

Supplementary Material: Incomplete LPS Core-specific *Felix01likevirus* vB_EcoM_VpaE1

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Table S1. List of Annotated VpaE1 ORFs.

VpaE1 ORF, Position	Predicted Function (Protein Length aa)	Significant Match (Protein Length aa)	Identity aa %/Similarity aa% (Length of the Overlapping Segment)	E Value
ORF01 1..2367	rIIA (788)	gb AGF88671.1 rIIA protein <i>Salmonella</i> phage FSL SP-010 (786)	98/99 (786)	0.0
ORF02 2449..3558	rIIB (369)	gb AFU62447.1 hypothetical protein <i>Escherichia</i> phage EC6 (369)	99/99 (369)	0.0
ORF03 3660..4208	hypothetical protein (182)	gb AGF88669.1 hypothetical protein SP010_00055 <i>Salmonella</i> phage FSL SP-010 (182)	99/99 (182)	4e-129
ORF04 4186..4881	putative PseT polynucleotide 5'-kinase/3'-phosphatase (231)	ref NP_944782.1 hypothetical protein Felix01p006 <i>Salmonella</i> phage FelixO1 (231)	98/99 (231)	5e-168
ORF05 4892..5356	hypothetical protein (154)	AIK67816.1 hypothetical protein HY02_005 <i>Escherichia</i> phage HY02 (159)	97/98 (154)	2e-102
ORF06 5409..5756	hypothetical protein (115)	ref NP_944790.1 phage conserved protein <i>Salmonella</i> phage FelixO1 (115)	100/100 (115)	2e-78
ORF07 5650..5919	hypothetical protein (89)	ref NP_944791.1 hypothetical protein Felix01p015 <i>Salmonella</i> phage FelixO1 (89)	100/100 (89)	2e-57
ORF08 5916..6185	hypothetical protein (89)	gb AGF89432.1 hypothetical protein SP107_00310 <i>Salmonella</i> phage FSL SP-107 (89)	98/100 (89)	3e-59
ORF09 6182..6496	hypothetical protein (104)	ref NP_944793.2 hypothetical protein Felix01p017 <i>Salmonella</i> phage FelixO1 (102)	100/100 (102)	3e-69
ORF10 6182..6496	hypothetical protein (108)	gb AGR48411.1 hypothetical protein JH2_015 <i>Escherichia</i> phage JH2 (108)	96/98 (108)	3e-70
ORF11 6787..7014	hypothetical protein (75)	YP_009146257.1 hypothetical protein HB2014_12 <i>Salmonella</i> phage HB-2014 (75)	100/100 (75)	3e-45

Table S1. Cont.

VpaE1 ORF, Position	Predicted Function (Protein Length aa)	Significant Match (Protein Length aa)	Identity aa %/Similarity aa% (Length of the Overlapping Segment)	E Value
ORF12 7007..7207	hypothetical protein (66)	ref YP_002922792.1 hypothetical protein WV8_gp011 <i>Escherichia</i> phage wV8 (66)	100/100 (66)	2e-40
ORF13 7209..7994	putative phosphatase (261)	gb AFQ96092.1 phage conserved protein Enterobacteria phage UAB_Phi87 (261)	98/99 (261)	0.0
ORF14 8504..8884	hypothetical protein (126)	YP_009146262.1 hypothetical protein HB2014_17 <i>Salmonella</i> phage HB-2014 (126)	95/98 (126)	4e-82
ORF15 8973..9230	hypothetical protein (85)	AKC04844.1 hypothetical protein AYO145A_016 <i>Escherichia</i> phage vB_EcoM_AYO145A (85)	89/94 (85)	9e-45
ORF16 9321..9617	hypothetical protein (98)	AKC04846.1 hypothetical protein AYO145A_018 <i>Escherichia</i> phage vB_EcoM_AYO145A (98)	94/97 (98)	2e-60
ORF17 9611..9943	hypothetical protein (110)	gb AGF88780.1 hypothetical protein SP010_00670 <i>Salmonella</i> phage FSL SP-010 (110)	97/98 (110)	8e-69
ORF18 10034..10306	hypothetical protein (90)	ref NP_944813.1 hypothetical protein Felix01p037 <i>Salmonella</i> phage FelixO1 (105)	97/97 (90)	2e-58
ORF19 10393..10797	hypothetical protein (134)	AKC04849.1 hypothetical protein AYO145A_021 <i>Escherichia</i> phage vB_EcoM_AYO145A (134)	97/97 (134)	5e-89
ORF20 10897..11100	hypothetical protein (67)	YP_009146268.1 hypothetical protein HB2014_23 <i>Salmonella</i> phage HB-2014 (67)	97/97 (67)	4e-38
ORF21 11186..11728	hypothetical protein (180)	AIK67833.1 hypothetical protein HY02_022 <i>Escherichia</i> phage HY02 (180)	94/97 (180)	2e-121
ORF22 11795..12028	hypothetical protein (77)	gb AGF88777.1 hypothetical protein SP010_00655 <i>Salmonella</i> phage FSL SP-010 (77)	97/100 (77)	1e-47
ORF23 12118..12459	hypothetical protein (113)	gb AGR48527.1 hypothetical protein JH2_131 <i>Escherichia</i> phage JH2 (113)	94/97 (113)	4e-74
ORF24 12682..13212	hypothetical protein (176)	AKC04854.1 hypothetical protein AYO145A_026 <i>Escherichia</i> phage vB_EcoM_AYO145A (176)	95/97 (176)	9e-119
ORF25 13281..13529	hypothetical protein (82)	gb AGF89487.1 hypothetical protein SP107_00590 <i>Salmonella</i> phage FSL SP-107 (90)	99/100 (82)	1e-53

Table S1. Cont.

VpaE1 ORF, Position	Predicted Function (Protein Length aa)	Significant Match (Protein Length aa)	Identity aa %/Similarity aa% (Length of the Overlapping Segment)	E value
ORF26c 15903..15280	hypothetical protein (207)	gb AFU63601.1 hypothetical protein <i>Salmonella</i> phage SPT-1 (201)	91/97 (196)	2e-130
ORF27c 16306..15842	hypothetical protein (154)	ref YP_002922810.1 hypothetical protein WV8_gp029 <i>Escherichia</i> phage wV8 (154)	97/99 (154)	3e-108
ORF28c 16724..16269	hypothetical protein (151)	gb AGF88759.1 hypothetical protein SP010_00542 <i>Salmonella</i> phage FSL SP-010 (142)	99/100 (142)	8e-100
ORF29c 17003..16779	hypothetical protein (74)	gb AFU63458.1 hypothetical protein <i>Salmonella</i> phage SBA-1781 (74)	100/100 (74)	8e-43
ORF30c 17583..17080	hypothetical protein (167)	AKE44937.1 hypothetical protein ECTP1_00057 <i>Escherichia coli</i> O157 typing phage 1 (167)	96/97 (167)	1e-114
ORF31c 17798..17580	hypothetical protein (72)	AKC04862.1 hypothetical protein AYO145A_034 <i>Escherichia</i> phage vB_EcoM_AYO145A (77)	100/100 (72)	3e-44
ORF32c 18340..17795	hypothetical protein (181)	ref NP_944833.1 hypothetical protein Felix01p057 <i>Salmonella</i> phage FelixO1 (181)	98/98 (181)	6e-128
ORF33c 18994..18413	hypothetical protein (193)	AKC04863.1 hypothetical protein AYO145A_035 <i>Escherichia</i> phage vB_EcoM_AYO145A (193)	98/99 (193)	1e-138
ORF34c 19338..18994	hypothetical protein (114)	ref YP_002922817.1 hypothetical protein WV8_gp036 <i>Escherichia</i> phage wV8 (114)	100/100 (114)	3e-76
ORF35c 19624..19331	hypothetical protein (97)	AKE44932.1 hypothetical protein ECTP1_00052 <i>Escherichia coli</i> O157 typing phage 1 (97)	98/100 (97)	9e-63
ORF36c 20031..19624	hypothetical protein (135)	ref YP_002922819.1 hypothetical protein WV8_gp038 <i>Escherichia</i> phage wV8 (129)	93/94 (135)	2e-85
ORF37c 20422..20024	hypothetical protein (132)	YP_009146287.1 hypothetical protein HB2014_42 <i>Salmonella</i> phage HB-2014 (132)	95/98 (132)	5e-88
ORF38c 20938..20474	lysine (154)	gb AGF89474.1 lysine <i>Salmonella</i> phage FSL SP-107 (154)	100/100 (154)	2e-109
ORF39c 21822..20938	putative tail protein (294)	gb AGF88769.1 hypothetical protein SP010_00592 <i>Salmonella</i> phage FSL SP-010 (294)	96/96 (294)	0.0

Table S1. Cont.

VpaE1 ORF, Position	Predicted Function (Protein Length aa)	Significant Match (Protein Length aa)	Identity aa %/Similarity aa% (Length of the Overlapping Segment)	E Value
ORF40c 22190..21819	hypothetical protein (123)	gb ACZ55588.1 hypothetical protein <i>Staphylococcus</i> phage SA1 (123)	99/99 (123)	3e-85
ORF41c 22828..22238	hypothetical protein (196)	ref YP_002922824.1 hypothetical protein WV8_gp043 <i>Escherichia</i> phage wV8 (196)	99/100 (196)	2e-138
ORF42c 23055..22822	hypothetical protein (77)	ref YP_002922825.1 hypothetical protein WV8_gp044 <i>Escherichia</i> phage wV8 (77)	100/100 (77)	4e-49
ORF43c 23219..23037	hypothetical protein (60)	ref YP_001504372.1 hypothetical protein Felix01p077 <i>Salmonella</i> phage FelixO1 (53)	100/100 (53)	3e-30
ORF44 23448..23819	hypothetical protein (123)	ref YP_002922827.1 hypothetical protein WV8_gp046 <i>Escherichia</i> phage wV8 (123)	100/100 (123)	4e-82
ORF45 23902..25317	hypothetical protein (471)	gb AGR48505.1 hypothetical protein JH2_109 <i>Escherichia</i> phage JH2 (471)	99/99 (471)	0.0
ORF46 28403..28960	hypothetical protein (185)	AKC04878.1 hypothetical protein AYO145A_050 <i>Escherichia</i> phage vB_EcoM_AYO145A (185)	99/99 (185)	9e-131
ORF47 29412..30146	hypothetical protein (244)	gb AFQ96189.1 hypothetical protein Phi87_210 Enterobacteria phage UAB_Phi87 (244)	98/98 (244)	2e-169
ORF48 30209..30436	hypothetical protein (75)	ref NP_944880.1 hypothetical protein Felix01p101 <i>Salmonella</i> phage FelixO1 (75)	97/98 (75)	2e-43
ORF49 30543..30743	hypothetical protein (66)	ref NP_944882.1 hypothetical protein Felix01p103 <i>Salmonella</i> phage FelixO1 (66)	100/100 (66)	1e-37
ORF50 30765..32366	terminase, large subunit (533)	ref NP_944884.1 terminase, large subunit <i>Salmonella</i> phage FelixO1 (533)	100/100 (533)	0.0
ORF51 32383..33849	putative structural protein (488)	ref YP_002922841.1 hypothetical protein WV8_gp059 <i>Escherichia</i> phage wV8 (488)	99/99 (488)	0.0
ORF52 33849..34349	hypothetical protein (166)	gb AGR48497.1 hypothetical protein JH2_101 <i>Escherichia</i> phage JH2 (166)	99/99 (166)	4e-116
ORF53 34349..34681	hypothetical protein (110)	ref NP_944887.1 hypothetical protein Felix01p108 <i>Salmonella</i> phage FelixO1 (110)	99/100 (110)	3e-72

Table S1. Cont.

VpaE1 ORF, Position	Predicted Function (Protein Length aa)	Significant Match (Protein Length aa)	Identity aa %/Similarity aa% (Length of the Overlapping Segment)	E Value
ORF54 34693..36039	head maturation protease (448)	ref NP_944888.1 putative head maturation protease <i>Salmonella</i> phage FelixO1 (448)	99/99 (448)	0.0
ORF55 36051..36428	structural protein (125)	AKC04886.1 hypothetical protein AYO145A_058 <i>Escherichia</i> phage vB_EcoM_AYO145A (125)	97/97 (125)	2e-83
ORF56 36462..37568	major capsid protein (368)	gb ACZ55521.1 major capsid protein <i>Staphylococcus</i> phage SA1 (368)	99/100 (368)	0.0
ORF57 37589..38038	hypothetical protein (149)	ref NP_944892.1 hypothetical protein Felix01p113 <i>Salmonella</i> phage FelixO1 (149)	100/100 (149)	1e-104
ORF58 38038..38520	hypothetical protein (160)	ref NP_944893.1 phage conserved protein <i>Salmonella</i> phage FelixO1 (160)	100/100 (160)	3e-112
ORF59 38517..38918	hypothetical protein (133)	ref YP_002922850.1 hypothetical protein WV8_gp068 <i>Escherichia</i> phage wV8 (133)	99/100 (133)	8e-93
ORF60 38893..39492	hypothetical protein (199)	ref NP_944895.1 hypothetical protein Felix01p116 <i>Salmonella</i> phage FelixO1 (199)	99/99 (199)	6e-142
ORF61 39493..40845	structural protein (450)	gb AFQ96174.1 phage conserved structural protein Enterobacteria phage UAB_Phi87 (450)	98/99 (450)	0.0
ORF62 40861..41307	hypothetical protein (148)	ref YP_002922853.1 hypothetical protein WV8_gp071 <i>Escherichia</i> phage wV8 (148)	100/100 (148)	3e-104
ORF63 41381..41779	hypothetical protein (132)	ref NP_944899.1 hypothetical protein Felix01p120 <i>Salmonella</i> phage FelixO1 (132)	100/100 (132)	5e-90
ORF64 41782..42021	hypothetical protein (79)	ref NP_944900.1 hypothetical protein Felix01p121 <i>Salmonella</i> phage FelixO1 (79)	100/100 (79)	1e-49
ORF65 42021..44249	tail tape-measure protein (742)	gb AGF89449.1 hypothetical protein SP107_00395 <i>Salmonella</i> phage FSL SP-107 (742)	99/99 (742)	0.0
ORF66 44249..45049	hypothetical protein (266)	gb AFQ96169.1 hypothetical protein Phi87_180 Enterobacteria phage UAB_Phi87 (266)	99/100 (266)	0.0
ORF67 45049..45390	hypothetical protein (113)	ref YP_002922858.1 hypothetical protein WV8_gp076 <i>Escherichia</i> phage wV8 (113)	100/100 (113)	3e-77

Table S1. Cont.

VpaE1 ORF, Position	Predicted Function (Protein Length aa)	Significant Match (Protein Length aa)	Identity aa %/Similarity aa% (Length of the Overlapping Segment)	E Value
ORF68 45390..46367	hypothetical protein (325)	gb AFU62379.1 hypothetical protein <i>Escherichia</i> phage EC6 (325)	99/99 (325)	0.0
ORF69 46367..46990	baseplate assembly protein (207)	gb AFQ96166.1 hypothetical protein Phi87_175 Enterobacteria phage UAB_Phi87 (207)	100/100 (207)	4e-153
ORF70 46990..47409	hypothetical protein (139)	ref NP_944914.1 phage conserved protein <i>Salmonella</i> phage FelixO1 (139)	100/100 (139)	5e-97
ORF71 47409..48878	baseplate component (489)	gb AGF89443.1 putative baseplate component <i>Salmonella</i> phage FSL SP-107 (489)	98/99 (489)	0.0
ORF72 48881..49738	hypothetical protein (285)	AKC04903.1 hypothetical protein AYO145A_075 <i>Escherichia</i> phage vB_EcoM_AYO145A (285)	98/99 (285)	0.0
ORF73 49738..50040	hypothetical protein (100)	gb AGF89441.1 hypothetical protein SP107_00355 <i>Salmonella</i> phage FSL SP-107 (100)	100/100 (100)	3e-66
ORF74 50043..51215	tail fiber protein (390)	AKC04905.1 tail fiber protein <i>Escherichia</i> phage vB_EcoM_AYO145A (390)	97/98 (390)	0.0
ORF75 51262..53616	tail fiber protein (784)	gb AGR48474.1 putative tail fiber protein <i>Escherichia</i> phage JH2 (781)	78/84 (788)	0.0
ORF76 53696..53890	hypothetical protein (64)	ref YP_002922867.1 hypothetical protein WV8_gp085 <i>Escherichia</i> phage wV8 (64)	100/100 (64)	1e-36
ORF77 53891..54262	hypothetical protein (123)	gb AGR48472.1 hypothetical protein JH2_076 <i>Escherichia</i> phage JH2 (123)	99/100 (123)	4e-81
ORF78c 55199..54300	thymidylate synthase (299)	gb AGF88725.1 thymidylate synthase <i>Salmonella</i> phage FSL SP-010 (299)	99/99 (299)	0.0
ORF79c 55746..55201	dihydrofolate reductase (181)	ref YP_002922870.1 dihydrofolate reductase <i>Escherichia</i> phage wV8 (181)	98/100 (181)	4e-127
ORF80c 56003..55743	hypothetical protein (88)	ref YP_002922871.1 hypothetical protein WV8_gp089 <i>Escherichia</i> phage wV8 (86)	97/96 (86)	3e-55
ORF81c 56519..56004	hypothetical protein (171)	ref YP_002922872.1 hypothetical protein WV8_gp090 <i>Escherichia</i> phage wV8 (171)	99/100 (171)	6e-119

Table S1. Cont.

VpaE1 ORF, Position	Predicted Function (Protein Length aa)	Significant Match (Protein Length aa)	Identity aa %/Similarity aa% (Length of the Overlapping Segment)	E Value
ORF82c 56892..56533	hypothetical protein (119)	gb AGF88721.1 hypothetical protein SP010_00315 <i>Salmonella</i> phage FSL SP-010 (119)	100/100 (119)	5e-82
ORF83c 57223..56894	transcriptional regulatory protein (109)	ref NP_944934.1 putative transcriptional regulatory protein <i>Salmonella</i> phage FelixO1 (109)	99/100 (109)	2e-75
ORF84c 57398..57186	hypothetical protein (70)	ref YP_002922875.1 hypothetical protein WV8_gp093 <i>Escherichia</i> phage wV8 (70)	100/100 (70)	4e-42
ORF85c 57783..57400	hypothetical protein (127)	ref NP_944938.1 hypothetical protein Felix01p159 <i>Salmonella</i> phage FelixO1 (127)	98/98 (127)	1e-86
ORF86c 58615..58175	hypothetical protein (146)	ref YP_002922877.1 hypothetical protein WV8_gp095 <i>Escherichia</i> phage wV8 (146)	100/100 (146)	1e-102
ORF87c 59205..58618	hypothetical protein (195)	ref YP_002922878.1 hypothetical protein WV8_gp096 <i>Escherichia</i> phage wV8 (195)	99/100 (195)	6e-142
ORF88c 59912..59766	hypothetical protein (48)	gb AFO96148.1 hypothetical protein Phi87_152 Enterobacteria phage UAB_Phi87 (48)	85/91 (48)	2e-18
ORF89c 61019..59916	DNA ligase (367)	gb AFU62398.1 ATP dependent DNA ligase <i>Escherichia</i> phage EC6 (367)	94/94 (367)	0.0
ORF90c 61222..61016	hypothetical protein (68)	AKC04921.1 hypothetical protein AYO145A_093 <i>Escherichia</i> phage vB_EcoM_AYO145A (87)	96/97 (68)	1e-38
ORF91c 61450..61232	hypothetical protein (72)	AKC04924.1 hypothetical protein AYO145A_096 <i>Escherichia</i> phage vB_EcoM_AYO145A (72)	97/100 (68)	6e-41
ORF92c 62066..61512	DNA polymerase (184)	gb AGR48455.1 DNA polymerase <i>Escherichia</i> phage JH2 (184)	100/100 (184)	4e-131
ORF93c 62516..62280	endonuclease VII (78)	gb AFU63489.1 hypothetical protein <i>Salmonella</i> phage SBA-1781 (160)	97/98 (78)	9e-48
ORF94c 62740..62435	hypothetical protein (101)	gb AGR48454.1 hypothetical protein JH2_058 <i>Escherichia</i> phage JH2 (160)	99/100 (71)	4e-44
ORF95c 65021..62808	DNA polymerase (737)	gb AFU63490.1 DNA polymerase <i>Salmonella</i> phage SBA-1781 (727)	99/99 (727)	0.0

Table S1. Cont.

VpaE1 ORF, Position	Predicted Function (Protein Length aa)	Significant Match (Protein Length aa)	Identity aa %/Similarity aa% (Length of the Overlapping Segment)	E Value
ORF96 65249..65671	hypothetical protein (140)	ref NP_944959.1 hypothetical protein Felix01p180 <i>Salmonella</i> phage FelixO1 (140)	99/99 (140)	1e-96
ORF97 65673..66464	hypothetical protein (263)	gb AFU63492.1 minor tail protein <i>Salmonella</i> phage SBA-1781 (266)	92/96 (263)	2e-170
ORF98 66535..67278	dNMP kinase (247)	AIK67908.1 putative deoxynucleotide monophosphate kinase <i>Escherichia</i> phage HY02 (247)	98/98 (247)	5e-177
ORF99 67287..67487	hypothetical protein (66)	ref NP_944966.1 hypothetical protein Felix01p187 <i>Salmonella</i> phage FelixO1 (66)	100/100 (66)	1e-36
ORF100 67480..69465	DNA primase/helicase (661)	YP_009146344.1 putative phage DNA primase/helicase <i>Salmonella</i> phage HB-2014 (661)	99/99 (661)	0.0
ORF101 69440..69721	hypothetical protein (93)	ref YP_002922892.1 hypothetical protein WV8_gp110 <i>Escherichia</i> phage wV8 (93)	96/98 (93)	4e-60
ORF102 69718..69867	hypothetical protein (49)	ref YP_001504375.1 hypothetical protein FelixO1p245 <i>Salmonella</i> phage FelixO1 (49)	100/100 (49)	8e-26
ORF103 69940..70797	hypothetical protein (285)	gb AGF89398.1 hypothetical protein SP107_00140 <i>Salmonella</i> phage FSL SP-107 (285)	99/99 (285)	0.0
ORF104 70860..71906	exodeoxyribonuclease (348)	gb AGF88699.1 putative exodeoxyribonuclease <i>Salmonella</i> phage FSL SP-010 (348)	99/99 (348)	0.0
ORF105 71860..72375	HNH endonuclease (171)	gb AGF88698.1 putative HNH endonuclease <i>Salmonella</i> phage FSL SP-010 (163)	99/99 (163)	1e-116
ORF106 72372..72872	NAD synthetase (166)	gb AGF88697.1 NAD synthetase <i>Salmonella</i> phage FSL SP-010 (166)	100/100 (166)	2e-118
ORF107 72894..73142	hypothetical protein (82)	ref YP_002922898.1 hypothetical protein WV8_gp116 <i>Escherichia</i> phage wV8 (82)	100/100 (82)	5e-49
ORF108 73118..73873	hypothetical protein (251)	gb AGF88695.1 hypothetical protein SP010_00185 <i>Salmonella</i> phage FSL SP-010 (251)	99/100 (251)	0.0

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VpaE1 ORF, Position	Predicted Function (Protein Length aa)	Significant Match (Protein Length aa)	Identity aa %/Similarity aa% (Length of the Overlapping Segment)	E Value
ORF109 73854..74177	hypothetical protein (107)	ref NP_944987.2 hypothetical protein Felix01p208 <i>Salmonella</i> phage FelixO1 (107)	100/100 (107)	8e-74
ORF110 74170..74502	hypothetical protein (110)	AIK67920.1 hypothetical protein HY02_109 <i>Escherichia</i> phage HY02 (110)	98/100 (110)	6e-73
ORF111 74549..76783	ribonucleoside triphosphate reductase, alpha subunit (744)	gb AGF89405.1 ribonucleoside triphosphate reductase, alpha chain <i>Salmonella</i> phage FSL SP-107 (744)	99/99 (744)	0.0
ORF112 76755..77096	hypothetical protein (113)	gb AFQ96123.1 hypothetical protein Phi87_112 Enterobacteria phage UAB_Phi87 (113)	99/99 (113)	2e-76
ORF113 77033..78166	ribonucleoside triphosphate reductase, beta subunit (377)	ref NP_944994.1 ribonucleoside triphosphate reductase, beta chain <i>Salmonella</i> phage FelixO1 (357)	100/100 (357)	0.0
ORF114 78166..78408	glutaredoxin (80)	gb AFU63504.1 hypothetical protein <i>Salmonella</i> phage SBA-1781 (80)	100/100 (80)	5e-53
ORF115 78401..78607	hypothetical protein (68)	AIK67925.1 hypothetical protein HY02_114 <i>Escherichia</i> phage HY02 (68)	100/100 (68)	1e-37
ORF116 78656..80800	anaerobic NDP reductase (714)	gb ACZ55498.1 anaerobic nucleoside diphosphate reductase <i>Staphylococcus</i> phage SA1 (714)	98/99 (714)	0.0
ORF117 80830..81366	MobE-like HNH homing endonuclease (178)	gb AFU63639.1 hypothetical protein <i>Salmonella</i> phage SPT-1 (185)	99/99 (167)	2e-118
ORF118 81388..81555	hypothetical protein (55)	AKC04947.1 hypothetical protein AYO145A_119 <i>Escherichia</i> phage vB_EcoM_AYO145A (54)	94/96 (54)	6e-27
ORF119 81531..81731	hypothetical protein (66)	gb AGF89411.1 hypothetical protein SP107_00205 <i>Salmonella</i> phage FSL SP-107 (66)	97/96 (66)	1e-37
ORF120 81728..82123	hypothetical protein (131)	ref NP_945002.1 hypothetical protein Felix01p222 <i>Salmonella</i> phage FelixO1 (131)	99/99 (131)	3e-91
ORF121 82120..82419	hypothetical protein (99)	ref YP_002922911.1 hypothetical protein WV8_gp129 <i>Escherichia</i> phage wV8 (99)	98/100 (99)	3e-66

Table S1. Cont.

VpaE1 ORF, Position	Predicted Function (Protein Length aa)	Significant Match (Protein Length aa)	Identity aa %/Similarity aa% (Length of the Overlapping Segment)	E Value
ORF122 82429..82914	anaerobic NTP reductase, small subunit (161)	AJF40541.1 anaerobic nucleoside-triphosphate reductase subunit <i>Salmonella</i> phage Mushroom (161)	99/98 (161)	3e-115
ORF123 82877..83254	hypothetical protein (125)	ref NP_945005.1 hypothetical protein Felix01p225 <i>Salmonella</i> phage FelixO1 (125)	98/99 (125)	3e-82
ORF124 83221..83478	hypothetical protein (85)	ref NP_945006.1 hypothetical protein Felix01p226 <i>Salmonella</i> phage FelixO1 (85)	98/98 (85)	2e-51
ORF125 83481..83801	hypothetical protein (106)	gb AFU63635.1 hypothetical protein <i>Salmonella</i> phage SPT-1 (106)	100/100 (106)	8e-69
ORF126 83853..84368	hypothetical protein (171)	AJF40538.1 hypothetical protein CPT_Mushroom8 <i>Salmonella</i> phage Mushroom (171)	99/99 (171)	2e-123
ORF127 84361..84639	hypothetical protein (92)	gb AFQ96109.1 hypothetical protein Phi87_92 Enterobacteria phage UAB_Phi87 (92)	98/100 (92)	4e-61
ORF128 84651..85532	ribose-phosphate pyrophosphokinase (293)	gb AFU63632.1 hypothetical protein <i>Salmonella</i> phage SPT-1 (293)	98/98 (293)	0.0
ORF129 85541..86032	HNH endonuclease (163)	gb AFU63402.1 hypothetical protein <i>Salmonella</i> phage SBA-1781 (163)	100/100 (163)	1e-116
ORF130 86047..87828	nicotinamide phosphoribosyltransferase (593)	ref NP_945019.1 Putative nictotinate phosphoribosyltransferase <i>Salmonella</i> phage FelixO1 (593)	98/99 (593)	0.0
ORF131 87882..88217	hypothetical protein (111)	gb AGF88673.1 hypothetical protein SP010_00075 <i>Salmonella</i> phage FSL SP-010 (111)	98/100 (111)	2e-74
ORF132 88199..88375	hypothetical protein (58)	ref NP_945023.1 hypothetical membrane protein <i>Salmonella</i> phage FelixO1 (58)	100/100 (58)	2e-34



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