Pham 346213


1: VC3_46 + 3
2: Cuco_36 + 5
3: Groundhog_37 + 1
4: Expelliarmus_37 + 3
5: Phillis_38
6: Astro_38

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 346213 Report

This analysis was run 11/14/26 on database version 672.

Pham number 346213 has 18 members, 0 are drafts.

Phages represented in each track:
• Track 1 : VC3_46, AN9_46, ANI8_46, C3_41
• Track 2 : Cuco_36, Micasa_38, Coog_36, Midas2_36, MarysWell_35, Theia_34
• Track 3 : Groundhog_37, Caitlin_38
• Track 4 : Expelliarmus_37, NearlyHeadless_38, Dixon_38, Smeadley_38
• Track 5 : Phillis_38
• Track 6 : Astro_38

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

The start number called the most often in the published annotations is 4, it was called in 11 of the 18 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Coog_36, Cuco_36, Dixon_38, Expelliarmus_37, MarysWell_35, Micasa_38, Midas2_36, NearlyHeadless_38, Phillis_38, Smeadley_38, Theia_34,

Genes that have the "Most Annotated" start but do not call it:
• AN9_46, ANI8_46, Astro_38, C3_41, Caitlin_38, Groundhog_37, VC3_46,

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

Summary by start number:

Start 4:
• Found in 18 of 18 (100.0%) of genes in pham
• Manual Annotations of this start: 11 of 18
• Called 61.1% of time when present
• Phage (with cluster) where this start called: Coog_36 (A5), Cuco_36 (A5), Dixon_38 (A8), Expelliarmus_37 (A8), MarysWell_35 (A5), Micasa_38 (A5), Midas2_36 (A5), NearlyHeadless_38 (A8), Phillis_38 (A8), Smeadley_38 (A8), Theia_34 (A5),

Start 5:
• Found in 3 of 18 (16.7%) of genes in pham

• Manual Annotations of this start: 2 of 18
• Called 66.7% of time when present
• Phage (with cluster) where this start called: Caitlin_38 (A8), Groundhog_37 (A8),

Start 9:
• Found in 9 of 18 (50.0%) of genes in pham
• Manual Annotations of this start: 1 of 18
• Called 11.1% of time when present
• Phage (with cluster) where this start called: Astro_38 (A8),

Start 12:
• Found in 10 of 18 (55.6%) of genes in pham
• Manual Annotations of this start: 4 of 18
• Called 40.0% of time when present
• Phage (with cluster) where this start called: AN9_46 (A2), ANI8_46 (A2), C3_41 (A2), VC3_46 (A2),

Summary by clusters:

There are 3 clusters represented in this pham: A8, A2, A5,

Info for manual annotations of cluster A2:
•Start number 12 was manually annotated 4 times for cluster A2.

Info for manual annotations of cluster A5:
•Start number 4 was manually annotated 6 times for cluster A5.

Info for manual annotations of cluster A8:
•Start number 4 was manually annotated 5 times for cluster A8.
•Start number 5 was manually annotated 2 times for cluster A8.
•Start number 9 was manually annotated 1 time for cluster A8.

Gene Information:

Gene: AN9_46 Start: 29550, Stop: 29290, Start Num: 12
Candidate Starts for AN9_46:
(1, 29730), (2, 29661), (3, 29640), (Start: 4 @29631 has 11 MA's), (8, 29595), (10, 29586), (11, 29571), (Start: 12 @29550 has 4 MA's), (14, 29532), (15, 29526), (30, 29334), (31, 29322), (33, 29316), (34, 29313),

Gene: ANI8_46 Start: 29550, Stop: 29290, Start Num: 12
Candidate Starts for ANI8_46:
(1, 29730), (2, 29661), (3, 29640), (Start: 4 @29631 has 11 MA's), (8, 29595), (10, 29586), (11, 29571), (Start: 12 @29550 has 4 MA's), (14, 29532), (15, 29526), (30, 29334), (31, 29322), (33, 29316), (34, 29313),

Gene: Astro_38 Start: 27858, Stop: 27583, Start Num: 9
Candidate Starts for Astro_38:
(Start: 4 @27900 has 11 MA's), (Start: 5 @27897 has 2 MA's), (6, 27876), (7, 27867), (Start: 9 @27858 has 1 MA's), (20, 27723), (22, 27690), (23, 27684), (27, 27648), (28, 27645), (29, 27621),

Gene: C3_41 Start: 29550, Stop: 29290, Start Num: 12
Candidate Starts for C3_41:
(1, 29730), (2, 29661), (3, 29640), (Start: 4 @29631 has 11 MA's), (8, 29595), (10, 29586), (11, 29571), (Start: 12 @29550 has 4 MA's), (14, 29532), (15, 29526), (30, 29334), (31, 29322), (33, 29316), (34, 29313),

Gene: Caitlin_38 Start: 27890, Stop: 27576, Start Num: 5
Candidate Starts for Caitlin_38:
(Start: 4 @27893 has 11 MA's), (Start: 5 @27890 has 2 MA's), (6, 27869), (7, 27860), (Start: 9 @27851 has 1 MA's), (20, 27716), (22, 27683), (23, 27677), (27, 27641), (28, 27638), (29, 27614),

Gene: Coog_36 Start: 28201, Stop: 27887, Start Num: 4
Candidate Starts for Coog_36:
(Start: 4 @28201 has 11 MA's), (7, 28171), (Start: 9 @28162 has 1 MA's), (Start: 12 @28126 has 4 MA's), (15, 28102), (16, 28099), (18, 28069), (22, 27994), (25, 27973), (26, 27967), (27, 27952), (29, 27925), (32, 27907),

Gene: Cuco_36 Start: 28154, Stop: 27843, Start Num: 4
Candidate Starts for Cuco_36:
(Start: 4 @28154 has 11 MA's), (7, 28124), (Start: 9 @28115 has 1 MA's), (Start: 12 @28079 has 4 MA's), (15, 28055), (16, 28052), (18, 28022), (22, 27947), (25, 27926), (26, 27920), (27, 27905), (29, 27878), (32, 27860),

Gene: Dixon_38 Start: 27897, Stop: 27577, Start Num: 4
Candidate Starts for Dixon_38:
(Start: 4 @27897 has 11 MA's), (13, 27807), (17, 27765), (20, 27720), (21, 27702), (24, 27672), (25, 27663), (29, 27615),

Gene: Expelliarmus_37 Start: 27774, Stop: 27454, Start Num: 4
Candidate Starts for Expelliarmus_37:
(Start: 4 @27774 has 11 MA's), (13, 27684), (17, 27642), (20, 27597), (21, 27579), (24, 27549), (25, 27540), (29, 27492),

Gene: Groundhog_37 Start: 27862, Stop: 27548, Start Num: 5
Candidate Starts for Groundhog_37:
(Start: 4 @27865 has 11 MA's), (Start: 5 @27862 has 2 MA's), (6, 27841), (7, 27832), (Start: 9 @27823 has 1 MA's), (20, 27688), (22, 27655), (23, 27649), (27, 27613), (28, 27610), (29, 27586),

Gene: MarysWell_35 Start: 28216, Stop: 27902, Start Num: 4
Candidate Starts for MarysWell_35:
(Start: 4 @28216 has 11 MA's), (7, 28186), (Start: 9 @28177 has 1 MA's), (Start: 12 @28141 has 4 MA's), (15, 28117), (16, 28114), (18, 28084), (22, 28009), (25, 27988), (26, 27982), (27, 27967), (29, 27940), (32, 27922),

Gene: Micasa_38 Start: 28483, Stop: 28169, Start Num: 4
Candidate Starts for Micasa_38:
(Start: 4 @28483 has 11 MA's), (7, 28453), (Start: 9 @28444 has 1 MA's), (Start: 12 @28408 has 4 MA's), (15, 28384), (16, 28381), (18, 28351), (22, 28276), (25, 28255), (26, 28249), (27, 28234), (29, 28207), (32, 28189),

Gene: Midas2_36 Start: 28201, Stop: 27887, Start Num: 4
Candidate Starts for Midas2_36:

(Start: 4 @28201 has 11 MA's), (7, 28171), (Start: 9 @28162 has 1 MA's), (Start: 12 @28126 has 4 MA's), (15, 28102), (16, 28099), (18, 28069), (22, 27994), (25, 27973), (26, 27967), (27, 27952), (29, 27925), (32, 27907),

Gene: NearlyHeadless_38 Start: 27827, Stop: 27507, Start Num: 4
Candidate Starts for NearlyHeadless_38:
(Start: 4 @27827 has 11 MA's), (13, 27737), (17, 27695), (20, 27650), (21, 27632), (24, 27602), (25, 27593), (29, 27545),

Gene: Phillis_38 Start: 27838, Stop: 27518, Start Num: 4
Candidate Starts for Phillis_38:
(Start: 4 @27838 has 11 MA's), (13, 27748), (16, 27733), (17, 27706), (19, 27688), (20, 27661), (21, 27643), (24, 27613), (25, 27604), (29, 27556),

Gene: Smeadley_38 Start: 27896, Stop: 27576, Start Num: 4
Candidate Starts for Smeadley_38:
(Start: 4 @27896 has 11 MA's), (13, 27806), (17, 27764), (20, 27719), (21, 27701), (24, 27671), (25, 27662), (29, 27614),

Gene: Theia_34 Start: 28183, Stop: 27869, Start Num: 4
Candidate Starts for Theia_34:
(Start: 4 @28183 has 11 MA's), (7, 28153), (Start: 9 @28144 has 1 MA's), (Start: 12 @28108 has 4 MA's), (15, 28084), (16, 28081), (18, 28051), (22, 27976), (25, 27955), (26, 27949), (27, 27934), (29, 27907), (32, 27889),

Gene: VC3_46 Start: 29550, Stop: 29290, Start Num: 12
Candidate Starts for VC3_46:
(1, 29730), (2, 29661), (3, 29640), (Start: 4 @29631 has 11 MA's), (8, 29595), (10, 29586), (11, 29571), (Start: 12 @29550 has 4 MA's), (14, 29532), (15, 29526), (30, 29334), (31, 29322), (33, 29316), (34, 29313),