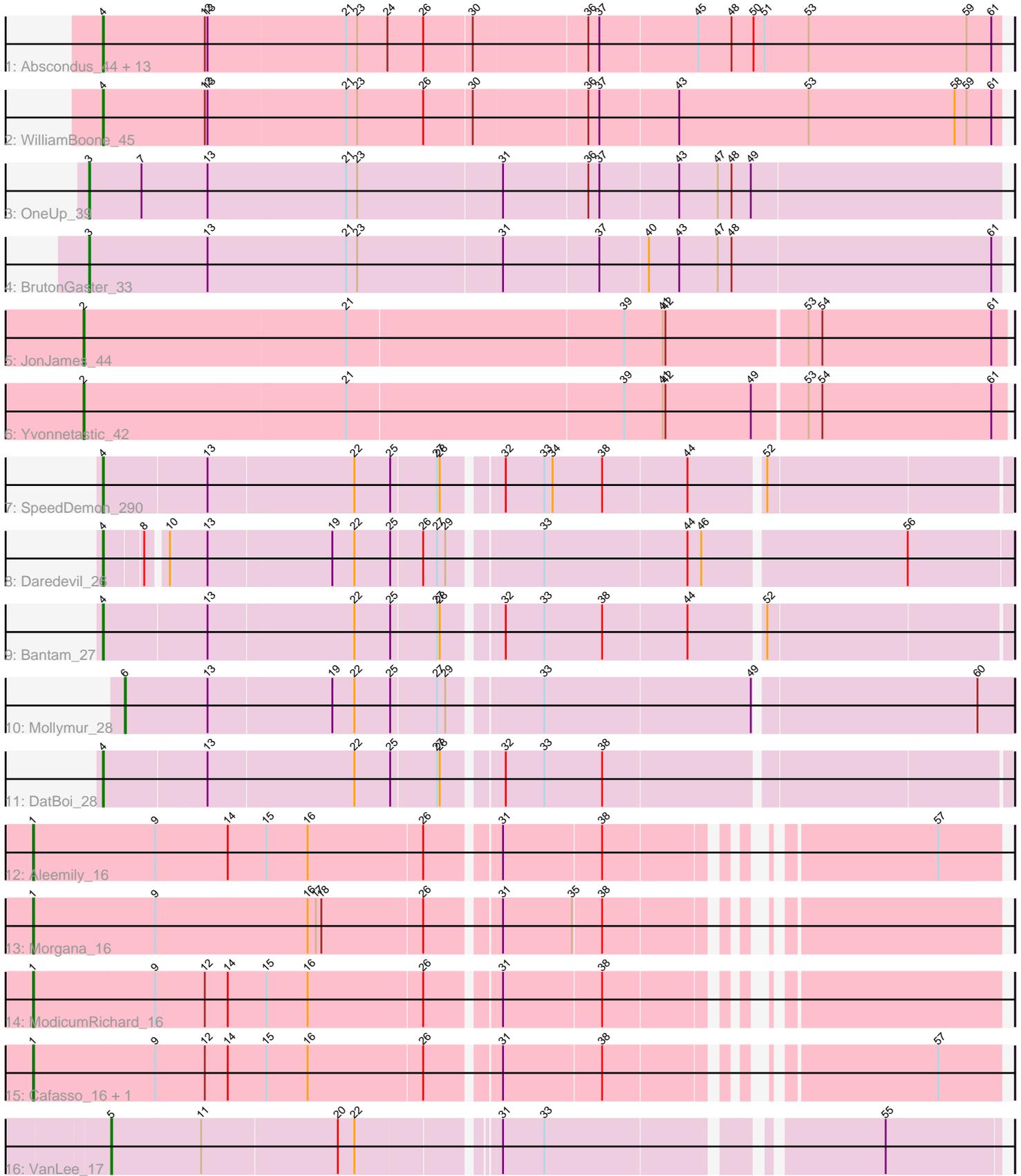# Pham 291411

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 291411 Report

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

Pham number 291411 has 30 members, 0 are drafts.

Phages represented in each track:
• Track 1 : Abscondus_44, Bachita_47, Aphelion_45, Norvs_46, Toniann_45, Smoothie_46, Dusty_44, Culver_45, Lozinak_45, Cucurbita_47, PhinkBoden_45, ClubL_45, Miskis_43, Engineer_45
• Track 2 : WilliamBoone_45
• Track 3 : OneUp_39
• Track 4 : BrutonGaster_33
• Track 5 : JonJames_44
• Track 6 : Yvonnetastic_42
• Track 7 : SpeedDemon_290
• Track 8 : Daredevil_26
• Track 9 : Bantam_27
• Track 10 : Mollymur_28
• Track 11 : DatBoi_28
• Track 12 : Aleemily_16
• Track 13 : Morgana_16
• Track 14 : ModicumRichard_16
• Track 15 : Cafasso_16, ObLaDi_16
• Track 16 : VanLee_17

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 19 of the 30 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Abscondus_44, Aphelion_45, Bachita_47, Bantam_27, ClubL_45, Cucurbita_47, Culver_45, Daredevil_26, DatBoi_28, Dusty_44, Engineer_45, Lozinak_45, Miskis_43, Norvs_46, PhinkBoden_45, Smoothie_46, SpeedDemon_290, Toniann_45, WilliamBoone_45,

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

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

• Aleemily_16, BrutonGaster_33, Cafasso_16, JonJames_44, ModicumRichard_16, Mollymur_28, Morgana_16, ObLaDi_16, OneUp_39, VanLee_17, Yvonnetastic_42,

Summary by start number:

Start 1:
• Found in 5 of 30 (16.7%) of genes in pham
• Manual Annotations of this start: 5 of 30
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Aleemily_16 (DZ), Cafasso_16 (DZ), ModicumRichard_16 (DZ), Morgana_16 (DZ), ObLaDi_16 (DZ),

Start 2:
• Found in 2 of 30 (6.7%) of genes in pham
• Manual Annotations of this start: 2 of 30
• Called 100.0% of time when present
• Phage (with cluster) where this start called: JonJames_44 (DD), Yvonnetastic_42 (DD),

Start 3:
• Found in 2 of 30 (6.7%) of genes in pham
• Manual Annotations of this start: 2 of 30
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BrutonGaster_33 (CQ2), OneUp_39 (CQ2),

Start 4:
• Found in 19 of 30 (63.3%) of genes in pham
• Manual Annotations of this start: 19 of 30
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Abscondus_44 (CQ1), Aphelion_45 (CQ1), Bachita_47 (CQ1), Bantam_27 (DL), ClubL_45 (CQ1), Cucurbita_47 (CQ1), Culver_45 (CQ1), Daredevil_26 (DL), DatBoi_28 (DL), Dusty_44 (CQ1), Engineer_45 (CQ1), Lozinak_45 (CQ1), Miskis_43 (CQ1), Norvs_46 (CQ1), PhinkBoden_45 (CQ1), Smoothie_46 (CQ1), SpeedDemon_290 (DL), Toniann_45 (CQ1), WilliamBoone_45 (CQ1),

Start 5:
• Found in 1 of 30 (3.3%) of genes in pham
• Manual Annotations of this start: 1 of 30
• Called 100.0% of time when present
• Phage (with cluster) where this start called: VanLee_17 (KA),

Start 6:
• Found in 1 of 30 (3.3%) of genes in pham
• Manual Annotations of this start: 1 of 30
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Mollymur_28 (DL),

Summary by clusters:

There are 6 clusters represented in this pham: KA, DD, DL, DZ, CQ2, CQ1,

Info for manual annotations of cluster CQ1:
•Start number 4 was manually annotated 15 times for cluster CQ1.

Info for manual annotations of cluster CQ2:
•Start number 3 was manually annotated 2 times for cluster CQ2.

Info for manual annotations of cluster DD:
•Start number 2 was manually annotated 2 times for cluster DD.

Info for manual annotations of cluster DL:
•Start number 4 was manually annotated 4 times for cluster DL.
•Start number 6 was manually annotated 1 time for cluster DL.

Info for manual annotations of cluster DZ:
•Start number 1 was manually annotated 5 times for cluster DZ.

Info for manual annotations of cluster KA:
•Start number 5 was manually annotated 1 time for cluster KA.

Gene Information:

Gene: Abscondus_44 Start: 18658, Stop: 19619, Start Num: 4
Candidate Starts for Abscondus_44:
(Start: 4 @18658 has 19 MA's), (12, 18769), (13, 18772), (21, 18919), (23, 18931), (24, 18964), (26, 19003), (30, 19054), (36, 19174), (37, 19186), (45, 19291), (48, 19327), (50, 19351), (51, 19363), (53, 19411), (59, 19582), (61, 19609),

Gene: Aleemily_16 Start: 9981, Stop: 10933, Start Num: 1
Candidate Starts for Aleemily_16:
(Start: 1 @9981 has 5 MA's), (9, 10113), (14, 10191), (15, 10233), (16, 10278), (26, 10401), (31, 10470), (38, 10575), (57, 10866),

Gene: Aphelion_45 Start: 18927, Stop: 19888, Start Num: 4
Candidate Starts for Aphelion_45:
(Start: 4 @18927 has 19 MA's), (12, 19038), (13, 19041), (21, 19188), (23, 19200), (24, 19233), (26, 19272), (30, 19323), (36, 19443), (37, 19455), (45, 19560), (48, 19596), (50, 19620), (51, 19632), (53, 19680), (59, 19851), (61, 19878),

Gene: Bachita_47 Start: 19360, Stop: 20321, Start Num: 4
Candidate Starts for Bachita_47:
(Start: 4 @19360 has 19 MA's), (12, 19471), (13, 19474), (21, 19621), (23, 19633), (24, 19666), (26, 19705), (30, 19756), (36, 19876), (37, 19888), (45, 19993), (48, 20029), (50, 20053), (51, 20065), (53, 20113), (59, 20284), (61, 20311),

Gene: Bantam_27 Start: 16393, Stop: 17321, Start Num: 4
Candidate Starts for Bantam_27:
(Start: 4 @16393 has 19 MA's), (13, 16501), (22, 16654), (25, 16693), (27, 16741), (28, 16744), (32, 16798), (33, 16840), (38, 16903), (44, 16993), (52, 17068),

Gene: BrutonGaster_33 Start: 15537, Stop: 16510, Start Num: 3
Candidate Starts for BrutonGaster_33:

(Start: 3 @15537 has 2 MA's), (13, 15666), (21, 15813), (23, 15825), (31, 15978), (37, 16080), (40, 16131), (43, 16164), (47, 16206), (48, 16221), (61, 16500),

Gene: Cafasso_16 Start: 9969, Stop: 10921, Start Num: 1
Candidate Starts for Cafasso_16:
(Start: 1 @9969 has 5 MA's), (9, 10101), (12, 10155), (14, 10179), (15, 10221), (16, 10266), (26, 10389), (31, 10458), (38, 10563), (57, 10854),

Gene: ClubL_45 Start: 18849, Stop: 19810, Start Num: 4
Candidate Starts for ClubL_45:
(Start: 4 @18849 has 19 MA's), (12, 18960), (13, 18963), (21, 19110), (23, 19122), (24, 19155), (26, 19194), (30, 19245), (36, 19365), (37, 19377), (45, 19482), (48, 19518), (50, 19542), (51, 19554), (53, 19602), (59, 19773), (61, 19800),

Gene: Cucurbita_47 Start: 20219, Stop: 21180, Start Num: 4
Candidate Starts for Cucurbita_47:
(Start: 4 @20219 has 19 MA's), (12, 20330), (13, 20333), (21, 20480), (23, 20492), (24, 20525), (26, 20564), (30, 20615), (36, 20735), (37, 20747), (45, 20852), (48, 20888), (50, 20912), (51, 20924), (53, 20972), (59, 21143), (61, 21170),

Gene: Culver_45 Start: 18658, Stop: 19619, Start Num: 4
Candidate Starts for Culver_45:
(Start: 4 @18658 has 19 MA's), (12, 18769), (13, 18772), (21, 18919), (23, 18931), (24, 18964), (26, 19003), (30, 19054), (36, 19174), (37, 19186), (45, 19291), (48, 19327), (50, 19351), (51, 19363), (53, 19411), (59, 19582), (61, 19609),

Gene: Daredevil_26 Start: 14796, Stop: 15721, Start Num: 4
Candidate Starts for Daredevil_26:
(Start: 4 @14796 has 19 MA's), (8, 14835), (10, 14853), (13, 14889), (19, 15018), (22, 15042), (25, 15081), (26, 15114), (27, 15129), (29, 15138), (33, 15228), (44, 15381), (46, 15396), (56, 15609),

Gene: DatBoi_28 Start: 17182, Stop: 18110, Start Num: 4
Candidate Starts for DatBoi_28:
(Start: 4 @17182 has 19 MA's), (13, 17290), (22, 17443), (25, 17482), (27, 17530), (28, 17533), (32, 17587), (33, 17629), (38, 17692),

Gene: Dusty_44 Start: 18658, Stop: 19619, Start Num: 4
Candidate Starts for Dusty_44:
(Start: 4 @18658 has 19 MA's), (12, 18769), (13, 18772), (21, 18919), (23, 18931), (24, 18964), (26, 19003), (30, 19054), (36, 19174), (37, 19186), (45, 19291), (48, 19327), (50, 19351), (51, 19363), (53, 19411), (59, 19582), (61, 19609),

Gene: Engineer_45 Start: 18875, Stop: 19836, Start Num: 4
Candidate Starts for Engineer_45:
(Start: 4 @18875 has 19 MA's), (12, 18986), (13, 18989), (21, 19136), (23, 19148), (24, 19181), (26, 19220), (30, 19271), (36, 19391), (37, 19403), (45, 19508), (48, 19544), (50, 19568), (51, 19580), (53, 19628), (59, 19799), (61, 19826),

Gene: JonJames_44 Start: 22784, Stop: 23772, Start Num: 2
Candidate Starts for JonJames_44:
(Start: 2 @22784 has 2 MA's), (21, 23066), (39, 23363), (41, 23405), (42, 23408), (53, 23558), (54, 23573), (61, 23756),

Gene: Lozinak_45 Start: 18930, Stop: 19891, Start Num: 4
Candidate Starts for Lozinak_45:
(Start: 4 @18930 has 19 MA's), (12, 19041), (13, 19044), (21, 19191), (23, 19203), (24, 19236), (26, 19275), (30, 19326), (36, 19446), (37, 19458), (45, 19563), (48, 19599), (50, 19623), (51, 19635), (53, 19683), (59, 19854), (61, 19881),

Gene: Miskis_43 Start: 18693, Stop: 19654, Start Num: 4
Candidate Starts for Miskis_43:
(Start: 4 @18693 has 19 MA's), (12, 18804), (13, 18807), (21, 18954), (23, 18966), (24, 18999), (26, 19038), (30, 19089), (36, 19209), (37, 19221), (45, 19326), (48, 19362), (50, 19386), (51, 19398), (53, 19446), (59, 19617), (61, 19644),

Gene: ModicumRichard_16 Start: 9969, Stop: 10921, Start Num: 1
Candidate Starts for ModicumRichard_16:
(Start: 1 @9969 has 5 MA's), (9, 10101), (12, 10155), (14, 10179), (15, 10221), (16, 10266), (26, 10389), (31, 10458), (38, 10563),

Gene: Mollymur_28 Start: 17282, Stop: 18201, Start Num: 6
Candidate Starts for Mollymur_28:
(Start: 6 @17282 has 1 MA's), (13, 17369), (19, 17498), (22, 17522), (25, 17561), (27, 17609), (29, 17618), (33, 17708), (49, 17930), (60, 18161),

Gene: Morgana_16 Start: 9973, Stop: 10925, Start Num: 1
Candidate Starts for Morgana_16:
(Start: 1 @9973 has 5 MA's), (9, 10105), (16, 10270), (17, 10279), (18, 10285), (26, 10393), (31, 10462), (35, 10537), (38, 10567),

Gene: Norvs_46 Start: 18932, Stop: 19893, Start Num: 4
Candidate Starts for Norvs_46:
(Start: 4 @18932 has 19 MA's), (12, 19043), (13, 19046), (21, 19193), (23, 19205), (24, 19238), (26, 19277), (30, 19328), (36, 19448), (37, 19460), (45, 19565), (48, 19601), (50, 19625), (51, 19637), (53, 19685), (59, 19856), (61, 19883),

Gene: ObLaDi_16 Start: 9957, Stop: 10909, Start Num: 1
Candidate Starts for ObLaDi_16:
(Start: 1 @9957 has 5 MA's), (9, 10089), (12, 10143), (14, 10167), (15, 10209), (16, 10254), (26, 10377), (31, 10446), (38, 10551), (57, 10842),

Gene: OneUp_39 Start: 16642, Stop: 17615, Start Num: 3
Candidate Starts for OneUp_39:
(Start: 3 @16642 has 2 MA's), (7, 16699), (13, 16771), (21, 16918), (23, 16930), (31, 17083), (36, 17173), (37, 17185), (43, 17269), (47, 17311), (48, 17326), (49, 17347),

Gene: PhinkBoden_45 Start: 19313, Stop: 20274, Start Num: 4
Candidate Starts for PhinkBoden_45:
(Start: 4 @19313 has 19 MA's), (12, 19424), (13, 19427), (21, 19574), (23, 19586), (24, 19619), (26, 19658), (30, 19709), (36, 19829), (37, 19841), (45, 19946), (48, 19982), (50, 20006), (51, 20018), (53, 20066), (59, 20237), (61, 20264),

Gene: Smoothie_46 Start: 18930, Stop: 19891, Start Num: 4
Candidate Starts for Smoothie_46:
(Start: 4 @18930 has 19 MA's), (12, 19041), (13, 19044), (21, 19191), (23, 19203), (24, 19236), (26, 19275), (30, 19326), (36, 19446), (37, 19458), (45, 19563), (48, 19599), (50, 19623), (51, 19635), (53,

19683), (59, 19854), (61, 19881),

Gene: SpeedDemon_290 Start: 18239, Stop: 19167, Start Num: 4
Candidate Starts for SpeedDemon_290:
(Start: 4 @18239 has 19 MA's), (13, 18347), (22, 18500), (25, 18539), (27, 18587), (28, 18590), (32, 18644), (33, 18686), (34, 18695), (38, 18749), (44, 18839), (52, 18914),

Gene: Toniann_45 Start: 18875, Stop: 19836, Start Num: 4
Candidate Starts for Toniann_45:
(Start: 4 @18875 has 19 MA's), (12, 18986), (13, 18989), (21, 19136), (23, 19148), (24, 19181), (26, 19220), (30, 19271), (36, 19391), (37, 19403), (45, 19508), (48, 19544), (50, 19568), (51, 19580), (53, 19628), (59, 19799), (61, 19826),

Gene: VanLee_17 Start: 10020, Stop: 10897, Start Num: 5
Candidate Starts for VanLee_17:
(Start: 5 @10020 has 1 MA's), (11, 10116), (20, 10260), (22, 10278), (31, 10410), (33, 10455), (55, 10779),

Gene: WilliamBoone_45 Start: 18239, Stop: 19200, Start Num: 4
Candidate Starts for WilliamBoone_45:
(Start: 4 @18239 has 19 MA's), (12, 18350), (13, 18353), (21, 18500), (23, 18512), (26, 18584), (30, 18635), (36, 18755), (37, 18767), (43, 18851), (53, 18992), (58, 19151), (59, 19163), (61, 19190),

Gene: Yvonnetastic_42 Start: 20319, Stop: 21307, Start Num: 2
Candidate Starts for Yvonnetastic_42:
(Start: 2 @20319 has 2 MA's), (21, 20601), (39, 20898), (41, 20940), (42, 20943), (49, 21036), (53, 21093), (54, 21108), (61, 21291),