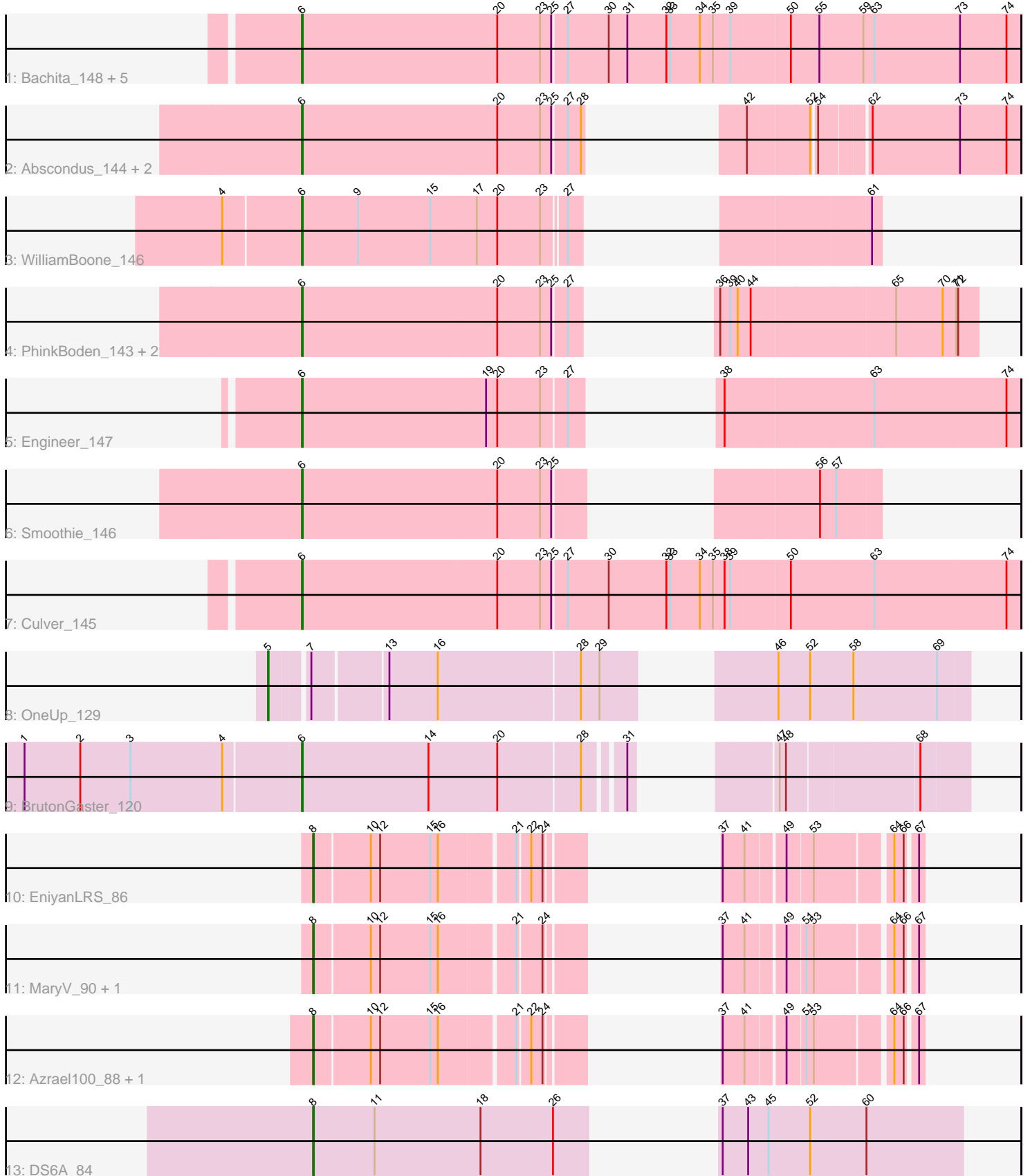


Pham 309187



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 309187 Report

This analysis was run 06/27/26 on database version 652.

Pham number 309187 has 24 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Bachita_148, ClubL_145, Toniann_145, Norvs_143, Cucurbita_144, Lozinak_145
- Track 2 : Abscondus_144, Geeche_146, Dusty_143
- Track 3 : WilliamBoone_146
- Track 4 : PhinkBoden_143, Aphelion_144, Miskis_139
- Track 5 : Engineer_147
- Track 6 : Smoothie_146
- Track 7 : Culver_145
- Track 8 : OneUp_129
- Track 9 : BrutonGaster_120
- Track 10 : EniyanLRS_86
- Track 11 : MaryV_90, Wildcat_90
- Track 12 : Azrael100_88, Cosmo_89
- Track 13 : DS6A_84

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

The start number called the most often in the published annotations is 6, it was called in 16 of the 23 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abscondus_144, Aphelion_144, Bachita_148, BrutonGaster_120, ClubL_145, Cucurbita_144, Culver_145, Dusty_143, Engineer_147, Geeche_146, Lozinak_145, Miskis_139, Norvs_143, PhinkBoden_143, Smoothie_146, Toniann_145, WilliamBoone_146,

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

-

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

- Azrael100_88, Cosmo_89, DS6A_84, EniyanLRS_86, MaryV_90, OneUp_129, Wildcat_90,

Summary by start number:

Start 5:

- Found in 1 of 24 (4.2%) 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: OneUp_129 (CQ2),

Start 6:

- Found in 17 of 24 (70.8%) 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: Abscondus_144 (CQ1), Aphelion_144 (CQ1), Bachita_148 (CQ1), BrutonGaster_120 (CQ2), ClubL_145 (CQ1), Cucurbita_144 (CQ1), Culver_145 (CQ1), Dusty_143 (CQ1), Engineer_147 (CQ1), Geeche_146 (CQ1), Lozinak_145 (CQ1), Miskis_139 (CQ1), Norvs_143 (CQ1), PhinkBoden_143 (CQ1), Smoothie_146 (CQ1), Toniann_145 (CQ1), WilliamBoone_146 (CQ1),

Start 8:

- Found in 6 of 24 (25.0%) of genes in pham
- Manual Annotations of this start: 6 of 23
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Azrael100_88 (V), Cosmo_89 (V), DS6A_84 (singleton), EniyanLRS_86 (V), MaryV_90 (V), Wildcat_90 (V),

Summary by clusters:

There are 4 clusters represented in this pham: CQ2, CQ1, singleton, V,

Info for manual annotations of cluster CQ1:

- Start number 6 was manually annotated 15 times for cluster CQ1.

Info for manual annotations of cluster CQ2:

- Start number 5 was manually annotated 1 time for cluster CQ2.
- Start number 6 was manually annotated 1 time for cluster CQ2.

Info for manual annotations of cluster V:

- Start number 8 was manually annotated 5 times for cluster V.

Gene Information:

Gene: Abscondus_144 Start: 78207, Stop: 79091, Start Num: 6

Candidate Starts for Abscondus_144:

(Start: 6 @78207 has 16 MA's), (20, 78519), (23, 78585), (25, 78600), (27, 78621), (28, 78642), (42, 78687), (52, 78780), (54, 78786), (62, 78855), (73, 78993), (74, 79068),

Gene: Aphelion_144 Start: 79132, Stop: 79980, Start Num: 6

Candidate Starts for Aphelion_144:

(Start: 6 @79132 has 16 MA's), (20, 79444), (23, 79510), (25, 79525), (27, 79546), (36, 79579), (39, 79594), (40, 79606), (44, 79627), (65, 79849), (70, 79924), (71, 79945), (72, 79948),

Gene: Azrael100_88 Start: 54300, Stop: 54977, Start Num: 8

Candidate Starts for Azrael100_88:

(Start: 8 @54300 has 6 MA's), (10, 54387), (12, 54402), (15, 54483), (16, 54495), (21, 54606), (22, 54624), (24, 54642), (37, 54702), (41, 54735), (49, 54789), (51, 54816), (53, 54828), (64, 54939), (66, 54954), (67, 54969),

Gene: Bachita_148 Start: 78997, Stop: 80130, Start Num: 6

Candidate Starts for Bachita_148:

(Start: 6 @78997 has 16 MA's), (20, 79309), (23, 79375), (25, 79390), (27, 79411), (30, 79477), (31, 79507), (32, 79570), (33, 79576), (34, 79624), (35, 79645), (39, 79672), (50, 79765), (55, 79810), (59, 79879), (63, 79897), (73, 80032), (74, 80107),

Gene: BrutonGaster_120 Start: 72413, Stop: 73297, Start Num: 6

Candidate Starts for BrutonGaster_120:

(1, 71975), (2, 72065), (3, 72146), (4, 72293), (Start: 6 @72413 has 16 MA's), (14, 72617), (20, 72725), (28, 72851), (31, 72905), (47, 73013), (48, 73022), (68, 73220),

Gene: ClubL_145 Start: 77571, Stop: 78704, Start Num: 6

Candidate Starts for ClubL_145:

(Start: 6 @77571 has 16 MA's), (20, 77883), (23, 77949), (25, 77964), (27, 77985), (30, 78051), (31, 78081), (32, 78144), (33, 78150), (34, 78198), (35, 78219), (39, 78246), (50, 78339), (55, 78384), (59, 78453), (63, 78471), (73, 78606), (74, 78681),

Gene: Cosmo_89 Start: 54301, Stop: 54978, Start Num: 8

Candidate Starts for Cosmo_89:

(Start: 8 @54301 has 6 MA's), (10, 54388), (12, 54403), (15, 54484), (16, 54496), (21, 54607), (22, 54625), (24, 54643), (37, 54703), (41, 54736), (49, 54790), (51, 54817), (53, 54829), (64, 54940), (66, 54955), (67, 54970),

Gene: Cucurbita_144 Start: 79310, Stop: 80443, Start Num: 6

Candidate Starts for Cucurbita_144:

(Start: 6 @79310 has 16 MA's), (20, 79622), (23, 79688), (25, 79703), (27, 79724), (30, 79790), (31, 79820), (32, 79883), (33, 79889), (34, 79937), (35, 79958), (39, 79985), (50, 80078), (55, 80123), (59, 80192), (63, 80210), (73, 80345), (74, 80420),

Gene: Culver_145 Start: 77574, Stop: 78707, Start Num: 6

Candidate Starts for Culver_145:

(Start: 6 @77574 has 16 MA's), (20, 77886), (23, 77952), (25, 77967), (27, 77988), (30, 78054), (32, 78147), (33, 78153), (34, 78201), (35, 78222), (38, 78240), (39, 78249), (50, 78342), (63, 78474), (74, 78684),

Gene: DS6A_84 Start: 52973, Stop: 53800, Start Num: 8

Candidate Starts for DS6A_84:

(Start: 8 @52973 has 6 MA's), (11, 53072), (18, 53243), (26, 53357), (37, 53420), (43, 53459), (45, 53492), (52, 53558), (60, 53645),

Gene: Dusty_143 Start: 78034, Stop: 78918, Start Num: 6

Candidate Starts for Dusty_143:

(Start: 6 @78034 has 16 MA's), (20, 78346), (23, 78412), (25, 78427), (27, 78448), (28, 78469), (42, 78514), (52, 78607), (54, 78613), (62, 78682), (73, 78820), (74, 78895),

Gene: Engineer_147 Start: 79046, Stop: 79966, Start Num: 6

Candidate Starts for Engineer_147:

(Start: 6 @79046 has 16 MA's), (19, 79340), (20, 79358), (23, 79424), (27, 79460), (38, 79499), (63, 79733), (74, 79943),

Gene: EniyanLRS_86 Start: 54295, Stop: 54972, Start Num: 8

Candidate Starts for EniyanLRS_86:

(Start: 8 @54295 has 6 MA's), (10, 54382), (12, 54397), (15, 54478), (16, 54490), (21, 54601), (22, 54619), (24, 54637), (37, 54697), (41, 54730), (49, 54784), (53, 54823), (64, 54934), (66, 54949), (67, 54964),

Gene: Geeche_146 Start: 78460, Stop: 79344, Start Num: 6

Candidate Starts for Geeche_146:

(Start: 6 @78460 has 16 MA's), (20, 78772), (23, 78838), (25, 78853), (27, 78874), (28, 78895), (42, 78940), (52, 79033), (54, 79039), (62, 79108), (73, 79246), (74, 79321),

Gene: Lozinak_145 Start: 78838, Stop: 79971, Start Num: 6

Candidate Starts for Lozinak_145:

(Start: 6 @78838 has 16 MA's), (20, 79150), (23, 79216), (25, 79231), (27, 79252), (30, 79318), (31, 79348), (32, 79411), (33, 79417), (34, 79465), (35, 79486), (39, 79513), (50, 79606), (55, 79651), (59, 79720), (63, 79738), (73, 79873), (74, 79948),

Gene: MaryV_90 Start: 54365, Stop: 55042, Start Num: 8

Candidate Starts for MaryV_90:

(Start: 8 @54365 has 6 MA's), (10, 54452), (12, 54467), (15, 54548), (16, 54560), (21, 54671), (24, 54707), (37, 54767), (41, 54800), (49, 54854), (51, 54881), (53, 54893), (64, 55004), (66, 55019), (67, 55034),

Gene: Miskis_139 Start: 77881, Stop: 78729, Start Num: 6

Candidate Starts for Miskis_139:

(Start: 6 @77881 has 16 MA's), (20, 78193), (23, 78259), (25, 78274), (27, 78295), (36, 78328), (39, 78343), (40, 78355), (44, 78376), (65, 78598), (70, 78673), (71, 78694), (72, 78697),

Gene: Norvs_143 Start: 78029, Stop: 79162, Start Num: 6

Candidate Starts for Norvs_143:

(Start: 6 @78029 has 16 MA's), (20, 78341), (23, 78407), (25, 78422), (27, 78443), (30, 78509), (31, 78539), (32, 78602), (33, 78608), (34, 78656), (35, 78677), (39, 78704), (50, 78797), (55, 78842), (59, 78911), (63, 78929), (73, 79064), (74, 79139),

Gene: OneUp_129 Start: 76870, Stop: 77817, Start Num: 5

Candidate Starts for OneUp_129:

(Start: 5 @76870 has 1 MA's), (7, 76921), (13, 77029), (16, 77107), (28, 77326), (29, 77356), (46, 77515), (52, 77566), (58, 77635), (69, 77767),

Gene: PhinkBoden_143 Start: 78709, Stop: 79557, Start Num: 6

Candidate Starts for PhinkBoden_143:

(Start: 6 @78709 has 16 MA's), (20, 79021), (23, 79087), (25, 79102), (27, 79123), (36, 79156), (39, 79171), (40, 79183), (44, 79204), (65, 79426), (70, 79501), (71, 79522), (72, 79525),

Gene: Smoothie_146 Start: 78850, Stop: 79545, Start Num: 6

Candidate Starts for Smoothie_146:

(Start: 6 @78850 has 16 MA's), (20, 79162), (23, 79228), (25, 79243), (56, 79456), (57, 79477),

Gene: Toniann_145 Start: 78170, Stop: 79303, Start Num: 6

Candidate Starts for Toniann_145:

(Start: 6 @78170 has 16 MA's), (20, 78482), (23, 78548), (25, 78563), (27, 78584), (30, 78650), (31, 78680), (32, 78743), (33, 78749), (34, 78797), (35, 78818), (39, 78845), (50, 78938), (55, 78983), (59, 79052), (63, 79070), (73, 79205), (74, 79280),

Gene: Wildcat_90 Start: 54375, Stop: 55052, Start Num: 8

Candidate Starts for Wildcat_90:

(Start: 8 @54375 has 6 MA's), (10, 54462), (12, 54477), (15, 54558), (16, 54570), (21, 54681), (24, 54717), (37, 54777), (41, 54810), (49, 54864), (51, 54891), (53, 54903), (64, 55014), (66, 55029), (67, 55044),

Gene: WilliamBoone_146 Start: 76888, Stop: 77556, Start Num: 6

Candidate Starts for WilliamBoone_146:

(4, 76765), (Start: 6 @76888 has 16 MA's), (9, 76978), (15, 77095), (17, 77167), (20, 77200), (23, 77266), (27, 77296), (61, 77542),