Figure S1. LC-MS/MS identification of FliC and FljB. (A and B) Protein sequences of FliC and FljB. **(C and D)** Intensities of specific peptides of FliC and FljB

A

FliC

1 **MAQVINTNSL SLLTQNNLNK SQSALGTAIE RLSSGLRINS AKDDAAGQAI**
51 **ANRFTANIKG LTQASRNAND GISIAQTTEG ALNEINNNLQ RVRELAVQSA**
101 **NSTNSQSDLD SIQAEITQRL NEIDRVSGQT QFNGVKVLAQ DNTLTIQVGA**
151 **NDGETIDIDL KQINSQTLGL** DTLNVQQKYK VSDTAATVTG YADTTIALDN
201 STFKASATGL GGTDQKIDGD LKFDDTTGKY YAKVTVTGGT GKDGYYEVSV
251 DKTNGEVTLA GGATSPLTGG LPATATEDVK NVQVANADLT EAKAALTAAG
301 VTGTASVVKM SYTDNNGKTI DGGLAVKVGD DYYSATQNKD GSISINTTKY
351 TADDGTSKTA LNKL**GGADGK TEVVSIGGKT YAASKAEGHN FKAQPDLAEA**
401 **AATTTENPLQ KIDAALAQVD TLRSDLGAVQ NRFNSAITNL GNTVNNLTSA**
451 RS**RIEDSDYA TEVSNMSRAQ ILQQAGTSVL AQANQVPQNV LSLLR**

B

FljB

1 **MAQVINTNSL SLLTQNNLNK SQSALGTAIE RLSSGLRINS AKDDAAGQAI**
51 **ANRFTANIKG LTQASRNAND GISIAQTTEG ALNEINNNLQ RVRELAVQSA**
101 **NSTNSQSDLD SIQAEITQRL NEIDRVSGQT QFNGVKVLAQ DNTLTIQVGA**
151 **NDGETIDIDL KQINSQTLGL** DSLNVQKAYD VKDTAVTTKA YANNGTTLDV
201 SGLDDAAIKA ATGGTNGTAS VTGGAVKFDA DNNKYFVTIG GFTGADAAKN
251 GDYEVNVATD GTVTLAAGAT KTTMPAGATT KTEVQELKDT PAVVSADAKN
301 ALIAGGVDAT DANGAELVKM SYTDKNGKTI EGGYALKAGD KYYAADYDEA
351 TGAIKAKTTS YTAADGTTKT AANQL**GGVDG KTEVVTIDGK TYNASKAAGH**
401 **DFKAQPELAE AAAKTTENPL QKIDAALAQV DALRSDLGAV QNRFNSAITN**
451 **LGNTVNNLSE ARSRIEDSDY ATEVSNMSRA QILQQAGTSV LAQANQVPQN**
501 **VLSLLR**

C

Intensity of FliC specific peptides

	WT	Δ*stm0347*
QINSQTLGLDTLNVQQK	1.71E+07	9.38E+05
VTVTGGTGK	6.72E+06	3.95E+05
NVQVANADLTEAK	3.67E+06	1.83E+05
AALTAAGVTGTASVVK	2.83E+06	1.47E+05
MSYTDNNGK	1.07E+07	2.59E+05
VGDDYYSATQNK	2.11E+06	8.84E+04
DGSISINTTK	4.25E+06	2.88E+05
LGGADGKTEVVSIGGK	4.57E+07	5.60E+06
TYAASKAEGHNFK	7.72E+06	1.08E+06
IDAALAQVDTLR	2.09E+07	1.33E+06
SDLGAVQNRFNSAITNLGNTVNNLTSAR	2.23E+07	6.90E+05

D

Intensity of FljB specific peptides

	WT	Δ*stm0347*
QINSQTLGLDSLNVQK	3.17E+05	2.15E+07
AYDVKDTAVTTK (+2)	1.28E+06	8.68E+07
AYDVKDTAVTTK (+3)	1.74E+06	8.68E+07
TTSYTAADGTTK	2.66E+05	1.24E+07
TEVVTIDGKTYNASK	1.21E+04	6.32E+05
AAGHDFKAQPELAEAAAK	4.16E+05	1.76E+07
IDAALAQVDALR	3.80E+05	1.31E+07
SDLGAVQNRFNSAITNLGNTVNNLSEAR	1.72E+05	7.81E+06
FNSAITNLGNTVNNLSEAR (+3)	2.16E+05	8.54E+06
FNSAITNLGNTVNNLSEAR (+2)	9.94E+05	3.26E+07

Figure S2. Swimming motility of WT and Δ*stm0347* strains under different viscosity conditions. Ficoll were added at the final concentrations of 0, 5 and 10% to the swimming plates. Data were presented as mean ± SD. n = 6. Asterisk indicates significant differences (*$p < 0.05$).