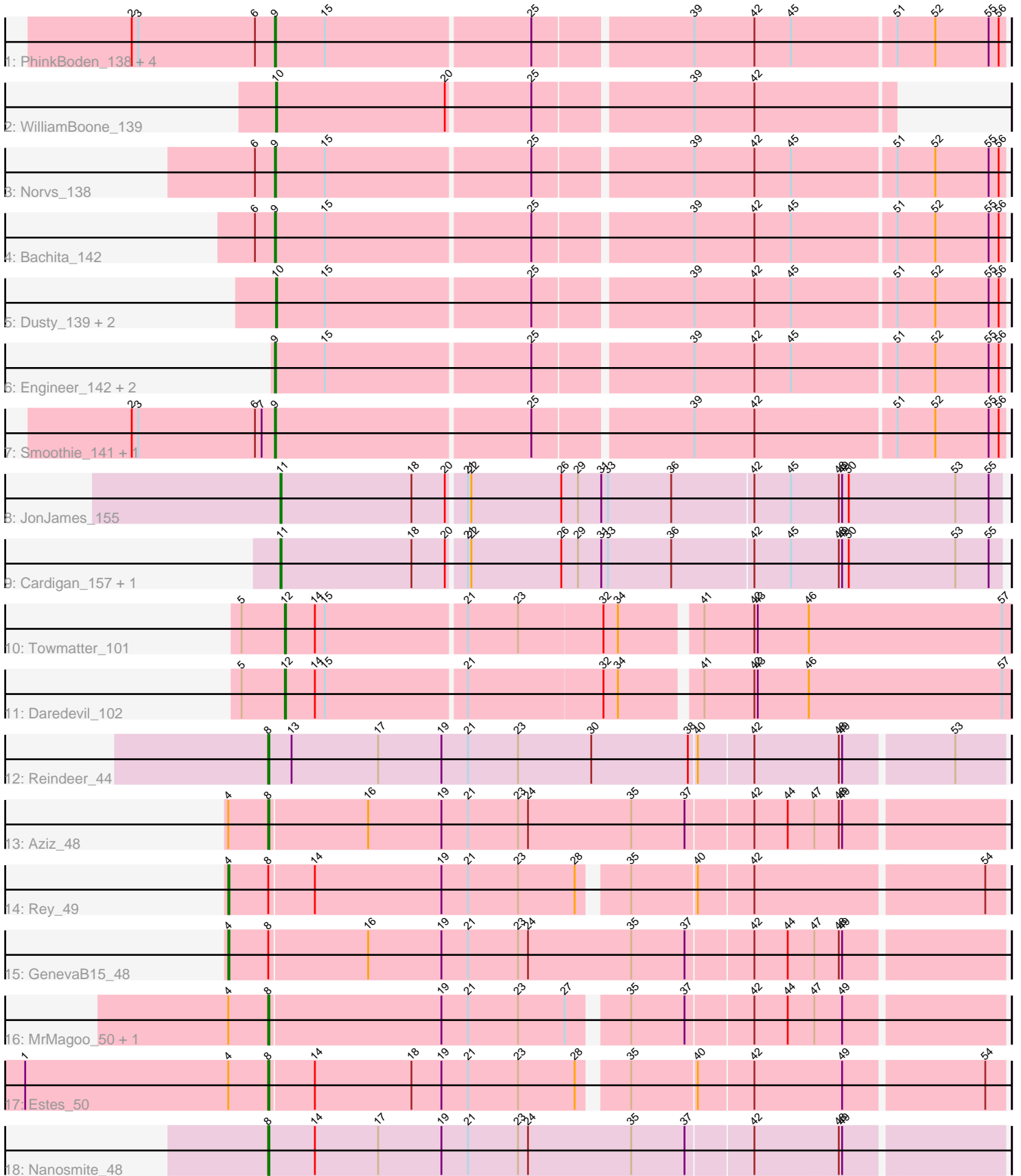


Pham 301643



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 301643 Report

This analysis was run 06/08/26 on database version 649.

Pham number 301643 has 29 members, 2 are drafts.

Phages represented in each track:

- Track 1 : PhinkBoden_138, Toniann_139, Miskis_134, ClubL_139, Cucurbita_140
- Track 2 : WilliamBoone_139
- Track 3 : Norvs_138
- Track 4 : Bachita_142
- Track 5 : Dusty_139, Geeche_141, Abscondus_140
- Track 6 : Engineer_142, Aphelion_140, Culver_140
- Track 7 : Smoothie_141, Lozinak_140
- Track 8 : JonJames_155
- Track 9 : Cardigan_157, Yvonnetastic_150
- Track 10 : Towmatter_101
- Track 11 : Daredevil_102
- Track 12 : Reindeer_44
- Track 13 : Aziz_48
- Track 14 : Rey_49
- Track 15 : GenevaB15_48
- Track 16 : MrMagoo_50, GardenSalsa_50
- Track 17 : Estes_50
- Track 18 : Nanosmite_48

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 12 of the 27 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Aphelion_140, Bachita_142, ClubL_139, Cucurbita_140, Culver_140, Engineer_142, Lozinak_140, Miskis_134, Norvs_138, PhinkBoden_138, Smoothie_141, Toniann_139,

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

-

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

- Abscondus_140, Aziz_48, Cardigan_157, Daredevil_102, Dusty_139, Estes_50, GardenSalsa_50, Geeche_141, GenevaB15_48, JonJames_155, MrMagoo_50, Nanosmite_48, Reindeer_44, Rey_49, Towmatter_101, WilliamBoone_139, Yvonnestic_150,

Summary by start number:

Start 4:

- Found in 6 of 29 (20.7%) of genes in pham
- Manual Annotations of this start: 2 of 27
- Called 33.3% of time when present
- Phage (with cluster) where this start called: GenevaB15_48 (M2), Rey_49 (M2),

Start 8:

- Found in 8 of 29 (27.6%) of genes in pham
- Manual Annotations of this start: 6 of 27
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Aziz_48 (M2), Estes_50 (M2), GardenSalsa_50 (M2), MrMagoo_50 (M2), Nanosmite_48 (M3), Reindeer_44 (M1),

Start 9:

- Found in 12 of 29 (41.4%) of genes in pham
- Manual Annotations of this start: 12 of 27
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aphelion_140 (CQ1), Bachita_142 (CQ1), ClubL_139 (CQ1), Cucurbita_140 (CQ1), Culver_140 (CQ1), Engineer_142 (CQ1), Lozinak_140 (CQ1), Miskis_134 (CQ1), Norvs_138 (CQ1), PhinkBoden_138 (CQ1), Smoothie_141 (CQ1), Toniann_139 (CQ1),

Start 10:

- Found in 4 of 29 (13.8%) of genes in pham
- Manual Annotations of this start: 3 of 27
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abscondus_140 (CQ1), Dusty_139 (CQ1), Geeche_141 (CQ1), WilliamBoone_139 (CQ1),

Start 11:

- Found in 3 of 29 (10.3%) of genes in pham
- Manual Annotations of this start: 2 of 27
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cardigan_157 (DD), JonJames_155 (DD), Yvonnestic_150 (DD),

Start 12:

- Found in 2 of 29 (6.9%) of genes in pham
- Manual Annotations of this start: 2 of 27
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Daredevil_102 (DL), Towmatter_101 (DL),

Summary by clusters:

There are 6 clusters represented in this pham: DL, DD, M1, M3, M2, CQ1,

Info for manual annotations of cluster CQ1:

- Start number 9 was manually annotated 12 times for cluster CQ1.
- Start number 10 was manually annotated 3 times for cluster CQ1.

Info for manual annotations of cluster DD:

- Start number 11 was manually annotated 2 times for cluster DD.

Info for manual annotations of cluster DL:

- Start number 12 was manually annotated 2 times for cluster DL.

Info for manual annotations of cluster M1:

- Start number 8 was manually annotated 1 time for cluster M1.

Info for manual annotations of cluster M2:

- Start number 4 was manually annotated 2 times for cluster M2.
- Start number 8 was manually annotated 4 times for cluster M2.

Info for manual annotations of cluster M3:

- Start number 8 was manually annotated 1 time for cluster M3.

Gene Information:

Gene: Abscondus_140 Start: 76562, Stop: 77191, Start Num: 10

Candidate Starts for Abscondus_140:

(Start: 10 @76562 has 3 MA's), (15, 76604), (25, 76784), (39, 76919), (42, 76973), (45, 77006), (51, 77096), (52, 77129), (55, 77177), (56, 77186),

Gene: Aphelion_140 Start: 77487, Stop: 78116, Start Num: 9

Candidate Starts for Aphelion_140:

(Start: 9 @77487 has 12 MA's), (15, 77529), (25, 77709), (39, 77844), (42, 77898), (45, 77931), (51, 78021), (52, 78054), (55, 78102), (56, 78111),

Gene: Aziz_48 Start: 35760, Stop: 35116, Start Num: 8

Candidate Starts for Aziz_48:

(Start: 4 @35796 has 2 MA's), (Start: 8 @35760 has 6 MA's), (16, 35673), (19, 35607), (21, 35583), (23, 35538), (24, 35529), (35, 35436), (37, 35388), (42, 35331), (44, 35301), (47, 35277), (48, 35256), (49, 35253),

Gene: Bachita_142 Start: 77161, Stop: 77790, Start Num: 9

Candidate Starts for Bachita_142:

(6, 77143), (Start: 9 @77161 has 12 MA's), (15, 77203), (25, 77383), (39, 77518), (42, 77572), (45, 77605), (51, 77695), (52, 77728), (55, 77776), (56, 77785),

Gene: Cardigan_157 Start: 84482, Stop: 85120, Start Num: 11

Candidate Starts for Cardigan_157:

(Start: 11 @84482 has 2 MA's), (18, 84599), (20, 84629), (21, 84644), (22, 84647), (26, 84728), (29, 84743), (31, 84764), (33, 84770), (36, 84827), (42, 84899), (45, 84932), (48, 84974), (49, 84977), (50, 84983), (53, 85079), (55, 85109),

Gene: ClubL_139 Start: 75735, Stop: 76364, Start Num: 9

Candidate Starts for ClubL_139:

(2, 75606), (3, 75612), (6, 75717), (Start: 9 @75735 has 12 MA's), (15, 75777), (25, 75957), (39, 76092), (42, 76146), (45, 76179), (51, 76269), (52, 76302), (55, 76350), (56, 76359),

Gene: Cucurbita_140 Start: 77474, Stop: 78103, Start Num: 9

Candidate Starts for Cucurbita_140:

(2, 77345), (3, 77351), (6, 77456), (Start: 9 @77474 has 12 MA's), (15, 77516), (25, 77696), (39, 77831), (42, 77885), (45, 77918), (51, 78008), (52, 78041), (55, 78089), (56, 78098),

Gene: Culver_140 Start: 75941, Stop: 76570, Start Num: 9

Candidate Starts for Culver_140:

(Start: 9 @75941 has 12 MA's), (15, 75983), (25, 76163), (39, 76298), (42, 76352), (45, 76385), (51, 76475), (52, 76508), (55, 76556), (56, 76565),

Gene: Daredevil_102 Start: 66210, Stop: 66842, Start Num: 12

Candidate Starts for Daredevil_102:

(5, 66171), (Start: 12 @66210 has 2 MA's), (14, 66237), (15, 66246), (21, 66369), (32, 66489), (34, 66501), (41, 66567), (42, 66612), (43, 66615), (46, 66660), (57, 66834),

Gene: Dusty_139 Start: 76389, Stop: 77018, Start Num: 10

Candidate Starts for Dusty_139:

(Start: 10 @76389 has 3 MA's), (15, 76431), (25, 76611), (39, 76746), (42, 76800), (45, 76833), (51, 76923), (52, 76956), (55, 77004), (56, 77013),

Gene: Engineer_142 Start: 77401, Stop: 78030, Start Num: 9

Candidate Starts for Engineer_142:

(Start: 9 @77401 has 12 MA's), (15, 77443), (25, 77623), (39, 77758), (42, 77812), (45, 77845), (51, 77935), (52, 77968), (55, 78016), (56, 78025),

Gene: Estes_50 Start: 36026, Stop: 35397, Start Num: 8

Candidate Starts for Estes_50:

(1, 36245), (Start: 4 @36062 has 2 MA's), (Start: 8 @36026 has 6 MA's), (14, 35987), (18, 35900), (19, 35873), (21, 35849), (23, 35804), (28, 35753), (35, 35717), (40, 35660), (42, 35612), (49, 35534), (54, 35414),

Gene: GardenSalsa_50 Start: 36124, Stop: 35495, Start Num: 8

Candidate Starts for GardenSalsa_50:

(Start: 4 @36160 has 2 MA's), (Start: 8 @36124 has 6 MA's), (19, 35971), (21, 35947), (23, 35902), (27, 35860), (35, 35815), (37, 35767), (42, 35710), (44, 35680), (47, 35656), (49, 35632),

Gene: Geeche_141 Start: 76612, Stop: 77241, Start Num: 10

Candidate Starts for Geeche_141:

(Start: 10 @76612 has 3 MA's), (15, 76654), (25, 76834), (39, 76969), (42, 77023), (45, 77056), (51, 77146), (52, 77179), (55, 77227), (56, 77236),

Gene: GenevaB15_48 Start: 35796, Stop: 35116, Start Num: 4

Candidate Starts for GenevaB15_48:

(Start: 4 @35796 has 2 MA's), (Start: 8 @35760 has 6 MA's), (16, 35673), (19, 35607), (21, 35583), (23, 35538), (24, 35529), (35, 35436), (37, 35388), (42, 35331), (44, 35301), (47, 35277), (48, 35256), (49, 35253),

Gene: JonJames_155 Start: 85628, Stop: 86266, Start Num: 11

Candidate Starts for JonJames_155:

(Start: 11 @85628 has 2 MA's), (18, 85745), (20, 85775), (21, 85790), (22, 85793), (26, 85874), (29, 85889), (31, 85910), (33, 85916), (36, 85973), (42, 86045), (45, 86078), (48, 86120), (49, 86123), (50, 86129), (53, 86225), (55, 86255),

Gene: Lozinak_140 Start: 77002, Stop: 77631, Start Num: 9

Candidate Starts for Lozinak_140:

(2, 76873), (3, 76879), (6, 76984), (7, 76990), (Start: 9 @77002 has 12 MA's), (25, 77224), (39, 77359), (42, 77413), (51, 77536), (52, 77569), (55, 77617), (56, 77626),

Gene: Miskis_134 Start: 76236, Stop: 76865, Start Num: 9

Candidate Starts for Miskis_134:

(2, 76107), (3, 76113), (6, 76218), (Start: 9 @76236 has 12 MA's), (15, 76278), (25, 76458), (39, 76593), (42, 76647), (45, 76680), (51, 76770), (52, 76803), (55, 76851), (56, 76860),

Gene: MrMagoo_50 Start: 36124, Stop: 35495, Start Num: 8

Candidate Starts for MrMagoo_50:

(Start: 4 @36160 has 2 MA's), (Start: 8 @36124 has 6 MA's), (19, 35971), (21, 35947), (23, 35902), (27, 35860), (35, 35815), (37, 35767), (42, 35710), (44, 35680), (47, 35656), (49, 35632),

Gene: Nanosmite_48 Start: 35552, Stop: 34905, Start Num: 8

Candidate Starts for Nanosmite_48:

(Start: 8 @35552 has 6 MA's), (14, 35510), (17, 35453), (19, 35396), (21, 35372), (23, 35327), (24, 35318), (35, 35225), (37, 35177), (42, 35120), (48, 35045), (49, 35042),

Gene: Norvs_138 Start: 76396, Stop: 77025, Start Num: 9

Candidate Starts for Norvs_138:

(6, 76378), (Start: 9 @76396 has 12 MA's), (15, 76438), (25, 76618), (39, 76753), (42, 76807), (45, 76840), (51, 76930), (52, 76963), (55, 77011), (56, 77020),

Gene: PhinkBoden_138 Start: 77064, Stop: 77693, Start Num: 9

Candidate Starts for PhinkBoden_138:

(2, 76935), (3, 76941), (6, 77046), (Start: 9 @77064 has 12 MA's), (15, 77106), (25, 77286), (39, 77421), (42, 77475), (45, 77508), (51, 77598), (52, 77631), (55, 77679), (56, 77688),

Gene: Reindeer_44 Start: 35219, Stop: 34572, Start Num: 8

Candidate Starts for Reindeer_44:

(Start: 8 @35219 has 6 MA's), (13, 35198), (17, 35120), (19, 35063), (21, 35039), (23, 34994), (30, 34928), (38, 34841), (40, 34835), (42, 34787), (48, 34712), (49, 34709), (53, 34616),

Gene: Rey_49 Start: 36096, Stop: 35431, Start Num: 4

Candidate Starts for Rey_49:

(Start: 4 @36096 has 2 MA's), (Start: 8 @36060 has 6 MA's), (14, 36021), (19, 35907), (21, 35883), (23, 35838), (28, 35787), (35, 35751), (40, 35694), (42, 35646), (54, 35448),

Gene: Smoothie_141 Start: 77002, Stop: 77631, Start Num: 9

Candidate Starts for Smoothie_141:

(2, 76873), (3, 76879), (6, 76984), (7, 76990), (Start: 9 @77002 has 12 MA's), (25, 77224), (39, 77359), (42, 77413), (51, 77536), (52, 77569), (55, 77617), (56, 77626),

Gene: Toniann_139 Start: 76334, Stop: 76963, Start Num: 9

Candidate Starts for Toniann_139:

(2, 76205), (3, 76211), (6, 76316), (Start: 9 @76334 has 12 MA's), (15, 76376), (25, 76556), (39, 76691), (42, 76745), (45, 76778), (51, 76868), (52, 76901), (55, 76949), (56, 76958),

Gene: Towmatter_101 Start: 66292, Stop: 66924, Start Num: 12

Candidate Starts for Towmatter_101:

(5, 66253), (Start: 12 @66292 has 2 MA's), (14, 66319), (15, 66328), (21, 66451), (23, 66496), (32, 66571), (34, 66583), (41, 66649), (42, 66694), (43, 66697), (46, 66742), (57, 66916),

Gene: WilliamBoone_139 Start: 74475, Stop: 75008, Start Num: 10

Candidate Starts for WilliamBoone_139:

(Start: 10 @74475 has 3 MA's), (20, 74625), (25, 74697), (39, 74832), (42, 74886),

Gene: Yvonnetastic_150 Start: 81703, Stop: 82341, Start Num: 11

Candidate Starts for Yvonnetastic_150:

(Start: 11 @81703 has 2 MA's), (18, 81820), (20, 81850), (21, 81865), (22, 81868), (26, 81949), (29, 81964), (31, 81985), (33, 81991), (36, 82048), (42, 82120), (45, 82153), (48, 82195), (49, 82198), (50, 82204), (53, 82300), (55, 82330),