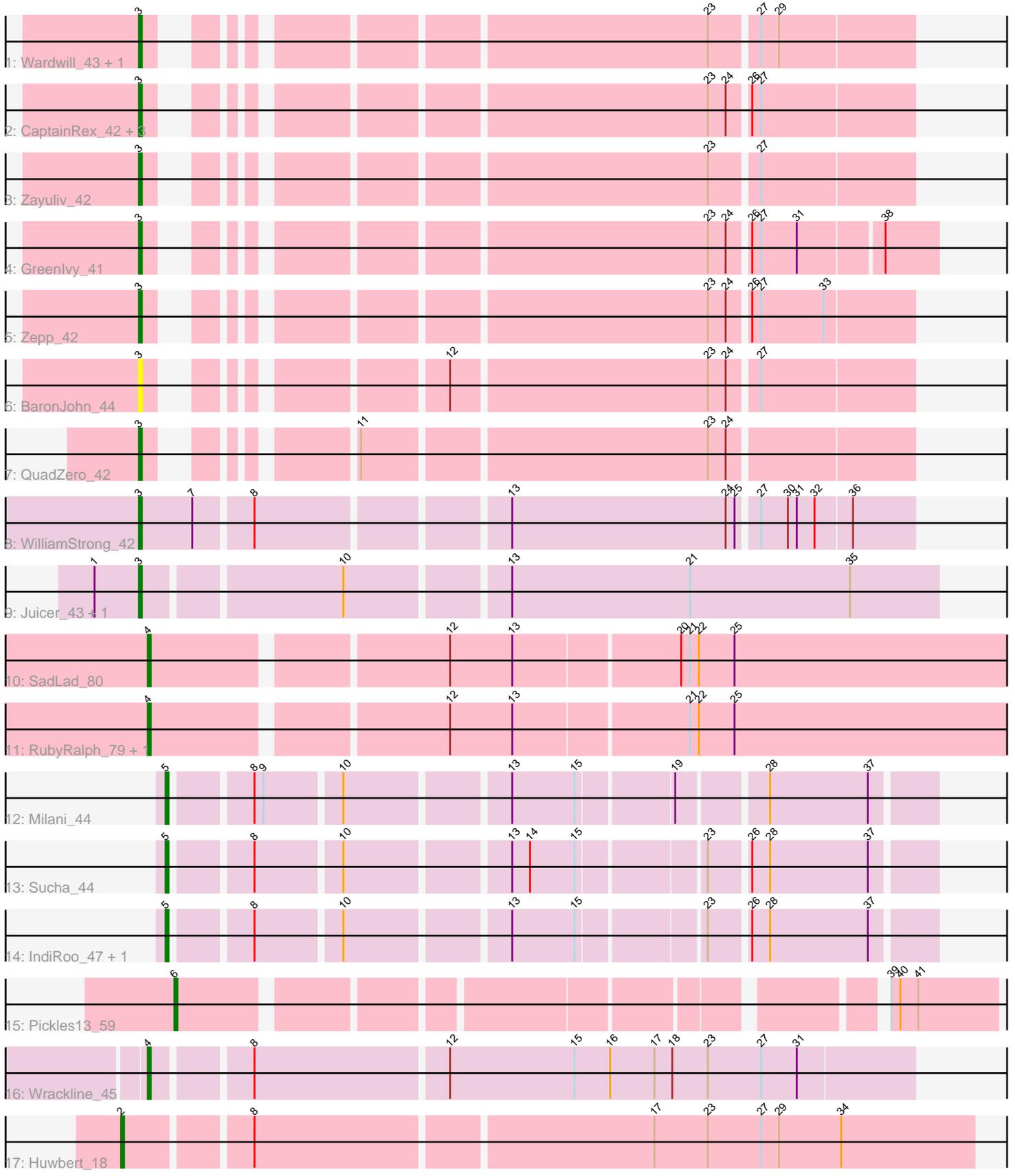# Pham 291501

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 291501 Report

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

Pham number 291501 has 24 members, 2 are drafts.

Phages represented in each track:
• Track 1 : Wardwill_43, LilTerminator_42
• Track 2 : CaptainRex_42, Librie_42, Fulton_42, Hasitha_42
• Track 3 : Zayuliv_42
• Track 4 : GreenIvy_41
• Track 5 : Zepp_42
• Track 6 : BaronJohn_44
• Track 7 : QuadZero_42
• Track 8 : WilliamStrong_42
• Track 9 : Juicer_43, Jemerald_43
• Track 10 : SadLad_80
• Track 11 : RubyRalph_79, Fransoyer_77
• Track 12 : Milani_44
• Track 13 : Sucha_44
• Track 14 : IndiRoo_47, Benry_46
• Track 15 : Pickles13_59
• Track 16 : Wrackline_45
• Track 17 : Huwbert_18

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

The start number called the most often in the published annotations is 3, it was called in 12 of the 22 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• BaronJohn_44, CaptainRex_42, Fulton_42, GreenIvy_41, Hasitha_42, Jemerald_43, Juicer_43, Librie_42, LilTerminator_42, QuadZero_42, Wardwill_43, WilliamStrong_42, Zayuliv_42, Zepp_42,

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

Genes that do not have the "Most Annotated" start:
• Benry_46, Fransoyer_77, Huwbert_18, IndiRoo_47, Milani_44, Pickles13_59, RubyRalph_79, SadLad_80, Sucha_44, Wrackline_45,

Summary by start number:

Start 2:
• Found in 1 of 24 (4.2%) of genes in pham
• Manual Annotations of this start: 1 of 22
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Huwbert_18 (GG),

Start 3:
• Found in 14 of 24 (58.3%) of genes in pham
• Manual Annotations of this start: 12 of 22
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BaronJohn_44 (EA5), CaptainRex_42 (EA5), Fulton_42 (EA5), GreenIvy_41 (EA5), Hasitha_42 (EA5), Jemerald_43 (EA6), Juicer_43 (EA6), Librie_42 (EA5), LilTerminator_42 (EA5), QuadZero_42 (EA5), Wardwill_43 (EA5), WilliamStrong_42 (EA6), Zayuliv_42 (EA5), Zepp_42 (EA5),

Start 4:
• Found in 4 of 24 (16.7%) of genes in pham
• Manual Annotations of this start: 4 of 22
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Fransoyer_77 (EG), RubyRalph_79 (EG), SadLad_80 (EG), Wrackline_45 (GF),

Start 5:
• Found in 4 of 24 (16.7%) of genes in pham
• Manual Annotations of this start: 4 of 22
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Benry_46 (EJ), IndiRoo_47 (EJ), Milani_44 (EJ), Sucha_44 (EJ),

Start 6:
• Found in 1 of 24 (4.2%) of genes in pham
• Manual Annotations of this start: 1 of 22
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Pickles13_59 (GA),

Summary by clusters:

There are 7 clusters represented in this pham: EJ, EG, GG, GF, GA, EA5, EA6,

Info for manual annotations of cluster EA5:
•Start number 3 was manually annotated 9 times for cluster EA5.

Info for manual annotations of cluster EA6:
•Start number 3 was manually annotated 3 times for cluster EA6.

Info for manual annotations of cluster EG:
•Start number 4 was manually annotated 3 times for cluster EG.

Info for manual annotations of cluster EJ:
•Start number 5 was manually annotated 4 times for cluster EJ.

Info for manual annotations of cluster GA:
•Start number 6 was manually annotated 1 time for cluster GA.

Info for manual annotations of cluster GF:
•Start number 4 was manually annotated 1 time for cluster GF.

Info for manual annotations of cluster GG:
•Start number 2 was manually annotated 1 time for cluster GG.

Gene Information:

Gene: BaronJohn_44 Start: 30319, Stop: 30095, Start Num: 3
Candidate Starts for BaronJohn_44:
(Start: 3 @30319 has 12 MA's), (12, 30244), (23, 30160), (24, 30154), (27, 30145),

Gene: Benry_46 Start: 28257, Stop: 28490, Start Num: 5
Candidate Starts for Benry_46:
(Start: 5 @28257 has 4 MA's), (8, 28281), (10, 28308), (13, 28359), (15, 28380), (23, 28419), (26, 28431), (28, 28437), (37, 28470),

Gene: CaptainRex_42 Start: 29567, Stop: 29343, Start Num: 3
Candidate Starts for CaptainRex_42:
(Start: 3 @29567 has 12 MA's), (23, 29408), (24, 29402), (26, 29396), (27, 29393),

Gene: Fransoyer_77 Start: 52088, Stop: 51798, Start Num: 4
Candidate Starts for Fransoyer_77:
(Start: 4 @52088 has 4 MA's), (12, 51995), (13, 51974), (21, 51917), (22, 51914), (25, 51902),

Gene: Fulton_42 Start: 29568, Stop: 29344, Start Num: 3
Candidate Starts for Fulton_42:
(Start: 3 @29568 has 12 MA's), (23, 29409), (24, 29403), (26, 29397), (27, 29394),

Gene: GreenIvy_41 Start: 29908, Stop: 29678, Start Num: 3
Candidate Starts for GreenIvy_41:
(Start: 3 @29908 has 12 MA's), (23, 29749), (24, 29743), (26, 29737), (27, 29734), (31, 29722), (38, 29695),

Gene: Hasitha_42 Start: 29580, Stop: 29356, Start Num: 3
Candidate Starts for Hasitha_42:
(Start: 3 @29580 has 12 MA's), (23, 29421), (24, 29415), (26, 29409), (27, 29406),

Gene: Huwbert_18 Start: 6388, Stop: 6663, Start Num: 2
Candidate Starts for Huwbert_18:
(Start: 2 @6388 has 1 MA's), (8, 6427), (17, 6556), (23, 6574), (27, 6592), (29, 6598), (34, 6619),

Gene: IndiRoo_47 Start: 28373, Stop: 28606, Start Num: 5
Candidate Starts for IndiRoo_47:
(Start: 5 @28373 has 4 MA's), (8, 28397), (10, 28424), (13, 28475), (15, 28496), (23, 28535), (26, 28547), (28, 28553), (37, 28586),

Gene: Jemerald_43 Start: 31971, Stop: 31714, Start Num: 3
Candidate Starts for Jemerald_43:
(1, 31986), (Start: 3 @31971 has 12 MA's), (10, 31908), (13, 31857), (21, 31797), (35, 31743),

Gene: Juicer_43 Start: 31971, Stop: 31714, Start Num: 3
Candidate Starts for Juicer_43:
(1, 31986), (Start: 3 @31971 has 12 MA's), (10, 31908), (13, 31857), (21, 31797), (35, 31743),

Gene: Librie_42 Start: 29567, Stop: 29343, Start Num: 3
Candidate Starts for Librie_42:
(Start: 3 @29567 has 12 MA's), (23, 29408), (24, 29402), (26, 29396), (27, 29393),

Gene: LilTerminator_42 Start: 29589, Stop: 29365, Start Num: 3
Candidate Starts for LilTerminator_42:
(Start: 3 @29589 has 12 MA's), (23, 29430), (27, 29415), (29, 29409),

Gene: Milani_44 Start: 28679, Stop: 28912, Start Num: 5
Candidate Starts for Milani_44:
(Start: 5 @28679 has 4 MA's), (8, 28703), (9, 28706), (10, 28730), (13, 28781), (15, 28802), (19, 28832), (28, 28859), (37, 28892),

Gene: Pickles13_59 Start: 35548, Stop: 35790, Start Num: 6
Candidate Starts for Pickles13_59:
(Start: 6 @35548 has 1 MA's), (39, 35755), (40, 35758), (41, 35764),

Gene: QuadZero_42 Start: 29737, Stop: 29513, Start Num: 3
Candidate Starts for QuadZero_42:
(Start: 3 @29737 has 12 MA's), (11, 29689), (23, 29578), (24, 29572),

Gene: RubyRalph_79 Start: 52113, Stop: 51823, Start Num: 4
Candidate Starts for RubyRalph_79:
(Start: 4 @52113 has 4 MA's), (12, 52020), (13, 51999), (21, 51942), (22, 51939), (25, 51927),

Gene: SadLad_80 Start: 53019, Stop: 52729, Start Num: 4
Candidate Starts for SadLad_80:
(Start: 4 @53019 has 4 MA's), (12, 52926), (13, 52905), (20, 52851), (21, 52848), (22, 52845), (25, 52833),

Gene: Sucha_44 Start: 27874, Stop: 28107, Start Num: 5
Candidate Starts for Sucha_44:
(Start: 5 @27874 has 4 MA's), (8, 27898), (10, 27925), (13, 27976), (14, 27982), (15, 27997), (23, 28036), (26, 28048), (28, 28054), (37, 28087),

Gene: Wardwill_43 Start: 29751, Stop: 29527, Start Num: 3
Candidate Starts for Wardwill_43:
(Start: 3 @29751 has 12 MA's), (23, 29592), (27, 29577), (29, 29571),

Gene: WilliamStrong_42 Start: 31432, Stop: 31187, Start Num: 3
Candidate Starts for WilliamStrong_42:
(Start: 3 @31432 has 12 MA's), (7, 31414), (8, 31396), (13, 31318), (24, 31246), (25, 31243), (27, 31237), (30, 31228), (31, 31225), (32, 31219), (36, 31207),

Gene: Wrackline_45 Start: 25461, Stop: 25213, Start Num: 4

Candidate Starts for Wrackline_45:
(Start: 4 @25461 has 4 MA's), (8, 25431), (12, 25368), (15, 25326), (16, 25314), (17, 25299), (18, 25293), (23, 25281), (27, 25263), (31, 25251),

Gene: Zayuliv_42 Start: 30190, Stop: 29966, Start Num: 3
Candidate Starts for Zayuliv_42:
(Start: 3 @30190 has 12 MA's), (23, 30031), (27, 30016),

Gene: Zepp_42 Start: 29624, Stop: 29400, Start Num: 3
Candidate Starts for Zepp_42:
(Start: 3 @29624 has 12 MA's), (23, 29465), (24, 29459), (26, 29453), (27, 29450), (33, 29429),