

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 224876 Report

This analysis was run 03/28/25 on database version 593.

Pham number 224876 has 23 members, 0 are drafts.

Phages represented in each track:

- Track 1 : Chargerpower 69
- Track 2 : VA6_72, AN3_74
- Track 3 : Herbertwm_69
- Track 4 : Roary 83
- Track 5 : Stephig9_80, NearlyHeadless_82, Danforth_82Track 6 : Saintus_77
- Track 7: Astro 81, Expelliarmus 78, Dixon 80
- Track 8 : Groundhog_79, Smeadley_81
- Track 9: Phillis 78
- Track 10 : Arissanae_71
- Track 11 : Elephantoon_74
- Track 12 : Toaka 74
- Track 13 : BogosyJay_74, Maminiaina_74Track 14 : Charm_68
- Track 15 : DreamTeam1_68
- Track 16 : Vanisoa 71

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

The start number called the most often in the published annotations is 5, it was called in 16 of the 23 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• AN3_74, Arissanae_71, Astro_81, Chargerpower_69, Charm_68, Danforth_82, Dixon_80, DreamTeam1_68, Elephantoon_74, Expelliarmus_78, Groundhog_79, NearlyHeadless_82, Smeadley_81, Stephig9_80, VA6_72, Vanisoa_71,

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

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

 BogosyJay_74, Herbertwm_69, Maminiaina_74, Phillis_78, Roary_83, Saintus_77, Toaka_74,

Summary by start number:

Start 4:

- Found in 3 of 23 (13.0%) of genes in pham
- Manual Annotations of this start: 2 of 23
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Phillis_78 (A8), Roary_83 (A8),

Start 5:

- Found in 16 of 23 (69.6%) of genes in pham
- Manual Annotations of this start: 16 of 23
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AN3_74 (A2), Arissanae_71 (A9), Astro_81 (A8), Chargerpower_69 (A), Charm_68 (A9), Danforth_82 (A8), Dixon_80 (A8), DreamTeam1_68 (A9), Elephantoon_74 (A9), Expelliarmus_78 (A8), Groundhog_79 (A8), NearlyHeadless_82 (A8), Smeadley_81 (A8), Stephig9_80 (A8), VA6_72 (A2), Vanisoa_71 (A9),

Start 6:

- Found in 1 of 23 (4.3%) of genes in pham
- Manual Annotations of this start: 1 of 23
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Toaka_74 (A9),

Start 7:

- Found in 2 of 23 (8.7%) of genes in pham
- Manual Annotations of this start: 2 of 23
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BogosyJay_74 (A9), Maminiaina_74 (A9),

Start 8:

- Found in 1 of 23 (4.3%) of genes in pham
- Manual Annotations of this start: 1 of 23
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Herbertwm_69 (A2),

Start 12:

- Found in 8 of 23 (34.8%) of genes in pham
- Manual Annotations of this start: 1 of 23
- Called 12.5% of time when present
- Phage (with cluster) where this start called: Saintus 77 (A8),

Summary by clusters:

There are 4 clusters represented in this pham: A9, A8, A2, A,

Info for manual annotations of cluster A:

•Start number 5 was manually annotated 1 time for cluster A.

Info for manual annotations of cluster A2:

- •Start number 5 was manually annotated 2 times for cluster A2.
- •Start number 8 was manually annotated 1 time for cluster A2.

Info for manual annotations of cluster A8:

- •Start number 4 was manually annotated 2 times for cluster A8.
- •Start number 5 was manually annotated 8 times for cluster A8.
- •Start number 12 was manually annotated 1 time for cluster A8.

Info for manual annotations of cluster A9:

- •Start number 5 was manually annotated 5 times for cluster A9.
- •Start number 6 was manually annotated 1 time for cluster A9.
- •Start number 7 was manually annotated 2 times for cluster A9.

Gene Information:

Gene: AN3 74 Start: 42283, Stop: 42008, Start Num: 5

Candidate Starts for AN3 74:

(Start: 5 @42283 has 16 MA's), (10, 42262), (13, 42238), (16, 42181), (17, 42175), (21, 42046), (22,

42043),

Gene: Arissanae_71 Start: 43153, Stop: 42884, Start Num: 5

Candidate Starts for Arissanae 71:

(Start: 5 @ 43153 has 16 MA's), (9, 43135), (Start: 12 @ 43123 has 1 MA's), (17, 43045), (18, 43027),

Gene: Astro_81 Start: 44417, Stop: 44070, Start Num: 5

Candidate Starts for Astro 81:

(Start: 5 @44417 has 16 MA's), (16, 44315), (17, 44309),

Gene: BogosyJay_74 Start: 43112, Stop: 42849, Start Num: 7

Candidate Starts for BogosyJay 74:

(Start: 7 @43112 has 2 MA's), (13, 43073), (17, 43010), (18, 42992), (20, 42890),

Gene: Chargerpower 69 Start: 41165, Stop: 40890, Start Num: 5

Candidate Starts for Chargerpower 69:

(Start: 5 @41165 has 16 MA's), (9, 41147), (13, 41120), (16, 41063), (17, 41057), (18, 41039), (22, 40925),

Gene: Charm_68 Start: 41975, Stop: 41700, Start Num: 5

Candidate Starts for Charm 68:

(Start: 5 @41975 has 16 MA's), (Start: 12 @41945 has 1 MA's), (13, 41930), (14, 41924), (16, 41873), (17, 41867), (18, 41849), (22, 41735),

Gene: Danforth 82 Start: 44494, Stop: 44147, Start Num: 5

Candidate Starts for Danforth_82:

(Start: 5 @44494 has 16 MA's), (14, 44443), (16, 44392), (17, 44386),

Gene: Dixon_80 Start: 43976, Stop: 43629, Start Num: 5

Candidate Starts for Dixon 80:

(Start: 5 @ 43976 has 16 MA's), (16, 43874), (17, 43868),

Gene: DreamTeam1 68 Start: 41822, Stop: 41553, Start Num: 5

Candidate Starts for DreamTeam1 68:

(Start: 5 @41822 has 16 MA's), (Start: 12 @41792 has 1 MA's), (13, 41777), (16, 41720), (23, 41585),

Gene: Elephantoon_74 Start: 42749, Stop: 42480, Start Num: 5

Candidate Starts for Elephantoon_74:

(Start: 5 @ 42749 has 16 MA's), (9, 42731), (Start: 12 @ 42719 has 1 MA's), (17, 42641), (18, 42623), (19, 42617),

Gene: Expelliarmus_78 Start: 44190, Stop: 43843, Start Num: 5

Candidate Starts for Expelliarmus 78:

(Start: 5 @44190 has 16 MA's), (16, 44088), (17, 44082),

Gene: Groundhog_79 Start: 44246, Stop: 43899, Start Num: 5

Candidate Starts for Groundhog 79:

(Start: 5 @44246 has 16 MA's), (14, 44195), (16, 44144), (17, 44138), (25, 43979),

Gene: Herbertwm_69 Start: 43036, Stop: 42749, Start Num: 8

Candidate Starts for Herbertwm_69:

(1, 43168), (2, 43159), (3, 43099), (Start: 8 @ 43036 has 1 MA's), (13, 42994), (15, 42964), (16, 42937), (18, 42913), (20, 42805), (21, 42802),

Gene: Maminiaina_74 Start: 43094, Stop: 42831, Start Num: 7

Candidate Starts for Maminiaina 74:

(Start: 7 @ 43094 has 2 MA's), (13, 43055), (17, 42992), (18, 42974), (20, 42872),

Gene: NearlyHeadless_82 Start: 44260, Stop: 43913, Start Num: 5

Candidate Starts for NearlyHeadless_82:

(Start: 5 @ 44260 has 16 MA's), (14, 44209), (16, 44158), (17, 44152),

Gene: Phillis 78 Start: 43167, Stop: 42865, Start Num: 4

Candidate Starts for Phillis_78:

(Start: 4 @43167 has 2 MA's), (10, 43146), (11, 43140), (Start: 12 @43137 has 1 MA's), (16, 43065), (17, 43059), (24, 42951),

Gene: Roary 83 Start: 44451, Stop: 44149, Start Num: 4

Candidate Starts for Roary 83:

(Start: 4 @44451 has 2 MA's), (10, 44430), (Start: 12 @44421 has 1 MA's), (16, 44349), (17, 44343), (24, 44235),

Gene: Saintus_77 Start: 41069, Stop: 40797, Start Num: 12

Candidate Starts for Saintus_77:

(Start: 4 @41099 has 2 MA's), (10, 41078), (Start: 12 @41069 has 1 MA's), (16, 40997), (17, 40991), (24, 40883),

Gene: Smeadley_81 Start: 44312, Stop: 43965, Start Num: 5

Candidate Starts for Smeadley 81:

(Start: 5 @ 44312 has 16 MA's), (14, 44261), (16, 44210), (17, 44204), (25, 44045),

Gene: Stephig9_80 Start: 44251, Stop: 43904, Start Num: 5

Candidate Starts for Stephig9_80:

(Start: 5 @ 44251 has 16 MA's), (14, 44200), (16, 44149), (17, 44143),

Gene: Toaka_74 Start: 43128, Stop: 42862, Start Num: 6

Candidate Starts for Toaka 74:

(Start: 6 @ 43128 has 1 MA's), (Start: 12 @ 43101 has 1 MA's), (15, 43056), (18, 43005), (20, 42903),

Gene: VA6_72 Start: 43461, Stop: 43186, Start Num: 5

Candidate Starts for VA6_72:

 $(Start: 5 @ 43461 \ has \ 16 \ MA's), \ (10, \ 43440), \ (13, \ 43416), \ (16, \ 43359), \ (17, \ 43353), \ (21, \ 43224), \ (22, \ 43224), \ (23, \ 43416), \ (23, \ 43416), \ (23, \ 43416), \ (23, \ 43416), \ (24, \ 43359), \ (24, \ 43353), \ (24, \ 43224), \ (24, \ 43359),$

43221),

Gene: Vanisoa_71 Start: 43466, Stop: 43197, Start Num: 5

Candidate Starts for Vanisoa_71:

(Start: 5 @ 43466 has 16 MA's), (9, 43448), (16, 43364),