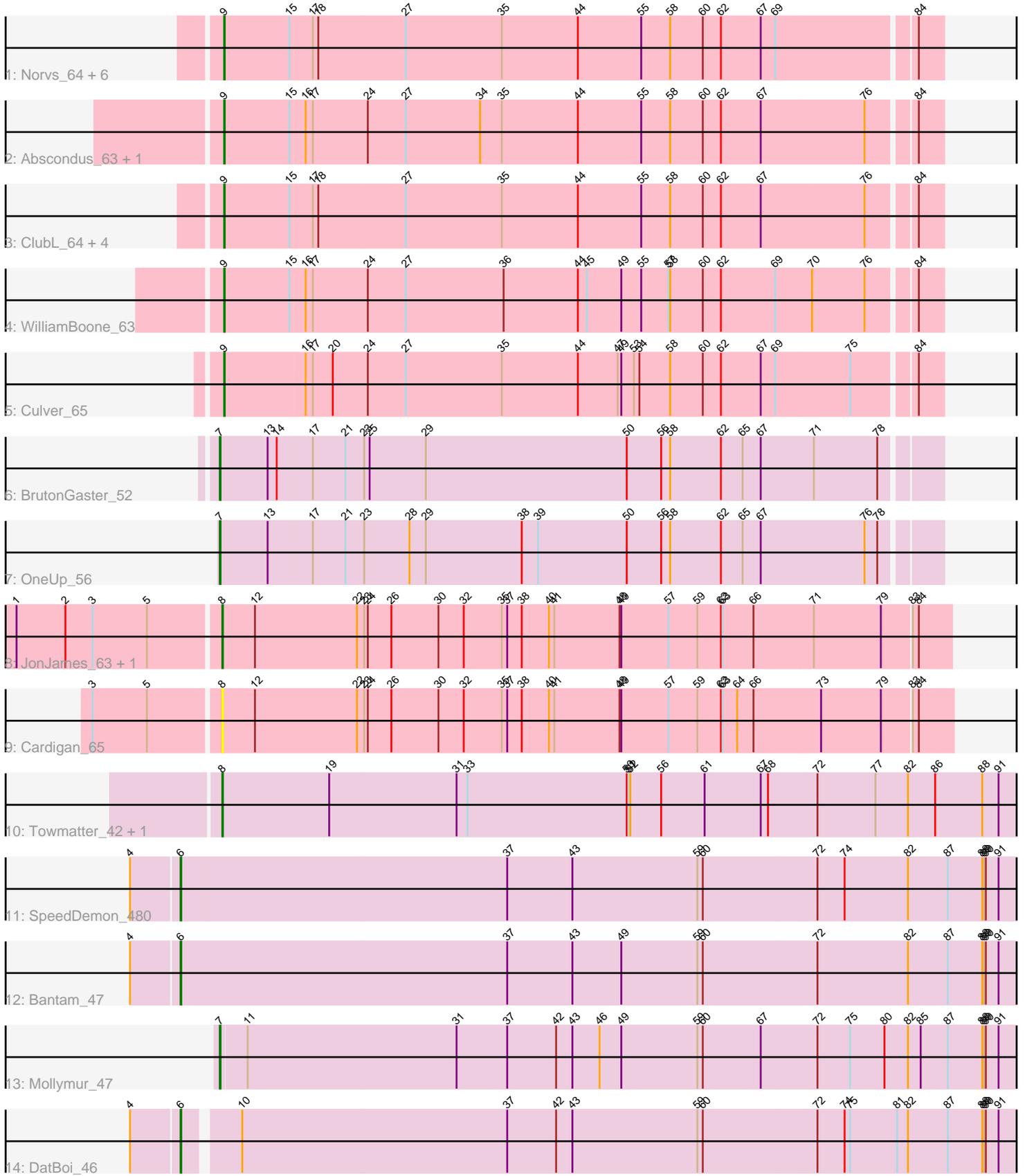# Pham 289675

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 289675 Report

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

Pham number 289675 has 27 members, 2 are drafts.

Phages represented in each track:
• Track 1 : Norvs_64, Cucurbita_65, Toniann_64, Aphelion_63, Geeche_62, PhinkBoden_63, Miskis_61
• Track 2 : Abscondus_63, Dusty_63
• Track 3 : ClubL_64, Bachita_65, Smoothie_65, Lozinak_64, Engineer_65
• Track 4 : WilliamBoone_63
• Track 5 : Culver_65
• Track 6 : BrutonGaster_52
• Track 7 : OneUp_56
• Track 8 : JonJames_63, Yvonnetastic_61
• Track 9 : Cardigan_65
• Track 10 : Towmatter_42, Daredevil_43
• Track 11 : SpeedDemon_480
• Track 12 : Bantam_47
• Track 13 : Mollymur_47
• Track 14 : DatBoi_46

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

The start number called the most often in the published annotations is 9, it was called in 15 of the 25 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Abscondus_63, Aphelion_63, Bachita_65, ClubL_64, Cucurbita_65, Culver_65, Dusty_63, Engineer_65, Geeche_62, Lozinak_64, Miskis_61, Norvs_64, PhinkBoden_63, Smoothie_65, Toniann_64, WilliamBoone_63,

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

Genes that do not have the "Most Annotated" start:
• Bantam_47, BrutonGaster_52, Cardigan_65, Daredevil_43, DatBoi_46, JonJames_63, Mollymur_47, OneUp_56, SpeedDemon_480, Towmatter_42, Yvonnetastic_61,

Summary by start number:

Start 6:
• Found in 3 of 27 (11.1%) of genes in pham
• Manual Annotations of this start: 3 of 25
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bantam_47 (DL), DatBoi_46 (DL), SpeedDemon_480 (DL),

Start 7:
• Found in 3 of 27 (11.1%) of genes in pham
• Manual Annotations of this start: 3 of 25
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BrutonGaster_52 (CQ2), Mollymur_47 (DL), OneUp_56 (CQ2),

Start 8:
• Found in 5 of 27 (18.5%) 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: Cardigan_65 (DD), Daredevil_43 (DL), JonJames_63 (DD), Towmatter_42 (DL), Yvonnetastic_61 (DD),

Start 9:
• Found in 16 of 27 (59.3%) of genes in pham
• Manual Annotations of this start: 15 of 25
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Abscondus_63 (CQ1), Aphelion_63 (CQ1), Bachita_65 (CQ1), ClubL_64 (CQ1), Cucurbita_65 (CQ1), Culver_65 (CQ1), Dusty_63 (CQ1), Engineer_65 (CQ1), Geeche_62 (CQ1), Lozinak_64 (CQ1), Miskis_61 (CQ1), Norvs_64 (CQ1), PhinkBoden_63 (CQ1), Smoothie_65 (CQ1), Toniann_64 (CQ1), WilliamBoone_63 (CQ1),

Summary by clusters:

There are 4 clusters represented in this pham: CQ2, DD, CQ1, DL,

Info for manual annotations of cluster CQ1:
•Start number 9 was manually annotated 15 times for cluster CQ1.

Info for manual annotations of cluster CQ2:
•Start number 7 was manually annotated 2 times for cluster CQ2.

Info for manual annotations of cluster DD:
•Start number 8 was manually annotated 2 times for cluster DD.

Info for manual annotations of cluster DL:
•Start number 6 was manually annotated 3 times for cluster DL.
•Start number 7 was manually annotated 1 time for cluster DL.
•Start number 8 was manually annotated 2 times for cluster DL.

Gene Information:

Gene: Abscondus_63 Start: 41992, Stop: 43158, Start Num: 9
Candidate Starts for Abscondus_63:
(Start: 9 @41992 has 15 MA's), (15, 42100), (16, 42124), (17, 42136), (24, 42226), (27, 42289), (34, 42412), (35, 42448), (44, 42574), (55, 42679), (58, 42727), (60, 42781), (62, 42811), (67, 42877), (76, 43045), (84, 43117),

Gene: Aphelion_63 Start: 42261, Stop: 43427, Start Num: 9
Candidate Starts for Aphelion_63:
(Start: 9 @42261 has 15 MA's), (15, 42369), (17, 42405), (18, 42414), (27, 42558), (35, 42717), (44, 42843), (55, 42948), (58, 42996), (60, 43050), (62, 43080), (67, 43146), (69, 43170), (84, 43386),

Gene: Bachita_65 Start: 42694, Stop: 43860, Start Num: 9
Candidate Starts for Bachita_65:
(Start: 9 @42694 has 15 MA's), (15, 42802), (17, 42838), (18, 42847), (27, 42991), (35, 43150), (44, 43276), (55, 43381), (58, 43429), (60, 43483), (62, 43513), (67, 43579), (76, 43747), (84, 43819),

Gene: Bantam_47 Start: 41103, Stop: 42488, Start Num: 6
Candidate Starts for Bantam_47:
(4, 41025), (Start: 6 @41103 has 3 MA's), (37, 41643), (43, 41751), (49, 41832), (59, 41958), (60, 41967), (72, 42153), (82, 42303), (87, 42369), (88, 42426), (89, 42429), (90, 42432), (91, 42453),

Gene: BrutonGaster_52 Start: 39981, Stop: 41153, Start Num: 7
Candidate Starts for BrutonGaster_52:
(Start: 7 @39981 has 3 MA's), (13, 40059), (14, 40074), (17, 40131), (21, 40185), (23, 40215), (25, 40224), (29, 40317), (50, 40650), (56, 40707), (58, 40722), (62, 40806), (65, 40842), (67, 40872), (71, 40956), (78, 41061),

Gene: Cardigan_65 Start: 45511, Stop: 46707, Start Num: 8
Candidate Starts for Cardigan_65:
(3, 45307), (5, 45397), (Start: 8 @45511 has 4 MA's), (12, 45565), (22, 45733), (23, 45745), (24, 45751), (26, 45790), (30, 45868), (32, 45910), (35, 45973), (37, 45982), (38, 46006), (40, 46051), (41, 46060), (48, 46168), (49, 46171), (57, 46249), (59, 46297), (62, 46336), (63, 46339), (64, 46363), (66, 46390), (73, 46498), (79, 46597), (83, 46642), (84, 46651),

Gene: ClubL_64 Start: 42184, Stop: 43350, Start Num: 9
Candidate Starts for ClubL_64:
(Start: 9 @42184 has 15 MA's), (15, 42292), (17, 42328), (18, 42337), (27, 42481), (35, 42640), (44, 42766), (55, 42871), (58, 42919), (60, 42973), (62, 43003), (67, 43069), (76, 43237), (84, 43309),

Gene: Cucurbita_65 Start: 43553, Stop: 44719, Start Num: 9
Candidate Starts for Cucurbita_65:
(Start: 9 @43553 has 15 MA's), (15, 43661), (17, 43697), (18, 43706), (27, 43850), (35, 44009), (44, 44135), (55, 44240), (58, 44288), (60, 44342), (62, 44372), (67, 44438), (69, 44462), (84, 44678),

Gene: Culver_65 Start: 41864, Stop: 43030, Start Num: 9
Candidate Starts for Culver_65:
(Start: 9 @41864 has 15 MA's), (16, 41996), (17, 42008), (20, 42041), (24, 42098), (27, 42161), (35, 42320), (44, 42446), (47, 42512), (49, 42518), (53, 42539), (54, 42548), (58, 42599), (60, 42653), (62, 42683), (67, 42749), (69, 42773), (75, 42893), (84, 42989),

Gene: Daredevil_43 Start: 37880, Stop: 39199, Start Num: 8

Candidate Starts for Daredevil_43:
(Start: 8 @37880 has 4 MA's), (19, 38057), (31, 38267), (33, 38285), (50, 38549), (51, 38552), (52, 38555), (56, 38606), (61, 38678), (67, 38771), (68, 38783), (72, 38861), (77, 38957), (82, 39011), (86, 39056), (88, 39134), (91, 39161),

Gene: DatBoi_46 Start: 41165, Stop: 42529, Start Num: 6
Candidate Starts for DatBoi_46:
(4, 41087), (Start: 6 @41165 has 3 MA's), (10, 41246), (37, 41684), (42, 41765), (43, 41792), (59, 41999), (60, 42008), (72, 42194), (74, 42239), (75, 42248), (81, 42326), (82, 42344), (87, 42410), (88, 42467), (89, 42470), (90, 42473), (91, 42494),

Gene: Dusty_63 Start: 41999, Stop: 43165, Start Num: 9
Candidate Starts for Dusty_63:
(Start: 9 @41999 has 15 MA's), (15, 42107), (16, 42131), (17, 42143), (24, 42233), (27, 42296), (34, 42419), (35, 42455), (44, 42581), (55, 42686), (58, 42734), (60, 42788), (62, 42818), (67, 42884), (76, 43052), (84, 43124),

Gene: Engineer_65 Start: 42667, Stop: 43833, Start Num: 9
Candidate Starts for Engineer_65:
(Start: 9 @42667 has 15 MA's), (15, 42775), (17, 42811), (18, 42820), (27, 42964), (35, 43123), (44, 43249), (55, 43354), (58, 43402), (60, 43456), (62, 43486), (67, 43552), (76, 43720), (84, 43792),

Gene: Geeche_62 Start: 42083, Stop: 43249, Start Num: 9
Candidate Starts for Geeche_62:
(Start: 9 @42083 has 15 MA's), (15, 42191), (17, 42227), (18, 42236), (27, 42380), (35, 42539), (44, 42665), (55, 42770), (58, 42818), (60, 42872), (62, 42902), (67, 42968), (69, 42992), (84, 43208),

Gene: JonJames_63 Start: 45458, Stop: 46651, Start Num: 8
Candidate Starts for JonJames_63:
(1, 45128), (2, 45209), (3, 45254), (5, 45344), (Start: 8 @45458 has 4 MA's), (12, 45512), (22, 45680), (23, 45692), (24, 45698), (26, 45737), (30, 45815), (32, 45857), (35, 45920), (37, 45929), (38, 45953), (40, 45998), (41, 46007), (48, 46115), (49, 46118), (57, 46196), (59, 46244), (62, 46283), (63, 46286), (66, 46337), (71, 46433), (79, 46544), (83, 46589), (84, 46598),

Gene: Lozinak_64 Start: 42493, Stop: 43659, Start Num: 9
Candidate Starts for Lozinak_64:
(Start: 9 @42493 has 15 MA's), (15, 42601), (17, 42637), (18, 42646), (27, 42790), (35, 42949), (44, 43075), (55, 43180), (58, 43228), (60, 43282), (62, 43312), (67, 43378), (76, 43546), (84, 43618),

Gene: Miskis_61 Start: 42027, Stop: 43193, Start Num: 9
Candidate Starts for Miskis_61:
(Start: 9 @42027 has 15 MA's), (15, 42135), (17, 42171), (18, 42180), (27, 42324), (35, 42483), (44, 42609), (55, 42714), (58, 42762), (60, 42816), (62, 42846), (67, 42912), (69, 42936), (84, 43152),

Gene: Mollymur_47 Start: 41693, Stop: 43006, Start Num: 7
Candidate Starts for Mollymur_47:
(Start: 7 @41693 has 3 MA's), (11, 41735), (31, 42080), (37, 42164), (42, 42245), (43, 42272), (46, 42317), (49, 42353), (59, 42479), (60, 42488), (67, 42584), (72, 42674), (75, 42728), (80, 42785), (82, 42824), (85, 42845), (87, 42890), (88, 42947), (89, 42950), (90, 42953), (91, 42974),

Gene: Norvs_64 Start: 42266, Stop: 43432, Start Num: 9
Candidate Starts for Norvs_64:

(Start: 9 @42266 has 15 MA's), (15, 42374), (17, 42410), (18, 42419), (27, 42563), (35, 42722), (44, 42848), (55, 42953), (58, 43001), (60, 43055), (62, 43085), (67, 43151), (69, 43175), (84, 43391),

Gene: OneUp_56 Start: 41681, Stop: 42853, Start Num: 7
Candidate Starts for OneUp_56:
(Start: 7 @41681 has 3 MA's), (13, 41759), (17, 41831), (21, 41885), (23, 41915), (28, 41990), (29, 42017), (38, 42176), (39, 42203), (50, 42350), (56, 42407), (58, 42422), (62, 42506), (65, 42542), (67, 42572), (76, 42740), (78, 42761),

Gene: PhinkBoden_63 Start: 42647, Stop: 43813, Start Num: 9
Candidate Starts for PhinkBoden_63:
(Start: 9 @42647 has 15 MA's), (15, 42755), (17, 42791), (18, 42800), (27, 42944), (35, 43103), (44, 43229), (55, 43334), (58, 43382), (60, 43436), (62, 43466), (67, 43532), (69, 43556), (84, 43772),

Gene: Smoothie_65 Start: 42493, Stop: 43659, Start Num: 9
Candidate Starts for Smoothie_65:
(Start: 9 @42493 has 15 MA's), (15, 42601), (17, 42637), (18, 42646), (27, 42790), (35, 42949), (44, 43075), (55, 43180), (58, 43228), (60, 43282), (62, 43312), (67, 43378), (76, 43546), (84, 43618),

Gene: SpeedDemon_480 Start: 42806, Stop: 44188, Start Num: 6
Candidate Starts for SpeedDemon_480:
(4, 42728), (Start: 6 @42806 has 3 MA's), (37, 43343), (43, 43451), (59, 43658), (60, 43667), (72, 43853), (74, 43898), (82, 44003), (87, 44069), (88, 44126), (89, 44129), (90, 44132), (91, 44153),

Gene: Toniann_64 Start: 42209, Stop: 43375, Start Num: 9
Candidate Starts for Toniann_64:
(Start: 9 @42209 has 15 MA's), (15, 42317), (17, 42353), (18, 42362), (27, 42506), (35, 42665), (44, 42791), (55, 42896), (58, 42944), (60, 42998), (62, 43028), (67, 43094), (69, 43118), (84, 43334),

Gene: Towmatter_42 Start: 37717, Stop: 39036, Start Num: 8
Candidate Starts for Towmatter_42:
(Start: 8 @37717 has 4 MA's), (19, 37894), (31, 38104), (33, 38122), (50, 38386), (51, 38389), (52, 38392), (56, 38443), (61, 38515), (67, 38608), (68, 38620), (72, 38698), (77, 38794), (82, 38848), (86, 38893), (88, 38971), (91, 38998),

Gene: WilliamBoone_63 Start: 41161, Stop: 42327, Start Num: 9
Candidate Starts for WilliamBoone_63:
(Start: 9 @41161 has 15 MA's), (15, 41269), (16, 41293), (17, 41305), (24, 41395), (27, 41458), (36, 41620), (44, 41743), (45, 41758), (49, 41815), (55, 41848), (57, 41893), (58, 41896), (60, 41950), (62, 41980), (69, 42070), (70, 42127), (76, 42214), (84, 42286),

Gene: Yvonnetastic_61 Start: 42993, Stop: 44186, Start Num: 8
Candidate Starts for Yvonnetastic_61:
(1, 42663), (2, 42744), (3, 42789), (5, 42879), (Start: 8 @42993 has 4 MA's), (12, 43047), (22, 43215), (23, 43227), (24, 43233), (26, 43272), (30, 43350), (32, 43392), (35, 43455), (37, 43464), (38, 43488), (40, 43533), (41, 43542), (48, 43650), (49, 43653), (57, 43731), (59, 43779), (62, 43818), (63, 43821), (66, 43872), (71, 43968), (79, 44079), (83, 44124), (84, 44133),