually annotated 5 times for cluster BD1.

Info for manual annotations of cluster BK1:

- Start number 37 was manually annotated 2 times for cluster BK1.

Info for manual annotations of cluster CQ1:

- Start number 33 was manually annotated 1 time for cluster CQ1.

Info for manual annotations of cluster CV:

- Start number 10 was manually annotated 2 times for cluster CV.

Info for manual annotations of cluster CY1:

- Start number 20 was manually annotated 1 time for cluster CY1.

Info for manual annotations of cluster CY4:

- Start number 20 was manually annotated 2 times for cluster CY4.

Info for manual annotations of cluster DR:

- Start number 33 was manually annotated 1 time for cluster DR.
- Start number 36 was manually annotated 2 times for cluster DR.
- Start number 40 was manually annotated 2 times for cluster DR.

Info for manual annotations of cluster DW:

- Start number 20 was manually annotated 1 time for cluster DW.

Info for manual annotations of cluster EP:

- Start number 35 was manually annotated 2 times for cluster EP.

Info for manual annotations of cluster FN:

- Start number 19 was manually annotated 1 time for cluster FN.

Info for manual annotations of cluster P1:

- Start number 12 was manually annotated 1 time for cluster P1.

Info for manual annotations of cluster P5:

- Start number 12 was manually annotated 1 time for cluster P5.
- Start number 13 was manually annotated 1 time for cluster P5.

Gene Information:

Gene: Axumite_50 Start: 44137, Stop: 43628, Start Num: 36

Candidate Starts for Axumite_50:

(Start: 33 @44149 has 2 MA's), (Start: 36 @44137 has 2 MA's), (39, 44101), (Start: 40 @44095 has 2 MA's), (46, 44008), (48, 43990), (58, 43912), (65, 43861), (75, 43786),

Gene: BlackSpider_69 Start: 42752, Stop: 43360, Start Num: 19

Candidate Starts for BlackSpider_69:

(Start: 19 @42752 has 1 MA's), (27, 42815), (44, 42986), (51, 43055), (63, 43148), (76, 43241), (79, 43259), (83, 43289),

Gene: Bradissa_60 Start: 44116, Stop: 44703, Start Num: 20

Candidate Starts for Bradissa_60:

(1, 43708), (3, 43816), (4, 43888), (6, 43924), (8, 44056), (Start: 20 @44116 has 4 MA's), (22, 44131), (25, 44167), (27, 44176), (29, 44191), (34, 44221), (43, 44302), (51, 44410), (65, 44512), (66, 44515), (85, 44671),

Gene: Cardigan_137 Start: 77101, Stop: 77631, Start Num: 30

Candidate Starts for Cardigan_137:

(30, 77101), (32, 77116), (39, 77179), (41, 77188), (52, 77311), (63, 77404), (65, 77413), (69, 77446), (72, 77464), (80, 77530), (81, 77551), (90, 77626),

Gene: CharlottesWeb_49 Start: 43503, Stop: 42994, Start Num: 36

Candidate Starts for CharlottesWeb_49:

(Start: 33 @43515 has 2 MA's), (Start: 36 @43503 has 2 MA's), (39, 43467), (Start: 40 @43461 has 2 MA's), (46, 43374), (48, 43356), (58, 43278), (65, 43227), (75, 43152),

Gene: DumpsterDude_62 Start: 46219, Stop: 46806, Start Num: 20

Candidate Starts for DumpsterDude_62:

(1, 45811), (3, 45919), (4, 45991), (6, 46027), (8, 46159), (Start: 20 @46219 has 4 MA's), (25, 46270), (27, 46279), (29, 46294), (34, 46324), (43, 46405), (51, 46513), (65, 46615), (66, 46618), (77, 46702), (78, 46714), (85, 46774),

Gene: Eddasa_56 Start: 41265, Stop: 40723, Start Num: 28

Candidate Starts for Eddasa_56:

(15, 41334), (Start: 28 @41265 has 5 MA's), (50, 41046), (56, 40995), (62, 40953), (65, 40932), (89, 40743),

Gene: Esperer_55 Start: 40815, Stop: 40285, Start Num: 28

Candidate Starts for Esperer_55:

(Start: 28 @40815 has 5 MA's), (42, 40707), (59, 40539), (67, 40488), (73, 40458), (88, 40311), (89, 40305),

Gene: Forrest_49 Start: 41931, Stop: 42446, Start Num: 37

Candidate Starts for Forrest_49:

(Start: 37 @41931 has 2 MA's), (64, 42195), (65, 42201), (71, 42249), (72, 42252), (82, 42342),

Gene: Fresco_50 Start: 44095, Stop: 43628, Start Num: 40

Candidate Starts for Fresco_50:

(Start: 33 @44149 has 2 MA's), (Start: 36 @44137 has 2 MA's), (39, 44101), (Start: 40 @44095 has 2 MA's), (46, 44008), (48, 43990), (58, 43912), (65, 43861), (75, 43786),

Gene: Hydra_56 Start: 41651, Stop: 41121, Start Num: 28

Candidate Starts for Hydra_56:

(Start: 28 @41651 has 5 MA's), (42, 41543), (59, 41375), (67, 41324), (73, 41294), (88, 41147), (89, 41141),

Gene: Jada_47 Start: 41113, Stop: 41628, Start Num: 37

Candidate Starts for Jada_47:

(Start: 37 @41113 has 2 MA's), (64, 41377), (65, 41383), (71, 41431), (72, 41434), (82, 41524),

Gene: Leviticus_55 Start: 41002, Stop: 40472, Start Num: 28

Candidate Starts for Leviticus_55:

(Start: 28 @41002 has 5 MA's), (42, 40894), (59, 40726), (67, 40675), (73, 40645), (88, 40498), (89, 40492),

Gene: Ligma_50 Start: 44095, Stop: 43628, Start Num: 40

Candidate Starts for Ligma_50:

(Start: 33 @44149 has 2 MA's), (Start: 36 @44137 has 2 MA's), (39, 44101), (Start: 40 @44095 has 2 MA's), (46, 44008), (48, 43990), (58, 43912), (65, 43861), (75, 43786),

Gene: Lysidious_72 Start: 45013, Stop: 45621, Start Num: 10

Candidate Starts for Lysidious_72:

(Start: 10 @45013 has 2 MA's), (16, 45040), (24, 45079), (Start: 33 @45139 has 2 MA's), (44, 45256), (45, 45262), (54, 45343), (55, 45346), (78, 45520), (83, 45553), (87, 45604),

Gene: MakoManhole_50 Start: 45251, Stop: 44724, Start Num: 33

Candidate Starts for MakoManhole_50:

(Start: 33 @45251 has 2 MA's), (46, 45113), (48, 45095), (55, 45050), (68, 44948), (75, 44894), (76, 44885), (85, 44807),

Gene: Megiddo_61 Start: 41199, Stop: 41795, Start Num: 12

Candidate Starts for Megiddo_61:

(5, 41016), (9, 41172), (Start: 12 @41199 has 2 MA's), (18, 41220), (24, 41256), (26, 41271), (Start: 33 @41316 has 2 MA's), (38, 41355), (63, 41595), (70, 41634), (74, 41670), (83, 41736), (85, 41763),

Gene: Miskis_71 Start: 47774, Stop: 48271, Start Num: 33

Candidate Starts for Miskis_71:

(14, 47657), (Start: 33 @47774 has 2 MA's), (54, 47984), (60, 48038), (65, 48068), (68, 48095), (74, 48146), (83, 48215),

Gene: Phayonce_65 Start: 43286, Stop: 43876, Start Num: 13

Candidate Starts for Phayonce_65:

(Start: 13 @43286 has 1 MA's), (17, 43298), (23, 43322), (Start: 28 @43364 has 5 MA's), (38, 43436), (63, 43676), (70, 43715), (74, 43751), (83, 43817), (85, 43844),

Gene: Posh_67 Start: 45892, Stop: 46479, Start Num: 20

Candidate Starts for Posh_67:

(6, 45700), (8, 45832), (Start: 20 @45892 has 4 MA's), (27, 45952), (29, 45967), (34, 45997), (43, 46078), (51, 46186), (65, 46288), (66, 46291), (85, 46447),

Gene: Shatter_50 Start: 44137, Stop: 43628, Start Num: 36

Candidate Starts for Shatter_50:

(Start: 33 @44149 has 2 MA's), (Start: 36 @44137 has 2 MA's), (39, 44101), (Start: 40 @44095 has 2 MA's), (46, 44008), (48, 43990), (58, 43912), (65, 43861), (75, 43786),

Gene: StAB_46 Start: 35820, Stop: 36344, Start Num: 35

Candidate Starts for StAB_46:

(2, 35346), (31, 35793), (Start: 35 @35820 has 2 MA's), (75, 36168), (86, 36270), (91, 36297),

Gene: Stewart25555_169 Start: 117773, Stop: 118273, Start Num: 37

Candidate Starts for Stewart25555_169:

(11, 117620), (23, 117677), (Start: 37 @117773 has 2 MA's), (47, 117902), (48, 117917), (49, 117926), (53, 117959), (61, 118022), (84, 118193),

Gene: Stiles_46 Start: 35275, Stop: 35799, Start Num: 35

Candidate Starts for Stiles_46:

(2, 34801), (Start: 35 @35275 has 2 MA's), (75, 35623), (86, 35725),

Gene: ThulaThula_69 Start: 44706, Stop: 45302, Start Num: 12

Candidate Starts for ThulaThula_69:

(7, 44622), (9, 44679), (Start: 12 @44706 has 2 MA's), (18, 44727), (24, 44763), (26, 44778), (Start: 33 @44823 has 2 MA's), (38, 44862), (63, 45102), (70, 45141), (74, 45177), (83, 45243), (85, 45270),

Gene: Walrus_68 Start: 43422, Stop: 44057, Start Num: 10

Candidate Starts for Walrus_68:

(Start: 10 @43422 has 2 MA's), (21, 43458), (24, 43485), (Start: 33 @43545 has 2 MA's), (44, 43662), (45, 43668), (74, 43899), (92, 44043),

Gene: Wrigley_69 Start: 45475, Stop: 46062, Start Num: 20

Candidate Starts for Wrigley_69:

(6, 45283), (8, 45415), (Start: 20 @45475 has 4 MA's), (27, 45535), (29, 45550), (34, 45580), (43, 45661), (51, 45769), (65, 45871), (66, 45874), (85, 46030),

Gene: Zemlya_56 Start: 42043, Stop: 41525, Start Num: 28

Candidate Starts for Zemlya_56:

(Start: 28 @42043 has 5 MA's), (52, 41836), (57, 41794), (63, 41746),