Pham 344454


1: RainyPolka_45
2: Maih_43 + 4
3: Asis_44
4: Xkcd426_48
5: Abt2graduatex2_45
6: Mischief19_53
7: YDN12_46
8: Mahdia_31
9: Widow_31
10: Puppers_31
11: Morrissey_33
12: Applejacks_31
13: WorMMAs_32
14: BFK20_ORF40

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 344454 Report

This analysis was run 11/14/26 on database version 672.

Pham number 344454 has 18 members, 3 are drafts.

Phages represented in each track:
• Track 1 : RainyPolka_45
• Track 2 : Maih_43, BabyGotBac_45, TP1604_44, Salete_44, BayC_44
• Track 3 : Asis_44
• Track 4 : Xkcd426_48
• Track 5 : Abt2graduatex2_45
• Track 6 : Mischief19_53
• Track 7 : YDN12_46
• Track 8 : Mahdia_31
• Track 9 : Widow_31
• Track 10 : Puppers_31
• Track 11 : Morrissey_33
• Track 12 : Applejacks_31
• Track 13 : WorMMAs_32
• Track 14 : BFK20_ORF40

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

The start number called the most often in the published annotations is 15, it was called in 6 of the 15 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Abt2graduatex2_45, Asis_44, Mischief19_53, RainyPolka_45, Xkcd426_48, YDN12_46,

Genes that have the "Most Annotated" start but do not call it:
• BabyGotBac_45, BayC_44, Maih_43, Salete_44, TP1604_44,

Genes that do not have the "Most Annotated" start:
• Applejacks_31, BFK20_ORF40, Mahdia_31, Morrissey_33, Puppers_31, Widow_31, WorMMAs_32,

Summary by start number:

Start 13:

• Found in 7 of 18 (38.9%) of genes in pham
• Manual Annotations of this start: 5 of 15
• Called 71.4% of time when present
• Phage (with cluster) where this start called: BabyGotBac_45 (BG), BayC_44 (BG), Maih_43 (BG), Salete_44 (BG), TP1604_44 (BG),

Start 15:
• Found in 11 of 18 (61.1%) of genes in pham
• Manual Annotations of this start: 6 of 15
• Called 54.5% of time when present
• Phage (with cluster) where this start called: Abt2graduatex2_45 (BG), Asis_44 (BG), Mischief19_53 (BG), RainyPolka_45 (BG), Xkcd426_48 (BG), YDN12_46 (BG),

Start 19:
• Found in 1 of 18 (5.6%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BFK20_ORF40 (singleton),

Start 22:
• Found in 1 of 18 (5.6%) of genes in pham
• Manual Annotations of this start: 1 of 15
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Morrissey_33 (CD),

Start 23:
• Found in 5 of 18 (27.8%) of genes in pham
• Manual Annotations of this start: 3 of 15
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Applejacks_31 (CD), Mahdia_31 (CD), Puppers_31 (CD), Widow_31 (CD), WorMMAs_32 (UNK),

Summary by clusters:

There are 4 clusters represented in this pham: UNK, singleton, BG, CD,

Info for manual annotations of cluster BG:
•Start number 13 was manually annotated 5 times for cluster BG.
•Start number 15 was manually annotated 6 times for cluster BG.

Info for manual annotations of cluster CD:
•Start number 22 was manually annotated 1 time for cluster CD.
•Start number 23 was manually annotated 3 times for cluster CD.

Gene Information:

Gene: Abt2graduatex2_45 Start: 36400, Stop: 35234, Start Num: 15
Candidate Starts for Abt2graduatex2_45:
(Start: 15 @36400 has 6 MA's), (20, 36361), (25, 36322), (29, 36256), (30, 36247), (35, 36151), (36, 36145), (39, 36100), (46, 36031), (51, 35980), (52, 35962), (57, 35884), (61, 35872), (64, 35860), (66,

35824), (67, 35821), (68, 35812), (76, 35728), (90, 35575), (93, 35542), (94, 35536), (98, 35527), (101, 35482), (104, 35458), (106, 35449), (116, 35359), (120, 35341), (129, 35245),

Gene: Applejacks_31 Start: 24445, Stop: 23327, Start Num: 23
Candidate Starts for Applejacks_31:
(Start: 23 @24445 has 3 MA's), (32, 24319), (33, 24307), (34, 24274), (48, 24142), (54, 24025), (59, 23998), (62, 23986), (64, 23980), (69, 23914), (71, 23890), (80, 23770), (86, 23710), (89, 23689), (90, 23683), (91, 23680), (97, 23635), (101, 23584), (102, 23575), (105, 23554), (108, 23539), (124, 23407),

Gene: Asis_44 Start: 36151, Stop: 34985, Start Num: 15
Candidate Starts for Asis_44:
(5, 36394), (7, 36343), (8, 36286), (Start: 13 @36175 has 5 MA's), (Start: 15 @36151 has 6 MA's), (20, 36112), (25, 36073), (27, 36028), (29, 36007), (35, 35902), (36, 35896), (39, 35851), (42, 35839), (46, 35782), (47, 35776), (51, 35731), (52, 35713), (56, 35641), (64, 35611), (66, 35575), (67, 35572), (68, 35563), (94, 35287), (98, 35278), (101, 35233), (104, 35209), (106, 35200), (110, 35167), (116, 35110), (120, 35092), (128, 34999), (129, 34996),

Gene: BFK20_ORF40 Start: 30567, Stop: 29512, Start Num: 19
Candidate Starts for BFK20_ORF40:
(14, 30639), (16, 30630), (19, 30567), (21, 30540), (28, 30456), (41, 30288), (49, 30213), (58, 30084), (65, 30048), (68, 30015), (78, 29880), (79, 29868), (82, 29835), (86, 29802), (88, 29784), (90, 29775), (96, 29730), (100, 29682), (121, 29553), (123, 29532),

Gene: BabyGotBac_45 Start: 36175, Stop: 34985, Start Num: 13
Candidate Starts for BabyGotBac_45:
(5, 36394), (7, 36343), (8, 36286), (Start: 13 @36175 has 5 MA's), (Start: 15 @36151 has 6 MA's), (20, 36112), (25, 36073), (27, 36028), (29, 36007), (35, 35902), (36, 35896), (39, 35851), (42, 35839), (46, 35782), (47, 35776), (51, 35731), (52, 35713), (56, 35641), (64, 35611), (66, 35575), (67, 35572), (68, 35563), (94, 35287), (98, 35278), (101, 35233), (104, 35209), (106, 35200), (110, 35167), (116, 35110), (120, 35092), (128, 34999), (129, 34996),

Gene: BayC_44 Start: 36172, Stop: 34982, Start Num: 13
Candidate Starts for BayC_44:
(5, 36391), (7, 36340), (8, 36283), (Start: 13 @36172 has 5 MA's), (Start: 15 @36148 has 6 MA's), (20, 36109), (25, 36070), (27, 36025), (29, 36004), (35, 35899), (36, 35893), (39, 35848), (42, 35836), (46, 35779), (47, 35773), (51, 35728), (52, 35710), (56, 35638), (64, 35608), (66, 35572), (67, 35569), (68, 35560), (94, 35284), (98, 35275), (101, 35230), (104, 35206), (106, 35197), (110, 35164), (116, 35107), (120, 35089), (128, 34996), (129, 34993),

Gene: Mahdia_31 Start: 24495, Stop: 23398, Start Num: 23
Candidate Starts for Mahdia_31:
(1, 25017), (2, 24885), (6, 24807), (Start: 23 @24495 has 3 MA's), (33, 24360), (38, 24273), (39, 24264), (53, 24093), (62, 24039), (69, 23967), (72, 23931), (75, 23889), (83, 23793), (86, 23763), (90, 23736), (97, 23688), (99, 23661), (102, 23628), (107, 23595), (111, 23568), (114, 23547), (115, 23532),

Gene: Maih_43 Start: 36174, Stop: 34984, Start Num: 13
Candidate Starts for Maih_43:
(5, 36393), (7, 36342), (8, 36285), (Start: 13 @36174 has 5 MA's), (Start: 15 @36150 has 6 MA's), (20, 36111), (25, 36072), (27, 36027), (29, 36006), (35, 35901), (36, 35895), (39, 35850), (42, 35838), (46, 35781), (47, 35775), (51, 35730), (52, 35712), (56, 35640), (64, 35610), (66, 35574), (67, 35571), (68, 35562), (94, 35286), (98, 35277), (101, 35232), (104, 35208), (106, 35199), (110, 35166), (116,

35109), (120, 35091), (128, 34998), (129, 34995),

Gene: Mischief19_53 Start: 46548, Stop: 45343, Start Num: 15
Candidate Starts for Mischief19_53:
(9, 46626), (10, 46605), (12, 46581), (Start: 15 @46548 has 6 MA's), (20, 46509), (31, 46380), (44, 46215), (62, 46017), (67, 45972), (68, 45963), (81, 45795), (84, 45780), (87, 45744), (92, 45720), (95, 45684), (101, 45633), (109, 45567), (112, 45540), (119, 45477), (120, 45474), (125, 45426), (130, 45369), (131, 45354),

Gene: Morrissey_33 Start: 26237, Stop: 25131, Start Num: 22
Candidate Starts for Morrissey_33:
(Start: 22 @26237 has 1 MA's), (33, 26090), (40, 25988), (53, 25820), (56, 25790), (64, 25760), (69, 25694), (74, 25631), (76, 25613), (83, 25520), (85, 25514), (86, 25490), (89, 25469), (90, 25463), (97, 25415), (100, 25370), (102, 25355), (103, 25346), (105, 25334), (114, 25280), (115, 25265),

Gene: Puppers_31 Start: 24982, Stop: 23882, Start Num: 23
Candidate Starts for Puppers_31:
(Start: 23 @24982 has 3 MA's), (24, 24967), (26, 24934), (34, 24805), (37, 24766), (39, 24742), (48, 24670), (55, 24550), (56, 24538), (69, 24442), (77, 24349), (78, 24316), (82, 24271), (83, 24268), (86, 24238), (89, 24217), (90, 24211), (91, 24208), (96, 24166), (102, 24103), (117, 24007), (120, 23992), (122, 23971),

Gene: RainyPolka_45 Start: 36140, Stop: 34974, Start Num: 15
Candidate Starts for RainyPolka_45:
(Start: 15 @36140 has 6 MA's), (17, 36131), (20, 36101), (25, 36062), (29, 35996), (30, 35987), (35, 35891), (36, 35885), (39, 35840), (51, 35720), (52, 35702), (56, 35630), (64, 35600), (66, 35564), (67, 35561), (68, 35552), (93, 35282), (94, 35276), (98, 35267), (101, 35222), (104, 35198), (106, 35189), (111, 35141), (113, 35126), (116, 35099), (120, 35081), (129, 34985),

Gene: Salete_44 Start: 36172, Stop: 34982, Start Num: 13
Candidate Starts for Salete_44:
(5, 36391), (7, 36340), (8, 36283), (Start: 13 @36172 has 5 MA's), (Start: 15 @36148 has 6 MA's), (20, 36109), (25, 36070), (27, 36025), (29, 36004), (35, 35899), (36, 35893), (39, 35848), (42, 35836), (46, 35779), (47, 35773), (51, 35728), (52, 35710), (56, 35638), (64, 35608), (66, 35572), (67, 35569), (68, 35560), (94, 35284), (98, 35275), (101, 35230), (104, 35206), (106, 35197), (110, 35164), (116, 35107), (120, 35089), (128, 34996), (129, 34993),

Gene: TP1604_44 Start: 36178, Stop: 34988, Start Num: 13
Candidate Starts for TP1604_44:
(5, 36397), (7, 36346), (8, 36289), (Start: 13 @36178 has 5 MA's), (Start: 15 @36154 has 6 MA's), (20, 36115), (25, 36076), (27, 36031), (29, 36010), (35, 35905), (36, 35899), (39, 35854), (42, 35842), (46, 35785), (47, 35779), (51, 35734), (52, 35716), (56, 35644), (64, 35614), (66, 35578), (67, 35575), (68, 35566), (94, 35290), (98, 35281), (101, 35236), (104, 35212), (106, 35203), (110, 35170), (116, 35113), (120, 35095), (128, 35002), (129, 34999),

Gene: Widow_31 Start: 24786, Stop: 23686, Start Num: 23
Candidate Starts for Widow_31:
(Start: 23 @24786 has 3 MA's), (24, 24771), (26, 24738), (37, 24570), (39, 24546), (48, 24474), (55, 24354), (56, 24342), (69, 24246), (77, 24153), (78, 24120), (82, 24075), (83, 24072), (86, 24042), (89, 24021), (90, 24015), (91, 24012), (96, 23970), (102, 23907), (117, 23811), (120, 23796), (122, 23775),

Gene: WorMMAs_32 Start: 24410, Stop: 23310, Start Num: 23
Candidate Starts for WorMMAs_32:

(3, 24806), (4, 24803), (6, 24737), (Start: 23 @24410 has 3 MA's), (24, 24395), (34, 24233), (37, 24194), (43, 24152), (45, 24128), (48, 24098), (50, 24059), (53, 23996), (60, 23951), (63, 23939), (70, 23861), (72, 23837), (73, 23819), (74, 23810), (80, 23729), (82, 23702), (83, 23699), (86, 23669), (89, 23648), (90, 23642), (91, 23639), (96, 23597), (97, 23594), (102, 23534), (120, 23423), (124, 23393), (127, 23348),

Gene: Xkcd426_48 Start: 42277, Stop: 41054, Start Num: 15
Candidate Starts for Xkcd426_48:
(11, 42331), (Start: 13 @42301 has 5 MA's), (Start: 15 @42277 has 6 MA's), (17, 42268), (18, 42259), (29, 42076), (34, 41983), (36, 41965), (39, 41920), (42, 41908), (46, 41851), (51, 41800), (52, 41782), (57, 41704), (64, 41680), (67, 41641), (68, 41632), (90, 41395), (94, 41356), (99, 41326), (101, 41302), (104, 41278), (106, 41269), (118, 41170), (120, 41161), (126, 41101), (129, 41065),

Gene: YDN12_46 Start: 35847, Stop: 34681, Start Num: 15
Candidate Starts for YDN12_46:
(Start: 15 @35847 has 6 MA's), (17, 35838), (20, 35808), (25, 35769), (29, 35703), (35, 35598), (36, 35592), (39, 35547), (46, 35478), (47, 35472), (51, 35427), (52, 35409), (56, 35337), (64, 35307), (66, 35271), (67, 35268), (68, 35259), (91, 35019), (94, 34983), (98, 34974), (101, 34929), (104, 34905), (106, 34896), (110, 34863), (116, 34806), (120, 34788), (126, 34728), (128, 34695), (129, 34692),