

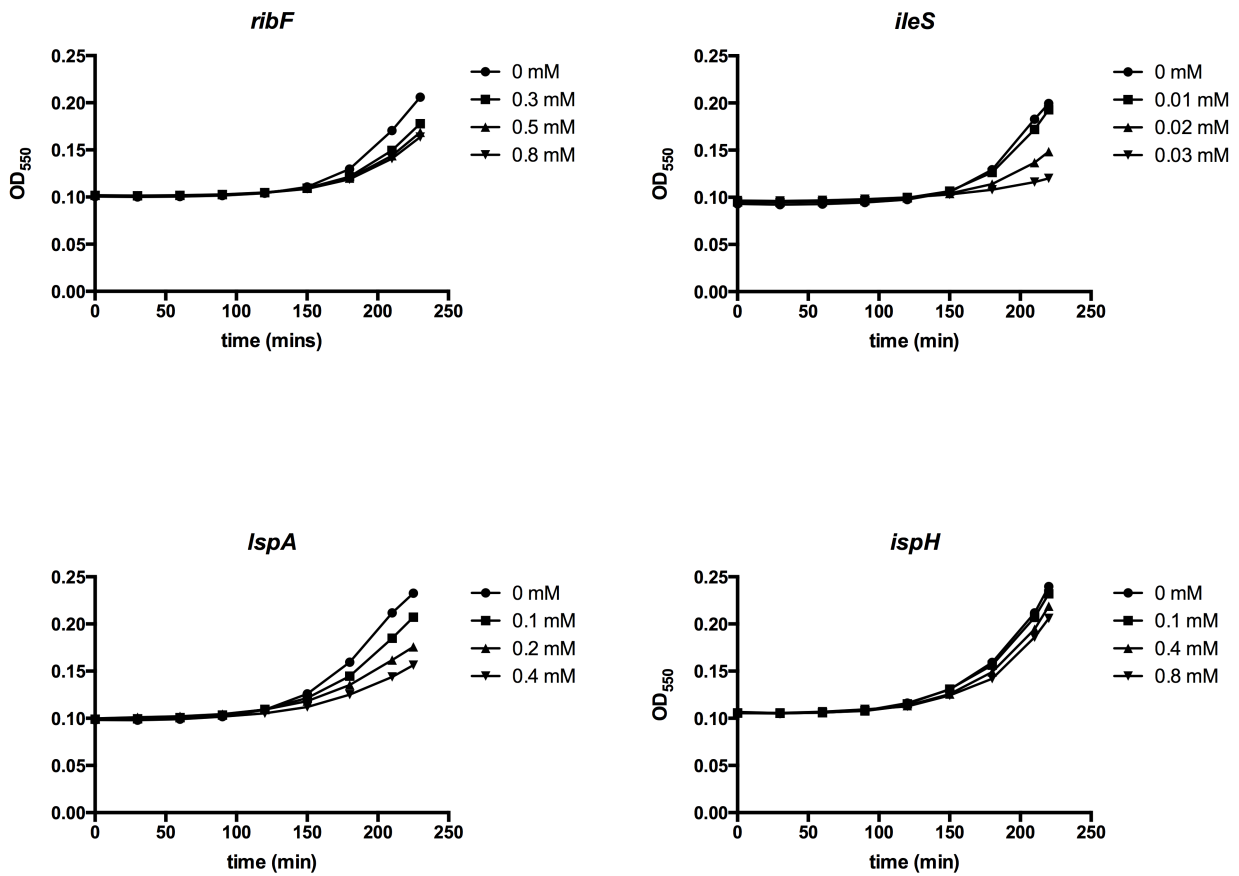
**TABLE S1** Gene expression stability of candidate reference genes

Gene	Gene product	Pathway	Essentiality <sup>a</sup>	M value <sup>b</sup>
<i>zipA</i>	Z-interacting protein A	Cell division	Yes	0.275
<i>rrs</i>	16S ribosomal RNA	Translation	No	0.282
<i>polA</i>	DNA polymerase I	DNA replication	No	0.288
<i>ispB</i>	Octaprenyl diphosphate synthase	Polyprenol biosynthesis	Yes	0.320
<i>fldA</i>	Flavodoxin 1	Electron transport chain	Yes	0.360
<i>plsC</i>	1-acylglycerol-3-phosphate O-acyltransferase	Phospholipid biosynthesis	Yes	0.440
<i>mreD</i>	Cytoskeletal protein	Peptidoglycan synthesis	Yes	0.541

<sup>a</sup> Determined by knock-out experiments (1, 2)

<sup>b</sup> Genorm M-value is the average M value of all remaining reference genes upon stepwise exclusion of the most unstable gene (highest M value) (3)

1. **Gerdes SY, Scholle MD, Campbell JW, Balazsi G, Ravasz E, Daugherty MD, Somera AL, Kyrpides NC, Anderson I, Gelfand MS, Bhattacharya A, Kapatral V, D'Souza M, Baev MV, Grechkin Y, Mseeh F, Fonstein MY, Overbeek R, Barabasi AL, Oltvai ZN, Osterman AL.** 2003. Experimental determination and system level analysis of essential genes in Escherichia coli MG1655. *J Bacteriol* **185**:5673-5684.
2. **Baba T, Ara T, Hasegawa M, Takai Y, Okumura Y, Baba M, Datsenko KA, Tomita M, Wanner BL, Mori H.** 2006. Construction of Escherichia coli K-12 in-frame, single-gene knockout mutants: the Keio collection. *Mol Syst Biol* **2**:2006 0008.
3. **Vandesompele J, De Preter K, Pattyn F, Poppe B, Van Roy N, De Paepe A, Speleman F.** 2002. Accurate normalization of real-time quantitative RT-PCR data by geometric averaging of multiple internal control genes. *Genome biology* **3**:RESEARCH0034.



**Figure S1.** IPTG induction and early log phase growth of conditionally silencing strains containing expressed asRNA against indicated target genes. Growth curves are mean of three experimental replicates.