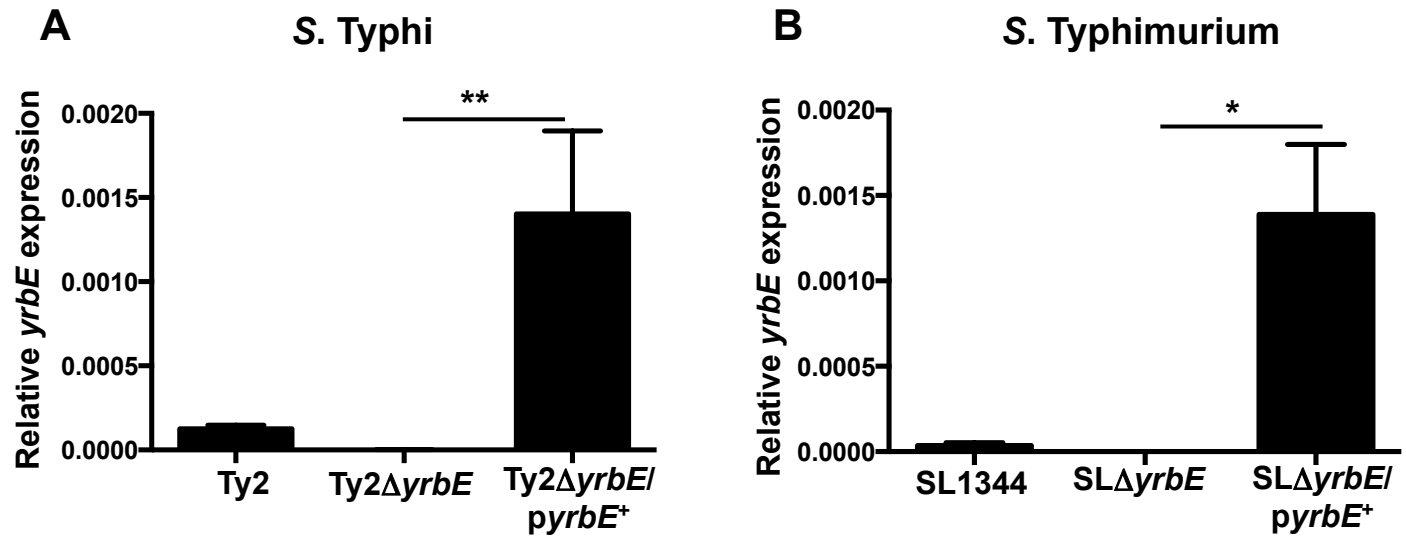


### Supplementary Table 1

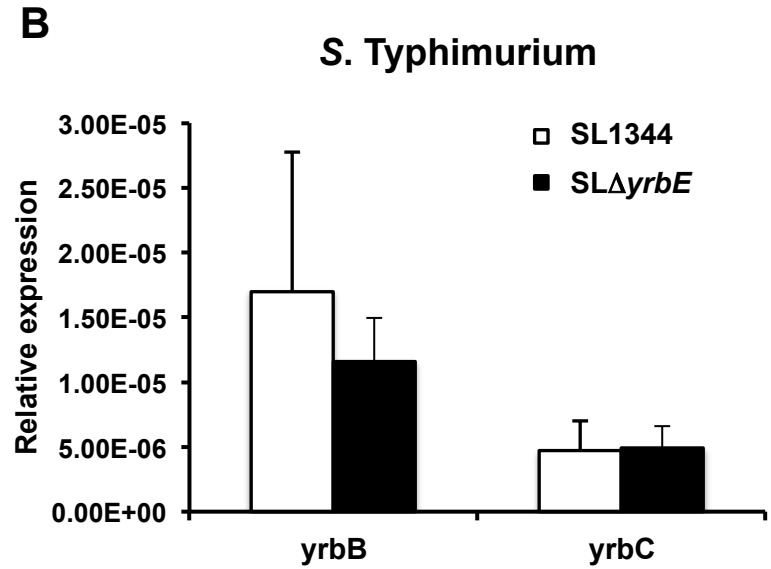
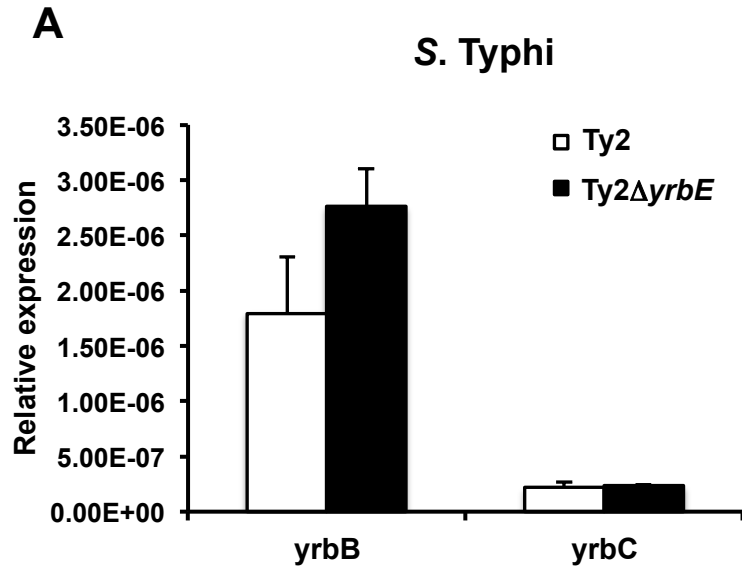
Sequences of primers used for gene disruptions and qRT-PCR analysis. All sequences are shown 5' > 3'.

Primer	Sequence
STyYrbEP1	TTTACTCGAAACAGGGAGTTAAGCCACTCATGCTGTTAAAGTGTAGGCTGGAGCTGCTTC
STyYrbEP2	CGTTTGCATGAACTCAATTCCCAAACATCAGTGCGGTCAGCATATGAATATCC TCCTTAG
STyYrbEUp	CAGGGAGTTAAGCCACTCATG
STyYrbEDn	GAACTCAATTCCCAAACATCAG
STyYrbER1	GTAGGGAATTCGGAGTTAAGCCACTCATGCTG
STyYrbEN1	ATAGCGGCCGCATGAACTCAATTCCCAAACATC
STyFliCP1	CATCAAGTTGTAATTGATAAGGAAAAGATCATGGCACAAGGTGTAGGCTGGAGCTGCTTC
STyFliCP2	TGTGTACCACGTGTCGGTGAATCAATCGCCGGATTAACGCCATATGAATATCC TCCTTAG
STyFliCUp	ATTCAGGTGCCGATACAAGGG
STyFliCDn	GCTTTCGCTGCCTTGATTGT
STyMtBP1	TCATCCATTGTCGTCGTA AACGCCGCAGGCACGTGTAGGCTGGAGCTGCTTC
STyMtBP2	GGTCCGCTTTTGGCGATGTGGGTACGCTTGCCGGCGCATATGAATATCCTCCTTAG
STyMtBUp	CAGTGAGCGTCCATCGTTTA
STyMtBDn	GCAGATGCTGCTCCATATCA
STmFijBF	ATTAAAGCGGCTACGGGTGG
STmFijBR	AGGCATTGTGGTTTTAGTTGCG
STyYrbBF	AGATCTCCAGGGTAGATACGG
STyYrbBR	AAGTACGTCTTCGGGCAAG
STyYrbCF	GTGAAGCCTATTTTGCAGCG
STyYrbCR	TTACACGGATAGGCACAATGG

# Supplementary Figure 1



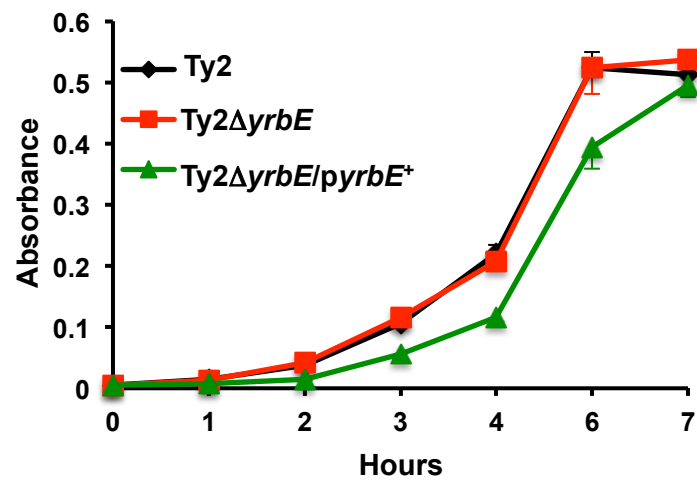
## Supplementary Figure 2



# Supplementary Figure 3

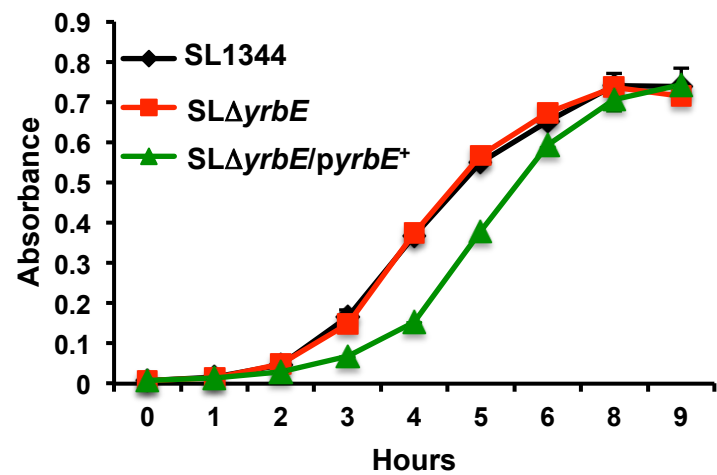
**A**

**S. Typhi**

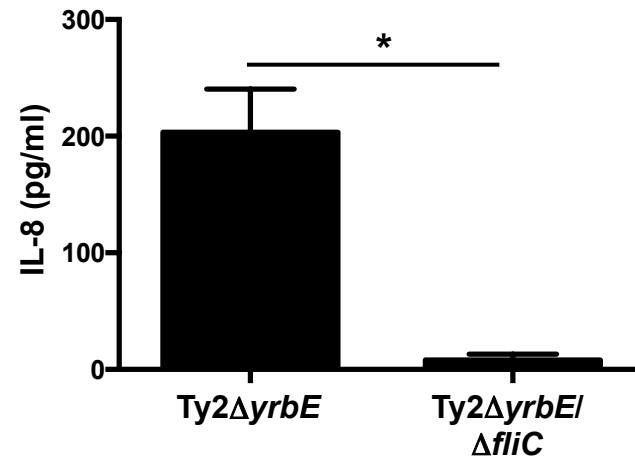


**B**

**S. Typhimurium**



## Supplementary Figure 4



# Supplementary Figure 5

**A**



**B**

