



Salmonella_Typhimurium_LT2 Salmonella_Enteritidis_P125109 Salmonella_Gallinarum_SG9 Salmonella_Pullorum_SG6004 Salmonella_Pullorum_RKS5078	MIFSVQELSCGGKSMLSPTTRNNGASLSPQPDVSGELNTEALTCIVERLESEIIDGSWIHISVEETDLEMMPFLVAQANK MIFSVQELSCGGKSMLSPTTRNMGASLSPQPDVSGELNTEALTCIVERLESEIIDGSWIHISVEETDLEMMPFLVAQANK MIFSVQELSCGGKSMLSPTTRNMGASLSPQPDVSGELNTEALTCIVERLESEIDGSWIHISVEETDLEMMPFLVAQANK MIFSVQELSCGGKSMLSPTTRNMGASLSPQPDVSGELNTEALTCIVERLESEIDGSWIHISVEETDLEMMPFLVAQANK MIFSVQELSCGGKSMLSPTTRNMGASLSPQPDVSGELNTEALTCIVERLESEIDGSWIHISVEETDLEMMPFLVAQANK	80 80 80 80 80
Salmonella_Typhimurium_LT2 Salmonella_Enteritidis_P125109 Salmonella_Gallinarum_SG9 Salmonella_Pullorum_SO6004 Salmonella_Pullorum_RKS5078	KYPELNIKFYMSYHELVSSIKETRMEGVESARFLYMMGSSGIHISVVDFRYMDGKTSVILFEPAACSAFGPALLALRIKA KYPELNIKFYMSYHELVSSIKETRMEGVESARFLYMMGSSGIHISVVDFRYMDGKTSVILFEPAACSAFGPALLALRIKA KYPELNIKFYMSYHELVSSIKETRMEGVESARFLYMMGSSGIHISVVDFRYMDGKTSVILFEPAACSAFGPALLALRIKA KYPELNIKFYMSYHELVSSIKETRMEGVESARFLYMGSSGIHISVVDFRYMDGKTSVILFEPAACSAFGPALLALRIKA	160 160 160 160 160
Salmonella_Typhimurium_LT2 Salmonella_Enteritidis_P125109 Salmonella_Gallinarum_SG9 Salmonella_Pullorum_S66004 Salmonella_Pullorum_RKS5078	ALEREQLPDCYFANVELDIQRSSSECGIFSLALAKKLQLEFNNLVKIHEDNICERLCGEEFFLFSDKADRYLPVSFYKHT ALEREQLPDCYFANVELDIQRSSSECGIFSLALAKKLQLEFNNLVKIHEDNICERLCGEEFFLFSDKADRYLPVSFYKHT ALEREQLPDCYFANVELDIQRSSSECGIFSLALAKKLQLEFNNLVKIHEDNICERLCGEEFFLFSDKADRYLPVSFYKHT ALEREQLPDCYFANVELDIQRSSSECGIFSLALAKKLQLEFNNLVKIHEDNICERLCGEEFFLFSDKADRYLPVSFYKHT	240 240 240 240 240
Salmonella_Typhimurium_LT2 Salmonella_Enteritidis_P125109 Salmonella_Gallinarum_SG9 Salmonella_Pullorum_SO6004 Salmonella_Pullorum_RKS5078	QGAQRLNEYVEANPAAGSSIVNKKNETLYERFDNNAVMLNDKKLSISAHKKRIAEYKSLLKP 302 QGVQRLNEYVEANPAAGSSIVNKKNETLYERFDNNAVMLNDKKLSISAHKKRIAEYKSLLKS 302 QGVQRLNEYVEANPAAGSSIVNKKNETLYERFDNNAVMLNDKKLSISAHKKRIAEYKSLLKS 302 QGVQRLNEYVEANPAAGSSIVNKKNETLYERFDNNAVMLNDKKLSISAHKKRIAEYKSLLKS 302 QGVQRLNEYVEANPAAGSSIVNKKNETLYERFDNNAVMLNDKKLSISAHKKR 292 QGVQRLNEYVEANPAAGSSIVNKKNETLYERFDNNAVMLNDKKLSISAHKKR 292 QGVQRLNEYVEANPAAGSSIVNKKNETLYERFDNNAVMLNDKKLSISAHKKR 292	

Figure S1. Alignment of AvrA sequences from different *Salmonella* serotypes. The amino acid sequences of AvrA were multi-aligned among *S*. Typhimurium, *S*. Enteritidis, *S*. Gallinarum and *S*. Pullorum strains. The Clustalx 2.1 software was used to perform alignment analysis. The red box displays the ten amino acids lost in the C-terminal of AvrA from *S*. Pullorum.



Figure S2. Identification of AvrA expression in cells transfected by pCMV-HA-*avrA*(SP) or pCMV-HA-*avrA*(SE) using indirect immunofluorescence. The eukaryotic expression plasmids pCMV-HA-

avrA(SP) and pCMV-HA-*avrA*(SE) were transfected into different cells (HeLa, 293T, and LMH) and subjected to the indirect immunofluorescence by using Mouse anti-HA antibody and Goat Anti-Mouse IgG H&L (Alexa Fluor[®] 488). The green fluorescence represents expression of AvrA in transfected cells.



Figure S3. Determination of infection time-point to detect secretion of proinflammatory cytokines in *S*. Enteritidis infected HeLa cells. The secretion of proinflammatory cytokines was measured at 4 h and 8 h after inoculation of HeLa cells with *S*. Enteritidis. At 4 h post-infection (p.i.), there was no difference in secreted cytokines between C50336-infected and C50336 $\Delta avrA$ -infected cells, while IL-8 and IL-6 were significantly higher in C50336 $\Delta avrA$ -infected cells than in cells infected with wild-type strain ("*", *p* < 0.05).