

Table S1. Primers used in this study.

Primer	Gene/sequence	Sequence (5' to 3')
CMD175	MCS_pGEM	GTAAAACGACGGCCAGTGA
CMD176	MCS_pGEM	CAGGAAACAGCTATGACCATG
CMD290	<i>fur</i> ::FRT	CGCGCCAAAGGCACGATGTT
CMD291	<i>fur</i> ::FRT	GCAGCAAAGAAGATCTGGAAGC
CMD1067	Tn7T-Gen	TGCGGTCAATTGTACCGCACAGATGCGTAAGGAGAA
CMD1068	Tn7T-Gen	AACGCCGCTCGAGTTTATAGTCCTGTCCGGTTTCGCCA
CMD1073	<i>pstS</i> _Tn7	AGATCAGTTTGGTGTACGCCAGGT
CMD1171	<i>ryhB</i> :: <i>cat</i>	TTTGGGGTAAATGTCCCTTTC
CMD1172	<i>ryhB</i> :: <i>cat</i>	GTGCGCATAACGAACACAAG
CMD1188	<i>fur</i> :: <i>kan</i>	TCATTTAGGCGTGGCAATTC
CMD1189	<i>fur</i> :: <i>kan</i>	TGAGAGCTGTAACTCTCGCTTTTC
CMD1269	<i>fur</i>	TGCTGTGGTACCTGTAAGCTGTGCCACGTTTT (KpnI)
CMD1270	<i>fur</i>	ACAGGTACCTGAGAGCTGTAACTCTCGCTTTTC (KpnI)
CMD1271	<i>ryhB</i>	GTACTCGAGTGTTTCTGCGTGGCGTATTAC (XhoI)
CMD1272	<i>ryhB</i>	CCTCCCGGGAAAGCGGACGTGGTTCCTAC (XmaI)
CMD1394	<i>lacA</i>	GATAAGCGVAGCGYATCAGG
qRT-PCR		
CMD1484	<i>entB</i>	AGCACCTATCCCCGCCAGCA
CMD1485	<i>entB</i>	TGCGCACCGAATCCAGACCG
CMD1488	<i>iroB</i>	GGGTATTGCCTGCTCCGCCA
CMD1489	<i>iroB</i>	GTCCGATTTGCGCTCGCTGC
CMD1492	<i>iucA</i>	AAGCCGGGAGAGAGTGGTAAAGTCG
CMD1493	<i>iucA</i>	TCCCCAACCCAGCATCACCG
CMD1496	<i>cysE</i>	AACGCTGGCGGACTGTGAGC
CMD1497	<i>cysE</i>	GCGGCGTAGGCTTCTTCCACC

CMD1583	<i>cirA</i>	CCGGTACAGAATCTGAAGGATG
CMD1584	<i>cirA</i>	CTGTCCAGACCACGAATACTTAC
CMD1585	<i>ryhB</i>	ATCAGGAAGACCCTCGCGGAGAA
CMD1586	<i>ryhB</i>	AGCACCCGGCTGGCTAAGTAATA
CMD1634	<i>shiA</i>	TGAAGGGACGCTTTCGTTAAG
CMD1635	<i>shiA</i>	GGCGGTAATGCCATAGAGTAAA
CMD1636	<i>iucD</i>	GGATAACTGTGGTTGGTGGAG
CMD1637	<i>iucD</i>	GCCGTGAGACCCAGTTTATT
CMD1640	<i>iroE</i>	TCTTTCTTGCCTCACCTTATC
CMD1641	<i>iroE</i>	CGGAGCCTTTATCGGCTATATT
CMD1808	<i>iucB</i>	CGATGCGCTGGATCAGATATT
CMD1809	<i>iucB</i>	GAAGGCGGTACGATGGATAATG
CMD1810	<i>iucC</i>	GCTGAGCGGTCATCCTAAAT
CMD1811	<i>iucC</i>	GTCTGAAGGTGTTGGCATACT

Restriction sites are underlined and restriction endonucleases are indicated in parentheses.

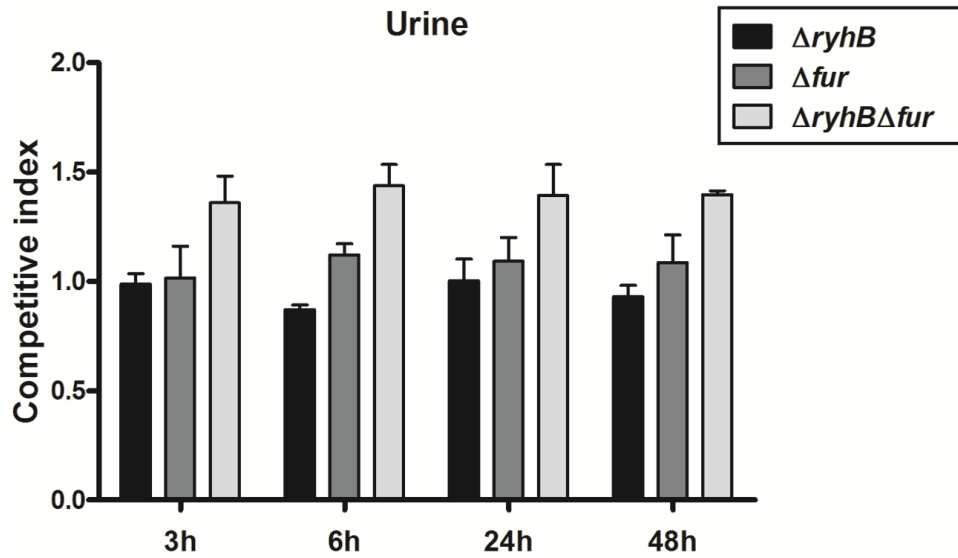


Figure S1. Role of RyhB and Fur in competitive growth assay in human urine.

Human urine was inoculated with a 1:1 ratio of CFT073 $\Delta lacZYA$ strain and one of the mutant strains ($\Delta ryhB$, Δfur or $\Delta ryhB\Delta fur$). Strains were grown without agitation at 37°C. The proportion of each strain was monitored and results are represented as the \log_{10} competitive indexes (CI). The CI represents the relative numbers of the two tested strains from the samples compared to the initial numbers of the strains in the inoculum. Negative CI values indicate a decreased capacity for the mutant strain to compete with the reference strain (CFT073 $\Delta lacZYA$). Results are the mean values and standard deviations of three biological experiments.

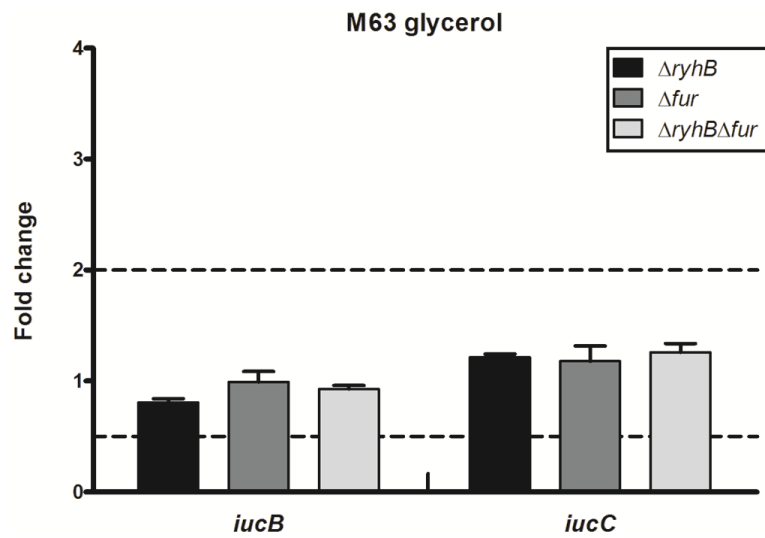


Figure S2. Role of RyhB and Fur in the expression of *iucB* and *iucC* genes in M63-glycerol minimal medium.

Expression of genes for the mutant strains in M63-glycerol minimal medium was compared to that of the wild-type CFT073 strain. The dashed lines correspond to the cut-off for a significant difference in expression. Results are the mean values and standard deviations of three biological experiments.