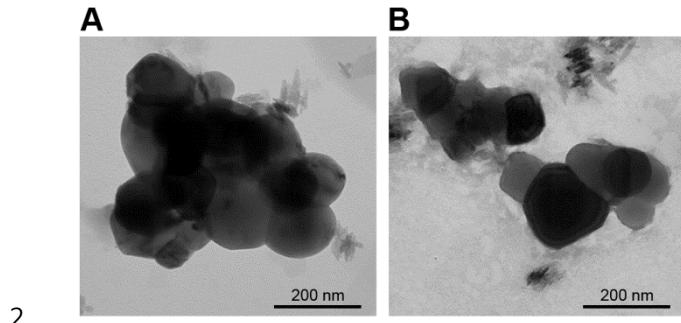
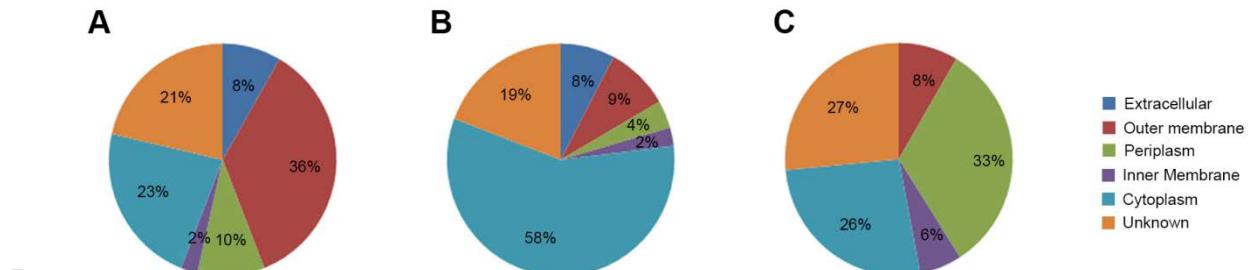


1 **Supplemental Figures and Tables**



3 Fig. S1. TEM analysis of OMVs from two different growth conditions.

4 *Salmonella* OMVs isolated from LB (A) and acidic MgM (B) conditions were mounted onto
5 carbon-coated copper grids and subjected to negative staining using uranyl acetate. The stained
6 grids were observed using a LIBRA 120 transmission electron microscope.

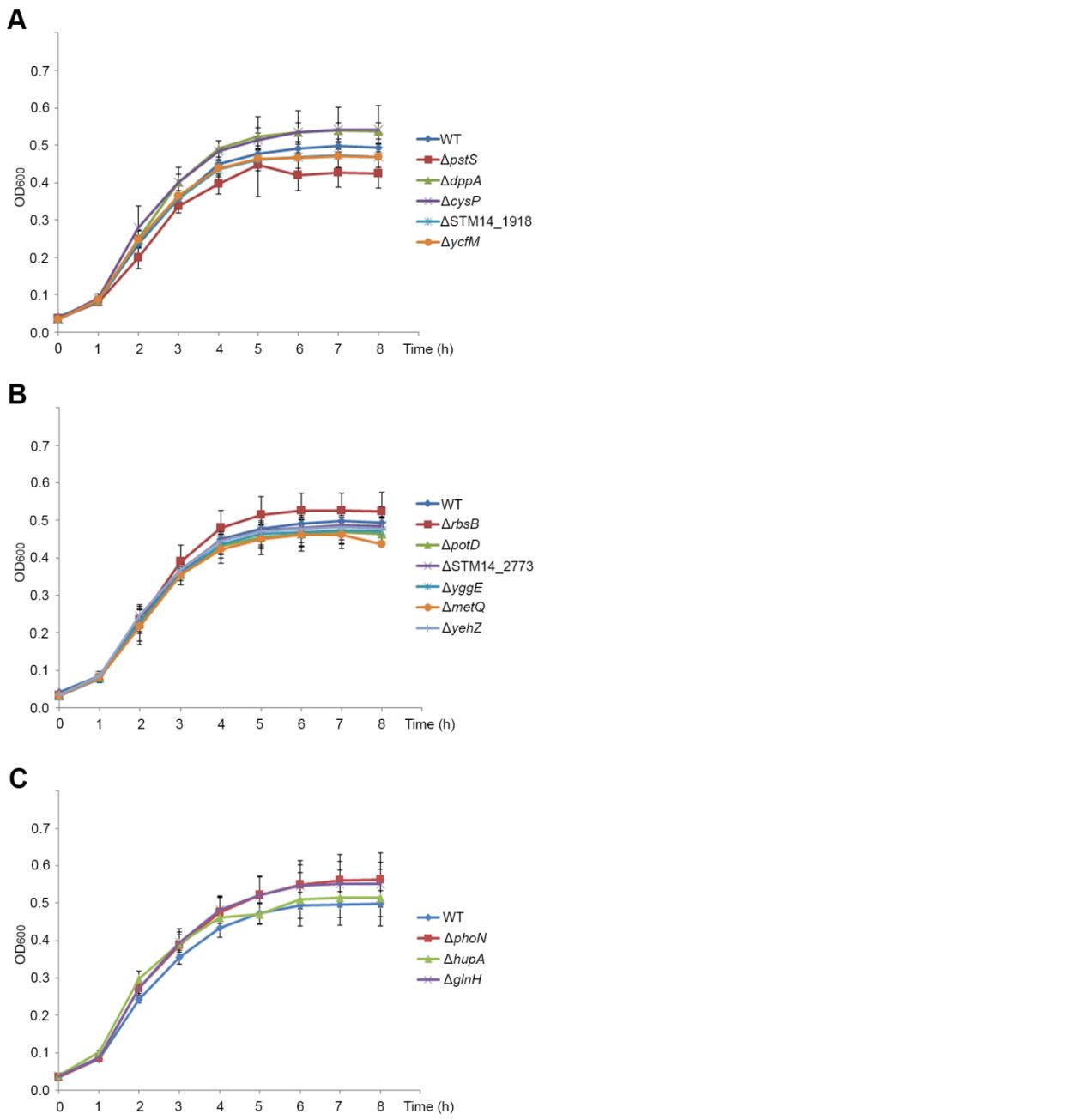


7

8 Fig. S2. Differences in the subcellular distribution of OMV-associated proteins between the two
 9 growth conditions.

10 The PSORTb prediction was applied to three groups of proteins to determine their subcellular
 11 locations: 84 OMV proteins found in both growth conditions (A), 78 OMV proteins detected
 12 only in the LB condition (B), and 83 OMV proteins determined only in the acidic MgM
 13 condition (C). The percentage of each subcellular location in each protein group is shown.

14



15

16 Fig. S3. *In vitro* growth curves of mutant strains tested in this study.17 The *Salmonella* mutant strains that showed decrease or increase in intracellular survival were
18 grown under acidic MgM conditions to compare their growth *in vitro*: five (A) and six (B)

19 mutant strains that exhibited attenuated and higher intracellular survival, respectively, in Fig. 3A,
20 and three (C) strains that exhibited impaired survival inside macrophages in Fig. 4B. Their
21 average growth curves (and standard deviations) from three independent experiments are plotted.
22 ANOVA was applied for the statistical analysis of the data from each time point, and there was
23 no significant difference in the growth between the mutants and the wild-type strain ($P < 0.05$).

24

Table S1. Primer sequences used in this study

Gene	Forward (5' to 3')	Reverse (5' to 3')	Purpose
<i>tbpA</i>	TCTCAAGTCCTTGCCACTCTTAAC TGAGGTGCAAAG TGGTAGGCTGGAGCTGCTTC	ATTCGCTAACATCCATGCCCTGGCGTTGTGCTGCCACTTGTT GTTCCGGGGATCCGTCGACCT	Deletion
<i>metQ</i>	GTTAACACAAACACAATAC TATTAAGGAAATAAGCA TGGTAGGCTGGAGCTGCTTC	GGAATCAGCCTAAAACCTTAC CAGCCTTCACCGCGCCG CCTTCCGGGGATCCGTCGACCT	Deletion
STM14_0360	ACTTGTCTTTAGCCAAATTAAAGGCAGGTTCTGAAAT GGTGTAGGCTGGAGCTGCTTC	GTGTTAAAAGGCGTAAGTAATGCCGAGCATGAAGTCA TTTCCGGGGATCCGTCGACCT	Deletion
<i>foxA</i>	CATCTCTAAAAGGTAATAATTCTATTACAATAAAAGAT GGTGTAGGCTGGAGCTGCTTC	CGGACGATAAGCGTTATCAAACGCCATGACACGCTG CCTTCCGGGGATCCGTCGACCT	Deletion
<i>sfbA</i>	TCCGGCACAGCATCACACTATTAAAATGGAGAAATTAT GGTGTAGGCTGGAGCTGCTTC	ATGGCCACCGCTGCGATCAGGGTGTGCGGGTCATCCAT TCTTCCGGGGATCCGTCGACCT	Deletion
<i>fepA</i>	TGGCTTATGTGGCTAAAGAAAAGCAGGATATAATGA ACGTGTAGGCTGGAGCTGCTTC	GGAGGGAAGGTTGCCATCAGAAATGGGTATTAATGCTC ATTCCGGGGATCCGTCGACCT	Deletion
<i>gltI</i>	CAACATCACAATAGCTATCAATGCGTCGACGGCGCAGA TGGTAGGCTGGAGCTGCTTC	TCCCATTAGTTAGTTAGTTAGTAAGCGCTTATCATT CGG TTCCGGGGATCCGTCGACCT	Deletion
<i>fhuE</i>	TCCTGAACTACCCCCATAACAAGCAAGGATTTCAGA TGGTAGGCTGGAGCTGCTTC	GCTCTCCGACAGTCTGT CAGAACTGATAATTGGCGGTG AGTTCCGGGGATCCGTCGACCT	Deletion
<i>ycfM</i>	GTCAGGCTTATCTTATTGTGAGGAGTGAATT TGAT GGTGTAGGCTGGAGCTGCTTC	CCGCACCTTACCTGACCAGATTATCTGCCAGTTGCA CTTCCGGGGATCCGTCGACCT	Deletion
<i>potD</i>	CAAGGGCCATAAGGCCGTAA TTCAAGGGACGTTAAA TGGTAGGCTGGAGCTGCTTC	AGGC GCTTGGCTGAATTAGCGCCTGCTT TAGCTTCT GTTCCGGGGATCCGTCGACCT	Deletion
STM14_1918	GAAGCAGCTATACACGTTTATCAAAGGGAGTCGTCA TGGTAGGCTGGAGCTGCTTC	CCCCTCCATACCC TATTACAGAGCAATGCGAATAACAT CTTCCGGGGATCCGTCGACCT	Deletion
<i>oppA</i>	AAAAACCA GTAAATTATAATGAGTGGAGTACAAACACAA TGGTAGGCTGGAGCTGCTTC	GTCCCAGTCTTGCCTTAATGTTGATAATATATAAGTT TTCCGGGGATCCGTCGACCT	Deletion
<i>fliY</i>	CAGTCTATGGTCATTAACGGCAATATTGGGGTTACTAT GGTGTAGGCTGGAGCTGCTTC	CGGGCAACGTAGAACATTATTGGGTACGTCAGCGCCA AATTCCGGGGATCCGTCGACCT	Deletion
<i>yehZ</i>	TCTCTGAAAAGGCCGTAAAAGGATGAGGAAAGCATC ATGGTAGGCTGGAGCTGCTTC	CAGCATC ACTCACAGATTACTCACCCACCCTTTGTC GTTCCGGGGATCCGTCGACCT	Deletion
STM14_2773	GGTAAAAATAACTATTGACATTGAAATGGTGGTGGAG TGGTAGGCTGGAGCTGCTTC	TAATTGTTATTCAACTTCAGAAATTATAACTAATTGAAG CTTCCGGGGATCCGTCGACCT	Deletion

<i>cysP</i>	GACCATAAGAAAAGTCATTAATTATAAGGGTGCCTAA TGGTAGGCTGGAGCTGCTTC	GCAAGCATTACTACGCCCGCCAAACAGTTGTCC AGTCCGGGGATCCGTCGACCT	Deletion
<i>iroN</i>	TGAGGGCAACAGCGCTACTTTAGACATTATTAGGGAA TGGTAGGCTGGAGCTGCTTC	CGGCAGGGCATAATCCATCAAACGAGGCCGTACACC GGCTCCGGGGATCCGTCGACCT	Deletion
<i>sitA</i>	TCGATGATTAATTAAACCACATTGTTGCGAGGGATACTAT GGTAGGCTGGAGCTGCTTC	GTAATCGCAGATTGACTCATTGTTGACTCCTCAGTCCGT CTTCCGGGGATCCGTCGACCT	Deletion
<i>yggE</i>	TATATCAGGGCAATGACTGCAATATGGAGGGAGAGACTG TGGTAGGCTGGAGCTGCTTC	CCCAGGCCGGGTGAGATTACTGCGTGTGGCGGCCGTT GTTCCGGGGATCCGTCGACCT	Deletion
<i>yrbC</i>	CGCGGGCGAAACGAAATAATCTCAGGAGAATTGAGGC ATGGTAGGCTGGAGCTGCTTC	AGTTGCGGCGTCATTACTGTTCTCGTCAAAGTAATT TTTCCGGGGATCCGTCGACCT	Deletion
<i>ugpB</i>	GATATCGCGCATCCCGGCACAAAAAGAGAGATAACCGA TGGTAGGCTGGAGCTGCTTC	TCCGGCACTTATACACTTAAGATTGCTCGCTTCTCAA ATTCCGGGGATCCGTCGACCT	Deletion
<i>dppA</i>	AGGGCAAAACAACATACATCACAAATTGGAGCAGAAGA ATGGTAGGCTGGAGCTGCTTC	CGCAGCGCTTTAATTATTCGACAGAGACGTTTCGA ATTCCGGGGATCCGTCGACCT	Deletion
<i>pstS</i>	TCAAACAACGATTACCGAACCGTGCAGGAGACATTA TGGTAGGCTGGAGCTGCTTC	TCCGCCAATTGTTAATTATACAGGCCCTACCGTTGC TTTCCGGGGATCCGTCGACCT	Deletion
<i>rbsB</i>	CAAAAAGCAGTAACAACGACTACAGGACATCTGAAAT ATGGTAGGCTGGAGCTGCTTC	TGACCCGTGCGTTATTACTGCTTGATGACCAGTTCA GTTCCGGGGATCCGTCGACCT	Deletion
<i>sbp</i>	CTTGCTCATCACACAAACATAAGCGAGTCTGGCGA TGGTAGGCTGGAGCTGCTTC	CGCCATTAGCGAAGTGATCTTTGCGCCTCGCCAG CCTTCCGGGGATCCGTCGACCT	Deletion
<i>glnH</i>	AGGGGATGCCCGTGGATAGAAAAGGAAATGCTATGA AGGTAGGCTGGAGCTGCTTC	CCAACATCAGGTGTTATTAGGTTCTGTACCGAAC ATTCCGGGGATCCGTCGACCT	Deletion
<i>tbpA</i>	CAGGCATGGATTAGCGAATGGCAACGCCGTAGCC GTCTCTCTTATACACATCTCA	CGCGCGGCCGCACAGCCCCGGAATCAGCCAGCCGGGA ACTGTCTTTATACACATCTGGT	CyaA' fusion
<i>metQ</i>	GCAAATAAGTTTAATGGCGCGCGGTGAAAGGCTG GCTGTCTCTTATACACATCTCA	CCTGAATAATATTACAGATTGGAATCAGCCTAAACC TGTCTCTTATACACATCTGGT	CyaA' fusion
STM14_0360	GCCTCCAATGACTCATGCTCGGCATTACTACGCC CTGTCTCTTATACACATCTCA	TCGGGAACCCACAGGACAGCTATTACCGATAGTGT CTGTCTCTTATACACATCTGGT	CyaA' fusion
<i>sfbA</i>	AGGCCCTCCAGAAACCGGAATGGATGACCGCGACAC CCCTGTCTCTTATACACATCTCA	ATATTACCTCAGAAATTGGGATGCCACCGCTGCGA CTGTCTCTTATACACATCTGGT	CyaA' fusion
<i>gltI</i>	AAAGCCCTGTTCAAAGCACCGAATGATAAAGCGCTTAA CCTGTCTCTTATACACATCTCA	AATCGAGAGGACAGGAGTCCCGTCCCATTAGTTTAG CTGTCTCTTATACACATCTGGT	CyaA' fusion
<i>wraB</i>	GGGAATACGTCGCCGGTCTGGCAGTCAAACCAACG GCCTGTCTCTTATACACATCTCA	TGCTCTTGAGTTGGCATTGCAATCCTCCTGTTGAAGA CTGTCTCTTATACACATCTGGT	CyaA' fusion

<i>ycfM</i>	GAGATAATCTGGTCAGGTAAAGGTGCGGTCCAACAAAC AACTGTCTTATACACATCTCA	GAAAATAGCGCGACAGGATCTCGTCGCCGTTAAGGG ACTGTCTTATACACATCTGGT	CyaA' fusion
<i>potD</i>	ATTATGAAGAGTATTATCAGAACGCTAAAGCAGGACG CCTGTCTTATACACATCTCA	TACGTTCATCTGTAGGCCGACAGGCCTTGCTGAA CTGTCTTATACACATCTGGT	CyaA' fusion
STM14_1918	GAAGCGACGCAGCCGGATGATGTTATTGCATTGCTCT GCTGTCTTATACACATCTCA	AAGAGATGACTGGAGGGTTTCCCCCTCCATACCCTAT CTGTCTTATACACATCTGGT	CyaA' fusion
<i>oppA</i>	GATAATATTATGTGAAAAACTTATATATTATCAAACATC TGTCTTATACACATCTCA	ACACCATGGGACAACCGCAGTTGTCCCATGTCTTGCCA CTGTCTTATACACATCTGGT	CyaA' fusion
<i>fliY</i>	GCGCTCTCTGAAAAATGGTTGGCGCTGACGTGACCCA ACTGTCTTATACACATCTCA	TGCCCCTGGCGCACTGCCTGCCGGCAACGTAGAAC ACTGTCTTATACACATCTGGT	CyaA' fusion
<i>yehZ</i>	GTCGCCGAGATTACCTCCGACAAAAAGGGTGGGTGA AGCTGTCTTATACACATCTCA	CGATTAACCGTGATTTTTGGCAGCATCACTCACAGA CTGTCTTATACACATCTGGT	CyaA' fusion
STM14_2773	GGGCATAATTTGTAGGTGCTTCAATTAGTTATAATTCC TGTCTTATACACATCTCA	ACTCCTTCAGCCAGCAACTCGCTAATTGTTATTCAACTC TGTCTTATACACATCTGGT	CyaA' fusion
<i>glpQ</i>	TTCCCGATAAGGCAGTCATGTTCTGCAAAAAAATGA CCTGTCTTATACACATCTCA	GCCCTCATCCGGCGCGTCACTCGACTATGGCAAACCT CTGTCTTATACACATCTGGT	CyaA' fusion
<i>cysP</i>	CACTTGCCAGCGGGCGAGCTGGACAAACTGTTGG CGCTGTCTTATACACATCTCA	GCGTCGGGAAGAACGGCAAGCATTACTTACGCCCG CCTGTCTTATACACATCTGGT	CyaA' fusion
<i>rpsP</i>	CGCGTTGCGCGCTGATCAAAGAAGTAAAAAAAGCAG CTCTGTCTTATACACATCTCA	GCGCGAGTTGCTCATCATGACCACCGTGACAGA CTGTCTTATACACATCTGGT	CyaA' fusion
<i>sitA</i>	TTTATTCGGCGCGTGGCCAGCGGAGGAAATCGTC ACTGTCTTATACACATCTCA	GAGCATATACTGGTAGCCAACGGCTAACAAAGCCAGT CTGTCTTATACACATCTGGT	CyaA' fusion
<i>yggE</i>	GGAACAGGGCAGACGTCGACAACGGCCAGCACG CAGCTGTCTTATACACATCTCA	GAGAAAACGCGGCCCTGGAAGCGCCCAGGCCGGTGA GACTGTCTTATACACATCTGGT	CyaA' fusion
<i>pgk</i>	CTGCCAGCCGTAGCGATGCTCGAAGAGCGCGCTAAGA AGCTGTCTTATACACATCTCA	GCGATAAAATCAACGGGCAGGAATCCCTGCCGTAAACGA CTGTCTTATACACATCTGGT	CyaA' fusion
<i>yrbC</i>	TCTATCTCTCAACAGAAAATTACTTGGACGAGAAACA GCTGTCTTATACACATCTCA	AGTGTCCGCCTCACCGTCCAGGTGAGTTGCCGTC ACTGTCTTATACACATCTGGT	CyaA' fusion
<i>rpmD</i>	ATGGTCAACCGGGTTCTTCAATGGTAAAGTGAGGA GCTGTCTTATACACATCTCA	GAGCCTTCGGCCGGAGACAGAGTATTAAACGCATCTC CTGTCTTATACACATCTGGT	CyaA' fusion
<i>ugpB</i>	AATCAGTTGCTGCGTCGTTTGAGAAAGCGAGCAAATC TCTGTCTTATACACATCTCA	GGATGGCGGTGCATGCACCTTATCCGGCACTTACACCC TGTCTTATACACATCTGGT	CyaA' fusion
<i>pstS</i>	AAGACCAGTAAAAGACAGCAACGGTAAGGCCTGT ATCTGTCTTATACACATCTCA	AGGGCGGATAAGCGTAGCGCCATCCGCCAATTGTTAA CTGTCTTATACACATCTGGT	CyaA' fusion

<i>rbsB</i>	GCCAAATATCCGGTTGACCTGAAACTGGTCATCAAGCA GCTGTCTCTTATACACATCTCA	TCTGTCGCCATCAGGCCATAGTTGACCCGTGTCGTTAC TGTCTCTTATACACATCTGGT	CyaA' fusion
<i>sbp</i>	TTCGCTAATGGCGGTACGTTGACCAAATCAGCAAACG CCTGTCCTTATACACATCTCA	ACCCGGTAACATAATACGTTACCGGGTTATAAACGGTC TGTCTCTTATACACATCTGGT	CyaA' fusion
<i>hupA</i>	GCGTTGTTCTGGTAAAGCTCTGAAAGACGCAGTTAA GCTGTCTCTTATACACATCTCA	ATGAGCCCCCTCGATAAAAAGCTTCACAGTTATGCGTCC TGTCTCTTATACACATCTGGT	CyaA' fusion
<i>phoN</i>	AATTATTGAGTAAAGAAGATCACCCAAACTTAATTAC CTGTCCTTATACACATCTCA	TCATTGCTGTGGCCAGTTGCGGGAAAGACTTTCACCT CTGTCCTTATACACATCTGGT	CyaA' fusion
<i>glnH</i>	AACGAAATCTACAAAAAATGGTCGGTACAGAACCTAA ACTGTCCTTATACACATCTCA	GTCCTCACTACCAGGGCCACAAGCCAACATCAGGTCGTT CTGTCCTTATACACATCTGGT	CyaA' fusion
<i>pstS</i>	GAAGACCAGTATAAAAGACAGCAACGGTAAGGCGCTG TATATTCCGGGGATCCGTGACC	GGGCGGATAAGCGTAGCGCCATCCGCCAATTGTTAATT AATTGTTAGGCTGGAGCTGC	2HA fusion
<i>dppA</i>	TCCATTAGGCAAACATCACTTCGAAAACGTCCTGTCG AAATTCCGGGGATCCGTGACC	CCGGCCTACACAACACCAGGGCGCAGCGCTTTTAATT TAATTGTTAGGCTGGAGCTGC	2HA fusion
<i>cysP</i>	CGCGGGCAGCTGGACAAACTGTTGGCGGGCGGT AAGATTCCGGGGATCCGTGACC	AAGCCGGGCAGCACCGCTGGGAAGAACGGCAAGC ATTAATTGTTAGGCTGGAGCTGC	2HA fusion
STM14_1918	GGAAGCGACGCAGCCGGATGATGTTATTGCAATTGCTC TGATTCCGGGGATCCGTGACC	AGAGATGACTGGAGGGTTTCCCCCTCCATACCCTATT AATTGTTAGGCTGGAGCTGC	2HA fusion
<i>ycfM</i>	CGAGATAATCTGGTCAGGTAAAGGTGCGGTCAACAAAC AAATTCCGGGGATCCGTGACC	AAAATAGCGCGACAGGATCTCGTCGCGCGTTAAGGGAT TAATTGTTAGGCTGGAGCTGC	2HA fusion
<i>rbsB</i>	GGCCAAATATCCGGTTGACCTGAAACTGGTCATCAAGC AGATTCCGGGGATCCGTGACC	CTGTCGCCATCAGGCCATAGTTGACCCGTGTCGTTATT AATTGTTAGGCTGGAGCTGC	2HA fusion
<i>potD</i>	CATTATGAAGAGTATTATCAGAAGCTAAAGCAGGAC GCATTCCGGGGATCCGTGACC	ACGTTCATCTGTTAGGCCCACAGGCCTTGGCTGAAT TAATTGTTAGGCTGGAGCTGC	2HA fusion
STM14_2773	AGGGCATAATTGTTAGGTCCTCAATTAGTTATAATTTC ATTCCGGGGATCCGTGACC	CTCCTTCAGCCAGCAACTCGCTAATTGTTATTCAACTTC AATTGTTAGGCTGGAGCTGC	2HA fusion
<i>yggE</i>	TGGAACAGGGCAGACGTCGACAACGGCCGCCAGCACG CAGATTCCGGGGATCCGTGACC	AGAAAACGCGGCCCTGGAAAGCGCCAGGCCGGGTGAGA TTAATTGTTAGGCTGGAGCTGC	2HA fusion
<i>metQ</i>	CGCAAATAAGTTTAATGGCGCGCGGTGAAAGGCT GGATTCCGGGGATCCGTGACC	CTGAATAATTACAGATTGTTAGGCTGGAGCTGC AATTGTTAGGCTGGAGCTGC	2HA fusion
<i>yehZ</i>	AGTCGCCAGATTACCTCCGACAAAAAGGGTGGGTG AAGATTCCGGGGATCCGTGACC	GATTAACCGTGATTGTTAGGCTGGAGCTGC AATTGTTAGGCTGGAGCTGC	2HA fusion
<i>hupA</i>	GGCGTTGTTCTGGTAAAGCTCTGAAAGACGCAGTTA AGATTCCGGGGATCCGTGACC	TGAGCCCCCTCGATAAAAAGCTTCACAGTTATGCGTCTT AATTGTTAGGCTGGAGCTGC	2HA fusion

<i>glnH</i>	TAACGAAATCTACAAAAAATGGITCGGTACAGAACCTA AATATCCGTATGTGTTCTGATTATGCTAGCCTCTAATGT AGGCTGGAGCTGCTTCG	GCGTCCTCACTACCAGGGCACAAGCCAACATCAGGTC GTTATTCCGGGGATCCGTCGACC	2HA fusion
<i>phoN</i>	TAATTTATTGAGTAAAGAAGATCACCCCAAACCTAATTA CTATCCGTATGATGTTCTGATTATGCTAGCCTCTGATGT AGGCTGGAGCTGCTTCG	TTTCATTGCTGTGGCCAGTTGCGGGAAAGACTTCAC CTATTCCGGGGATCCGTCGACC	2HA fusion
<i>tbpA</i>	TTTTAAATCGCGTGGTTGCG	AAACGCCTGCCAGAATGAGAAG	Diagnostic PCR
<i>metQ</i>	CGGCTATCAGTACGGTTATATTG	CAGCATTGGTGTAAATCCTGAC	Diagnostic PCR
<i>STM14_0360</i>	AATTGGCGAGGAGATGGATTTC	AAGTTAACCCATACCAGAAACG	Diagnostic PCR
<i>foxA</i>	TATCAACATGCCACTAACTTGC	TATGGACGAATACAGCGCATTG	Diagnostic PCR
<i>sfbA</i>	GTGGCGTTAACGACCTCTTATC	GTACCGACAATGCAAAAATCTC	Diagnostic PCR
<i>fepA</i>	GCCTTTTCAATTATAACCCGTG	CAGATGTTCAGCTTACGCTTG	Diagnostic PCR
<i>gltI</i>	ATTCTGGCACGTCTATTGCTTTG	ATACATCTACTCCGAAAAAAAAGGG	Diagnostic PCR
<i>fhxE</i>	CGAAAAATGACTACATGCTGGAC	TAAAGAGAACATCACTAACCTGG	Diagnostic PCR
<i>ycfM</i>	GAGCCCATAACCGTTCAATTATC	ATGACGTAAAAATGGGCTGGTG	Diagnostic PCR
<i>potD</i>	CAGTGAGGTAACGATTTACGC	ATACGGTGGAACTGAATCTTGAG	Diagnostic PCR
<i>STM14_1918</i>	AAGCGTATCAACGGAAAACGTG	ACATAGTTGGTTGACAACCCG	Diagnostic PCR
<i>oppA</i>	GTGTCAGAAATAACGTGCGAC	ATAAGAATAAACAGCGTGAATC	Diagnostic PCR
<i>fliY</i>	CCAGCAATATAAGCGCATCAG	AAGCGCTTAAGTGTAGTAGTG	Diagnostic PCR
<i>yehZ</i>	GCAAGTTAACGTCTTATCGG	TACAAAGCACAGCGTAAACAGC	Diagnostic PCR
<i>STM14_2773</i>	TGAAAATGTGGTCAGAAATGAGTG	TCGCAGCAATAATAAAACGTTCTG	Diagnostic PCR
<i>cysP</i>	AACGCAAAACGTCAATTGATGGC	CAAACACGCCATTAAAAATCGAC	Diagnostic PCR
<i>iron</i>	ACAGAGAGTCATATTGCAAAATCC	AAAAAGTTCAGGAGACC GTGAG	Diagnostic PCR
<i>sita</i>	TTTTCACGAGCGATACGTTAC	AACGCTTAAATAACGTAGACTTAC	Diagnostic PCR
<i>yggE</i>	AACGCATTATCAACATTCTGGTG	GAAGTTCATCACAAAATCATTGCG	Diagnostic PCR
<i>yrbC</i>	AACGTCTATCCTCAAAGATGGG	TTTTGCCTGGTTACAAGGTG	Diagnostic PCR
<i>ugpB</i>	GAGAATAATGTCGTACCTATCCG	GACAAATTGGCTGGAAAAACCAA	Diagnostic PCR
<i>dppA</i>	GACATTCTATTGACAGATTGAGG	CGGAGAACATGCAACATAAC	Diagnostic PCR
<i>pstS</i>	TTGCGCAAACAGTCTAATTCATC	AACATCAATAGCACAATCAGCGC	Diagnostic PCR
<i>rbsB</i>	TGATTCTCGGCTTCCTTAATAATG	TAAGGATATGATCGGCATTAATGC	Diagnostic PCR
<i>sbp</i>	TGTACTGATTGTTTGCAGCGC	ATCACCGCCAGTAAAAGTAGC	Diagnostic PCR
<i>glnH</i>	CCCTGTATCTACTTTGTTATTC	ACTGCATATGTCGTTCTGTAC	Diagnostic PCR
<i>pstS</i>	GCGGGTTCTACCGTGAACCTGG	CTTGGCCAGGAGGAGATGATCAAT	Diagnostic PCR

<i>dppA</i>	CGTATGGCGGAAATGATCCAGG	GTTCAGCCAGCAGTTGAGCATGA	Diagnostic PCR
<i>cysP</i>	TTTGCCGAGCGTGGTCTGGG	GAAACCGTTCACTGAGAACAGCG	Diagnostic PCR
<i>STM14_1918</i>	AAGCGCAACGCCTGTACACCAC	GCTTACCCCTGAGTTACGATCGTT	Diagnostic PCR
<i>ycfM</i>	CCACTATGACTGGAACGGCG	CCGGATCGCAACACGACCAAG	Diagnostic PCR
<i>rbsB</i>	TGCAAGGCATTGCCGGAACATC	CGCCCCTGCAGGCGATAAAC	Diagnostic PCR
<i>potD</i>	ATCCGGCGAATCCGTATATGGAAG	CGAGATGCCGCTTGGCATGGA	Diagnostic PCR
<i>STM14_2773</i>	GGGTATCTCGAAGGATGTGG	ACAATTAGCCTCCCTGTCGC	Diagnostic PCR
<i>yggE</i>	ACGGTAAAAGCATTCTGAAAGGGT	AGCCTCTCTATGAATGCCGGATG	Diagnostic PCR
<i>metQ</i>	CTGGATGAGCTCAAGGACGGTT	GGTTGCGGTGCTTGAACGGGT	Diagnostic PCR
<i>yehZ</i>	CTCAGCCGTATCTGAAAGAGGGC	GCCGACTCCCCACAGCATGAC	Diagnostic PCR
<i>hupA</i>	CAAGCGATAAACACATTGTAAGG	TACTTAACTGCGTCTTCAGAG	Diagnostic PCR
<i>glnH</i>	CTAAATCAGTGCCCCAAACGGT	GCTAGCATAATCAGGAACATCATA	Diagnostic PCR
<i>phoN</i>	TCGGGGACAAAAGTTAACAAAATGC	GCTAGCATAATCAGGAACATCATA	Diagnostic PCR
<i>hupA</i>	GAAACGCTGGATCCCGCTATTGA	AAAAACTGTTCAAGCTTATGCGTCTTAC	Cloning
<i>glnH</i>	TATTGTGCACAGGATCCTTTCACG	CGGGGCCACAAGCTTACATCAGGT	Cloning
<i>phoN</i>	ATGACTGATGGATCCTATCGGGGT	AGTTTGCAGGAAGCTTTCACCTT	Cloning

1 Table S2. OMV-associated SPI-1 and SPI-2 T3SS proteins

2

14028S locus	LT2 locus	Gene name	Description	Location ¹	Signal peptide ²
SPI-1					
STM14_3472	STM2873	<i>prgI</i>	needle complex major subunit	Unknown	yes
STM14_3484	STM2885	<i>sipB</i>	translocation machinery component	Extracellular	no
STM14_3483	STM2884	<i>sipC</i>	translocation machinery component	Extracellular	yes
STM14_3481	STM2882	<i>sipA</i>	secreted effector protein	Extracellular	yes
STM14_1237	STM1091	<i>sopB</i>	secreted effector protein	Unknown	yes
STM14_2557	STM2066	<i>sopA</i>	secreted effector protein	Unknown	yes
STM14_2244	STM1855	<i>sopE2</i>	secreted effector protein	Extracellular	yes
STM14_3482	STM2883	<i>sipD</i>	translocation machinery component	Extracellular	yes
STM14_3477	STM2878	<i>sptP</i>	protein tyrosine phosphatase, translocated protein antagonizing sopE/E2	Extracellular	yes
STM14_3476	STM2877	<i>iagB</i>	invasion protein precursor	Periplasm	no
SPI-2					
STM14_1696	STM1400	<i>sseC</i>	translocation machinery component	Cytoplasm	no
STM14_3110	STM1398	<i>sseB</i>	translocation machinery component	Unknown	yes
STM14_1697	STM1401	<i>sseD</i>	translocation machinery component	Cytoplasm	no

3

4 ¹ Location was predicted using PSORTb ver. 3.0.2 (<http://www.psort.org/psortb/>).5 ² Secretion signal peptide was assessed using SecretomeP 2.0 (<http://www.cbs.dtu.dk/services/SecretomeP/>).

6

7 Table S3. Top 48 OMV-associated proteins with unique matches of 4 or more in acidic MgM

14028S locus	LT2 locus	Gene	Description	survival assay ¹	secretion assay ²
STM14_0127	STM0108	<i>tbpA</i>	thiamine-binding periplasmic protein	yes	yes
STM14_0287	STM0245	<i>metQ</i>	putative outer membrane lipoprotein	yes	yes
STM14_0360	STM0306		homolog of <i>sapA</i>	yes	yes
STM14_0426	STM0364	<i>foxA</i>	ferrioxamine receptor	yes	
STM14_0600	STM0510	<i>sfbA</i>	putative ABC-type transport system ATPase	yes	yes
STM14_0682	STM0585	<i>fepA</i>	outer membrane receptor FepA	yes	
STM14_0773	STM0665	<i>gltI</i>	glutamate/aspartate transporter	yes	yes
STM14_1272	STM1119	<i>wraB</i>	trp-repressor binding protein		yes
STM14_1378	STM1204	<i>flhE</i>	outer membrane receptor for Fe(III)-coprogen	yes	
STM14_1381	STM1207	<i>ycfM</i>	putative outer membrane lipoprotein	yes	yes
STM14_1397	STM1222	<i>potD</i>	spermidine/putrescine transporter	yes	yes
STM14_1696	STM1400	<i>sseC</i>	secretion system effector		
STM14_1918	STM1586		putative Periplasmic protein	yes	yes
STM14_1936	STM1599	<i>pdgL</i>	periplasmic dipeptidase		
STM14_1977	STM1633		putative Periplasmic binding protein		
STM14_2050	STM1698		putative inner membrane protein		
STM14_2110	STM1746.S	<i>oppA</i>	oligopeptide transport protein	yes	yes
STM14_2116	STM1751	<i>hns</i>	DNA-binding protein HLP-II		
STM14_2372	STM1954	<i>fliY</i>	putative Periplasmic binding transport protein	yes	yes
STM14_2669	STM2165	<i>yehZ</i>	putative ABC superfamily transport protein	yes	yes
STM14_2773	STM2245		putative outer membrane protein	yes	yes
STM14_2817	STM2282	<i>glpQ</i>	glycerophosphodiester phosphodiesterase		yes
STM14_2946	STM2395	<i>pgtE</i>	outer membrane protein E		
STM14_3002	STM2444	<i>cysP</i>	thiosulfate transport protein	yes	yes
STM14_3110	STM1398	<i>sseB</i>	secretion system effector		
STM14_3279	STM2676	<i>rpsP</i>	30S ribosomal subunit protein S16		yes
STM14_3348	STM2777	<i>iroN</i>	outer membrane receptor FepA	yes	
STM14_3458	STM2861	<i>sitA</i>	fur regulated <i>Salmonella</i> iron transporter	yes	yes
STM14_3705	STM3065	<i>yggE</i>	putative Periplasmic immunogenic protein	yes	yes
STM14_3709	STM3069	<i>pgk</i>	phosphoglycerate kinase		yes
STM14_3752	STM3107	<i>yggN</i>	putative Periplasmic protein		
STM14_3998	STM3310	<i>yrbC</i>	putative ABC superfamily transport protein	yes	yes
STM14_4125	STM3422	<i>rpmD</i>	50S ribosomal subunit protein L30		yes
STM14_4128	STM3425	<i>rplF</i>	50S ribosomal subunit protein L6		
STM14_4129	STM3426	<i>rpsH</i>	30S ribosomal subunit protein S8		
STM14_4157	STM3453	<i>fkpA</i>	FKBP-type peptidyl-prolyl cis-trans isomerase		
STM14_4283	STM3557	<i>ugpB</i>	sn-glycerol 3-phosphate transport protein	yes	yes
STM14_4375	STM3630	<i>dppA</i>	dipeptide transport protein	yes	
STM14_4489	STM3727	<i>rpmG</i>	50S ribosomal subunit protein L33		
STM14_4652	STM3857	<i>pstS</i>	high-affinity phosphate transporter	yes	yes
STM14_4681	STM3884	<i>rbsB</i>	D-ribose transport protein	yes	yes
STM14_4887	STM4063	<i>sbp</i>	sulfate transport protein	yes	yes
STM14_4902	STM4077	<i>yneA</i>	putative sugar transport protein		
STM14_5011	STM4170	<i>hupA</i>	transcriptional regulator HU subunit alpha		yes
STM14_5193	STM4319	<i>phoN</i>	non-specific acid phosphatase		yes

	STM14_5278	STM4394	<i>rplI</i>	50S ribosomal subunit protein L9		
8	STM14_964	STM0830	<i>glnH</i>	glutamine high-affinity transporter	yes	yes

9 ¹ *Salmonella* strains lacking OMV-associated proteins were subjected to macrophage infection to assess their
10 survival ability.

11 ² *Salmonella* strains producing CyaA'-tagged proteins were subjected to macrophage infection and the translocation
12 of CyaA'-tagged proteins into the host cytoplasm was examined.