

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 311837 Report

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

Pham number 311837 has 33 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Ebert_29
- Track 2 : StorminNorm_39
- Track 3 : Gustavo_39, Saronaya_39
- Track 4 : Kewpiedoll_39, ChadMasterC_40
- Track 5 : Stultus_38, Geodirt_38
- Track 6 : Fitzgerald_38, Brawn1_36, Barsten_40, Sanjuju_38
- Track 7 : Tangerine_39, LilHam_37, Kwobi_41, Baumdotcom_38, Baddon_39, Flatwoods_40, Gaea_39, SchottB_38
- Track 8 : Stichling_37, Derg_35
- Track 9 : RiverRaider_40
- Track 10 : Kroos_40
- Track 11 : Ashertheman_40
- Track 12 : Tycho_39
- Track 13 : FuegoCuervo_42
- Track 14 : Bizzy_40
- Track 15 : Ribeye_40
- Track 16 : YorkOnyx_40
- Track 17 : JKSyngboy_37
- Track 18 : MoontowerMania_39
- Track 19 : Jabberwocky_38

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

The start number called the most often in the published annotations is 2, it was called in 30 of the 31 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Ashertheman_40, Baddon_39, Barsten_40, Baumdotcom_38, Bizzy_40, Brawn1_36, ChadMasterC_40, Derg_35, Fitzgerald_38, Flatwoods_40, FuegoCuervo_42, Gaea_39, Geodirt_38, Gustavo_39, JKSyngboy_37, Jabberwocky_38, Kewpiedoll_39, Kroos_40, Kwobi_41, LilHam_37, MoontowerMania_39, Ribeye_40, RiverRaider_40, Sanjuju_38, Saronaya_39, SchottB_38, Stichling_37, StorminNorm_39, Stultus_38, Tangerine_39, Tycho_39, YorkOnyx_40,

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

-

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

- Ebert_29,

Summary by start number:

Start 2:

- Found in 32 of 33 (97.0%) of genes in pham
- Manual Annotations of this start: 30 of 31
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ashertheman_40 (DE1), Baddon_39 (DE1), Barsten_40 (DE1), Baumdotcom_38 (DE1), Bizzy_40 (DE1), Brawn1_36 (DE1), ChadMasterC_40 (DE1), Derg_35 (DE1), Fitzgerald_38 (DE1), Flatwoods_40 (DE1), FuegoCuervo_42 (DE1), Gaea_39 (DE1), Geodirt_38 (DE1), Gustavo_39 (DE1), JKSyngboy_37 (DE1), Jabberwocky_38 (DE1), Kewpiedoll_39 (DE1), Kroos_40 (DE1), Kwobi_41 (DE1), LilHam_37 (DE1), MoontowerMania_39 (DE1), Ribeye_40 (DE1), RiverRaider_40 (DE1), Sanjuju_38 (DE1), Saronaya_39 (DE1), SchottB_38 (DE1), Stichling_37 (DE1), StorminNorm_39 (DE1), Stultus_38 (DE1), Tangerine_39 (DE1), Tycho_39 (DE1), YorkOnyx_40 (DE1),

Start 6:

- Found in 1 of 33 (3.0%) of genes in pham
- Manual Annotations of this start: 1 of 31
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ebert_29 (CZ2),

Summary by clusters:

There are 2 clusters represented in this pham: CZ2, DE1,

Info for manual annotations of cluster CZ2:

- Start number 6 was manually annotated 1 time for cluster CZ2.

Info for manual annotations of cluster DE1:

- Start number 2 was manually annotated 30 times for cluster DE1.

Gene Information:

Gene: Ashertheman_40 Start: 34502, Stop: 35743, Start Num: 2

Candidate Starts for Ashertheman_40:

(Start: 2 @34502 has 30 MA's), (4, 34577), (5, 34622), (9, 34682), (13, 34736), (14, 34793), (17, 34868), (18, 34904), (19, 34916), (21, 34961), (26, 35063), (29, 35147), (31, 35177), (33, 35216), (42, 35336), (49, 35510), (52, 35540), (54, 35612), (57, 35672), (58, 35723),

Gene: Baddon_39 Start: 35299, Stop: 36540, Start Num: 2

Candidate Starts for Baddon_39:

(Start: 2 @35299 has 30 MA's), (4, 35374), (5, 35419), (9, 35479), (13, 35533), (14, 35590), (18, 35701), (19, 35713), (21, 35758), (26, 35860), (31, 35974), (33, 36013), (42, 36133), (49, 36307), (52,

36337), (54, 36409), (57, 36469), (58, 36520),

Gene: Barsten_40 Start: 34796, Stop: 35917, Start Num: 2

Candidate Starts for Barsten_40:

(Start: 2 @34796 has 30 MA's), (3, 34820), (4, 34871), (10, 34985), (12, 35012), (13, 35030), (14, 35087), (21, 35255), (22, 35291), (26, 35357), (31, 35471), (37, 35510), (50, 35702), (51, 35708), (52, 35714),

Gene: Baumdotcom_38 Start: 34155, Stop: 35396, Start Num: 2

Candidate Starts for Baumdotcom_38:

(Start: 2 @34155 has 30 MA's), (4, 34230), (5, 34275), (9, 34335), (13, 34389), (14, 34446), (18, 34557), (19, 34569), (21, 34614), (26, 34716), (31, 34830), (33, 34869), (42, 34989), (49, 35163), (52, 35193), (54, 35265), (57, 35325), (58, 35376),

Gene: Bizzy_40 Start: 34446, Stop: 35687, Start Num: 2

Candidate Starts for Bizzy_40:

(Start: 2 @34446 has 30 MA's), (4, 34521), (5, 34566), (9, 34626), (13, 34680), (14, 34737), (18, 34848), (19, 34860), (21, 34905), (26, 35007), (31, 35121), (33, 35160), (42, 35280), (44, 35307), (49, 35454), (52, 35484), (54, 35556), (57, 35616), (58, 35667), (59, 35682),

Gene: Brawn1_36 Start: 34138, Stop: 35259, Start Num: 2

Candidate Starts for Brawn1_36:

(Start: 2 @34138 has 30 MA's), (3, 34162), (4, 34213), (10, 34327), (12, 34354), (13, 34372), (14, 34429), (21, 34597), (22, 34633), (26, 34699), (31, 34813), (37, 34852), (50, 35044), (51, 35050), (52, 35056),

Gene: ChadMasterC_40 Start: 36195, Stop: 37316, Start Num: 2

Candidate Starts for ChadMasterC_40:

(Start: 2 @36195 has 30 MA's), (3, 36219), (4, 36270), (9, 36375), (10, 36384), (12, 36411), (13, 36429), (14, 36486), (21, 36654), (22, 36690), (26, 36756), (31, 36870), (37, 36909), (41, 36948), (50, 37101), (51, 37107), (52, 37113),

Gene: Derg_35 Start: 34042, Stop: 35292, Start Num: 2

Candidate Starts for Derg_35:

(1, 33946), (Start: 2 @34042 has 30 MA's), (4, 34117), (5, 34162), (9, 34222), (13, 34276), (14, 34333), (18, 34444), (19, 34456), (21, 34501), (26, 34612), (31, 34726), (33, 34765), (42, 34885), (49, 35059), (52, 35089), (54, 35161), (57, 35221), (58, 35272),

Gene: Ebert_29 Start: 23678, Stop: 24772, Start Num: 6

Candidate Starts for Ebert_29:

(Start: 6 @23678 has 1 MA's), (7, 23684), (8, 23717), (10, 23744), (11, 23753), (15, 23894), (27, 24128), (30, 24200), (32, 24260), (35, 24278), (45, 24419), (46, 24425), (47, 24440), (48, 24455), (50, 24557), (53, 24584), (55, 24662), (56, 24668),

Gene: Fitzgerald_38 Start: 35470, Stop: 36591, Start Num: 2

Candidate Starts for Fitzgerald_38:

(Start: 2 @35470 has 30 MA's), (3, 35494), (4, 35545), (10, 35659), (12, 35686), (13, 35704), (14, 35761), (21, 35929), (22, 35965), (26, 36031), (31, 36145), (37, 36184), (50, 36376), (51, 36382), (52, 36388),

Gene: Flatwoods_40 Start: 34403, Stop: 35644, Start Num: 2

Candidate Starts for Flatwoods_40:

(Start: 2 @34403 has 30 MA's), (4, 34478), (5, 34523), (9, 34583), (13, 34637), (14, 34694), (18, 34805), (19, 34817), (21, 34862), (26, 34964), (31, 35078), (33, 35117), (42, 35237), (49, 35411), (52, 35441), (54, 35513), (57, 35573), (58, 35624),

Gene: FuegoCuervo_42 Start: 33799, Stop: 35013, Start Num: 2

Candidate Starts for FuegoCuervo_42:

(Start: 2 @33799 has 30 MA's), (3, 33823), (4, 33874), (9, 33979), (10, 33988), (12, 34015), (13, 34033), (14, 34090), (21, 34258), (22, 34294), (26, 34360), (28, 34402), (34, 34522), (50, 34798), (51, 34804), (52, 34810),

Gene: Gaea_39 Start: 34051, Stop: 35292, Start Num: 2

Candidate Starts for Gaea_39:

(Start: 2 @34051 has 30 MA's), (4, 34126), (5, 34171), (9, 34231), (13, 34285), (14, 34342), (18, 34453), (19, 34465), (21, 34510), (26, 34612), (31, 34726), (33, 34765), (42, 34885), (49, 35059), (52, 35089), (54, 35161), (57, 35221), (58, 35272),

Gene: Geodirt_38 Start: 35338, Stop: 36552, Start Num: 2

Candidate Starts for Geodirt_38:

(Start: 2 @35338 has 30 MA's), (3, 35362), (4, 35413), (10, 35527), (12, 35554), (13, 35572), (14, 35629), (21, 35797), (22, 35833), (26, 35899), (28, 35941), (50, 36337), (51, 36343), (52, 36349),

Gene: Gustavo_39 Start: 34206, Stop: 35447, Start Num: 2

Candidate Starts for Gustavo_39:

(Start: 2 @34206 has 30 MA's), (4, 34281), (5, 34326), (9, 34386), (13, 34440), (14, 34497), (18, 34608), (19, 34620), (21, 34665), (26, 34767), (31, 34881), (33, 34920), (42, 35040), (49, 35214), (52, 35244), (54, 35316), (57, 35376),

Gene: JKSyngboy_37 Start: 34781, Stop: 36022, Start Num: 2

Candidate Starts for JKSyngboy_37:

(1, 34685), (Start: 2 @34781 has 30 MA's), (4, 34856), (5, 34901), (9, 34961), (13, 35015), (14, 35072), (18, 35183), (20, 35210), (21, 35240), (26, 35342), (29, 35426), (31, 35456), (38, 35546), (39, 35579), (40, 35588), (43, 35639), (51, 35813), (52, 35819), (54, 35891), (57, 35951), (58, 36002), (59, 36017),

Gene: Jabberwocky_38 Start: 35874, Stop: 36995, Start Num: 2

Candidate Starts for Jabberwocky_38:

(Start: 2 @35874 has 30 MA's), (3, 35898), (4, 35949), (10, 36063), (12, 36090), (13, 36108), (14, 36165), (16, 36237), (21, 36333), (22, 36369), (26, 36435), (31, 36549), (37, 36588), (50, 36780), (51, 36786), (52, 36792),

Gene: Kewpiedoll_39 Start: 34733, Stop: 35854, Start Num: 2

Candidate Starts for Kewpiedoll_39:

(Start: 2 @34733 has 30 MA's), (3, 34757), (4, 34808), (9, 34913), (10, 34922), (12, 34949), (13, 34967), (14, 35024), (21, 35192), (22, 35228), (26, 35294), (31, 35408), (37, 35447), (41, 35486), (50, 35639), (51, 35645), (52, 35651),

Gene: Kroos_40 Start: 34959, Stop: 36200, Start Num: 2

Candidate Starts for Kroos_40:

(Start: 2 @34959 has 30 MA's), (3, 34983), (4, 35034), (5, 35079), (9, 35139), (13, 35193), (14, 35250), (18, 35361), (19, 35373), (21, 35418), (26, 35520), (31, 35634), (33, 35673), (42, 35793), (49, 35967), (52, 35997), (54, 36069), (57, 36129), (58, 36180),

Gene: Kwobi_41 Start: 34945, Stop: 36186, Start Num: 2

Candidate Starts for Kwobi_41:

(Start: 2 @34945 has 30 MA's), (4, 35020), (5, 35065), (9, 35125), (13, 35179), (14, 35236), (18, 35347), (19, 35359), (21, 35404), (26, 35506), (31, 35620), (33, 35659), (42, 35779), (49, 35953), (52, 35983), (54, 36055), (57, 36115), (58, 36166),

Gene: LilHam_37 Start: 33548, Stop: 34789, Start Num: 2

Candidate Starts for LilHam_37:

(Start: 2 @33548 has 30 MA's), (4, 33623), (5, 33668), (9, 33728), (13, 33782), (14, 33839), (18, 33950), (19, 33962), (21, 34007), (26, 34109), (31, 34223), (33, 34262), (42, 34382), (49, 34556), (52, 34586), (54, 34658), (57, 34718), (58, 34769),

Gene: MoontowerMania_39 Start: 35099, Stop: 36313, Start Num: 2

Candidate Starts for MoontowerMania_39:

(Start: 2 @35099 has 30 MA's), (3, 35123), (4, 35174), (9, 35279), (10, 35288), (12, 35315), (13, 35333), (14, 35390), (21, 35558), (22, 35594), (26, 35660), (28, 35702), (50, 36098), (51, 36104), (52, 36110),

Gene: Ribeye_40 Start: 35363, Stop: 36604, Start Num: 2

Candidate Starts for Ribeye_40:

(1, 35267), (Start: 2 @35363 has 30 MA's), (4, 35438), (5, 35483), (9, 35543), (13, 35597), (14, 35654), (18, 35765), (19, 35777), (21, 35822), (26, 35924), (31, 36038), (33, 36077), (42, 36197), (49, 36371), (52, 36401), (54, 36473), (57, 36533), (58, 36584), (59, 36599),

Gene: RiverRaider_40 Start: 33592, Stop: 34821, Start Num: 2

Candidate Starts for RiverRaider_40:

(Start: 2 @33592 has 30 MA's), (4, 33667), (9, 33772), (12, 33808), (13, 33826), (14, 33883), (18, 33994), (23, 34117), (24, 34135), (25, 34141), (26, 34153), (36, 34324), (50, 34606), (51, 34612), (52, 34618),

Gene: Sanjuju_38 Start: 35603, Stop: 36724, Start Num: 2

Candidate Starts for Sanjuju_38:

(Start: 2 @35603 has 30 MA's), (3, 35627), (4, 35678), (10, 35792), (12, 35819), (13, 35837), (14, 35894), (21, 36062), (22, 36098), (26, 36164), (31, 36278), (37, 36317), (50, 36509), (51, 36515), (52, 36521),

Gene: Saronaya_39 Start: 34206, Stop: 35447, Start Num: 2

Candidate Starts for Saronaya_39:

(Start: 2 @34206 has 30 MA's), (4, 34281), (5, 34326), (9, 34386), (13, 34440), (14, 34497), (18, 34608), (19, 34620), (21, 34665), (26, 34767), (31, 34881), (33, 34920), (42, 35040), (49, 35214), (52, 35244), (54, 35316), (57, 35376),

Gene: SchottB_38 Start: 35221, Stop: 36462, Start Num: 2

Candidate Starts for SchottB_38:

(Start: 2 @35221 has 30 MA's), (4, 35296), (5, 35341), (9, 35401), (13, 35455), (14, 35512), (18, 35623), (19, 35635), (21, 35680), (26, 35782), (31, 35896), (33, 35935), (42, 36055), (49, 36229), (52, 36259), (54, 36331), (57, 36391), (58, 36442),

Gene: Stichling_37 Start: 33741, Stop: 34982, Start Num: 2

Candidate Starts for Stichling_37:

(1, 33645), (Start: 2 @33741 has 30 MA's), (4, 33816), (5, 33861), (9, 33921), (13, 33975), (14, 34032), (18, 34143), (19, 34155), (21, 34200), (26, 34302), (31, 34416), (33, 34455), (42, 34575), (49, 34749), (52, 34779), (54, 34851), (57, 34911), (58, 34962),

Gene: StorminNorm_39 Start: 34088, Stop: 35329, Start Num: 2

Candidate Starts for StorminNorm_39:

(Start: 2 @34088 has 30 MA's), (4, 34163), (5, 34208), (9, 34268), (13, 34322), (14, 34379), (18, 34490), (19, 34502), (21, 34547), (26, 34649), (31, 34763), (33, 34802), (42, 34922), (49, 35096), (51, 35120), (52, 35126), (54, 35198), (57, 35258), (58, 35309),

Gene: Stultus_38 Start: 34405, Stop: 35619, Start Num: 2

Candidate Starts for Stultus_38:

(Start: 2 @34405 has 30 MA's), (3, 34429), (4, 34480), (10, 34594), (12, 34621), (13, 34639), (14, 34696), (21, 34864), (22, 34900), (26, 34966), (28, 35008), (50, 35404), (51, 35410), (52, 35416),

Gene: Tangerine_39 Start: 34091, Stop: 35332, Start Num: 2

Candidate Starts for Tangerine_39:

(Start: 2 @34091 has 30 MA's), (4, 34166), (5, 34211), (9, 34271), (13, 34325), (14, 34382), (18, 34493), (19, 34505), (21, 34550), (26, 34652), (31, 34766), (33, 34805), (42, 34925), (49, 35099), (52, 35129), (54, 35201), (57, 35261), (58, 35312),

Gene: Tycho_39 Start: 34180, Stop: 35421, Start Num: 2

Candidate Starts for Tycho_39:

(Start: 2 @34180 has 30 MA's), (4, 34255), (5, 34300), (9, 34360), (13, 34414), (14, 34471), (18, 34582), (19, 34594), (21, 34639), (26, 34741), (31, 34855), (33, 34894), (42, 35014), (49, 35188), (52, 35218), (54, 35290), (57, 35350), (58, 35401),

Gene: YorkOnyx_40 Start: 34439, Stop: 35680, Start Num: 2

Candidate Starts for YorkOnyx_40:

(Start: 2 @34439 has 30 MA's), (5, 34559), (9, 34619), (13, 34673), (14, 34730), (18, 34841), (19, 34853), (21, 34898), (26, 35000), (31, 35114), (39, 35237), (40, 35246), (43, 35297), (49, 35447), (51, 35471), (52, 35477), (54, 35549), (57, 35609), (58, 35660),