# Table S1

## Oligonucleotide primers used in the present study[1].

### I. Primers used for cloning *nfrB* into pGEX-6P-1 (Cytiva 58-9546-48):

| | |
|---|---|
| *NfrB*$^{451-745}$_BamHI_f | cat**ggatcc**atggttaaccgcatcgtgcag |
| *NfrB*$^{451-745}$_EcoRI_r | gta**gaattc**ttattctccttcattttcggactc |

### II. Primers used for generating the *nfrB::lacZ* reporter gene fusion:

| | |
|---|---|
| *nfrBlacZ-1499_f* | catat**gaattc**gcatggatcatgatccactc |
| *nfrBlacZ+0_r* | gat**aagctt**ccatacaaaaaccttacattaacg |

### III. Primers used for generating chromosomal knockout mutations by one-step inactivation (OSI):

| | |
|---|---|
| *nfrB*-H1P1 | gccaccctaaacataaccagcgttaatgtaaggtttttgt**gtgtaggctggagctgcttc** |
| *nfrB*-H2P2 | aggttattctccttcattttcggactccagttgcgcaacc**attccggggatccgtcgacc** |
| *nfrA*-H1P1 | acaggttgcgcaactggagtccgaaaatgaaggagaataa**gtgtaggctggagctgcttc** |
| *nfrA*-H2P2 | gaaaatgaacttacgcatttaccagtgcactccaatggtg**attccggggatccgtcgacc** |
| *ybcH*-H1P1 | gcgcaacaacgcgtttctcaccattggagtgcactggtaa**gtgtaggctggagctgcttc** |
| *ybcH*-H2P2 | gaaagaggtaagccaggtcgtacccgacttacctggaggagat**attccggggatccgtcg acc** |
| *wecA-G*-H1P1 | ggtcttcgtggttatacttctgctaataattttctctgagagcatgcattgt**gtaggctg gagctgcttc** |
| *wecA-G*-H2P2 | gcagacaggcgacggagtgaccactccgtcgctttacaaagagaggaaaa**attccgggga tccgtcgacc** |
| *wecB*-H1P1 | gagcgcaaaggcgctcgccgcttattcgaagagaatcgat**gtggtgtaggctggagctgc ttc** |
| *wecB*-H2P2 | gaaatggtcgcaaaactcatagtgatatccgattatttttaacgc**attccggggatccg tcgacc** |
| *wecC*-H1P1 | ctcgcattctggaagcgttaaaaaataatcggatatcactatga**gtgtaggctggagctg cttc** |
| *wecC*-H2P2 | gttatcagaatttttctcatcagcgccagactcctttggcatcgac**attccggggatccg tcgacc** |

### IV. Primers used for generating the plasmid pAP58 by replacing the antibiotic resistance cassette of pCAB18 (Barembruch and Hengge, 2007) with the chloramphenicol resistance cassette of pACYC184 (Chang and Cohen, 1978):

| | |
|---|---|
| pCAB18-BglII-rew | **ggcggc**agatct**gttgaatactcat**actcttcc |
| pCAB18-NdeI-for | ggcggc**catatg**ctgtcagaccaagtttactc |
| CAT-BglII-for | ggcggc**agatct**ggtgcttttgccgttacgcac |
| CAT-NdeI-rew | ggcggc**catatg**aataactgccttaaaaaaattac**gcc** |

### V. Primers used for cloning *nfrBA-ybcH* and mutant alleles into pAP58:

| | |
|---|---|
| *nfrB*_XmaI_f | ct**cccggg**acataaccagcgttaatgtaag |
| *ybcH*_XbaI_r | ga**tctaga**ttaatactcgagaatgccgtg |
| *nfrB*$^{L490A}$_f | cgcccg**gcg**ggtcaaattc |
| *nfrB*$^{L490A}$_r | gaatttgacc**cgc**cgggcg |
| *nfrB*$^{L537A}$_f | gctggcacaggcg**gcg**gcagagcaaaac |
| *nfrB*$^{L537A}$_r | gttttgctctgc**cgc**cgcctgtgccagc |
| *nfrB*$^{G491L}$_f | gttgcgcccgtta**ctg**caaattctgctgg |
| *nfrB*$^{G491L}$_r | ccagcagaatttg**cag**taacgggcgcaac |

[1] Relevant nucleotides (e.g. restriction sites, mutations introduced or pKD13-specific sequences) labeled in **bold**. All primer sequences are given from 5´- to 3´-end.

| | |
|---|---|
| *nfrB*$^{D169A}$_f | attctgcat**gcc**gccgaagatgtgatttc |
| *nfrB*$^{D169A}$_r | gaaatcacatcttcggc**ggc**atgcagaat |
| *nfrB*$^{D267A}$_f | gagtcttactgaa**gcg**tacgacattggcttc |
| *nfrB*$^{D267A}$_r | gaagccaatgtcgta**cgc**ttcagtaagactc |
| *nfrB*$^{W330A}$_f | atccc**gcg**cgatcatcggcattgttttc |
| *nfrB*$^{W330A}$_r | gaaaacaatgccgatgatcg**cgc**gggat |
| *nfrA*_BamHI_r | gta**ggatcc**gatcgtccagctg |
| *nfrB_ClaI_rev* | catt**atcgat**ggattcccacgcc |

## VI. Primers used for cloning *dgcJ* and *dgcQ* into pRH800 (Lange and Hengge-Aronis, 1994) and generating mutant alleles:

| | |
|---|---|
| *dgcJ*_BamHI_f | cat**ggatcc**ctcgtttcactaaccgaagg |
| *dgcJ*_XbaI_r | gt**tctaga**tcatgaacggctgtttttgttc |
| *dgcJ*$^{6xHIS}$_XbaI_r | gt**tctaga**tcagtgatggtgatggtgatgtgaacggctgtttttgttc |
| *dgcJ*$^{GGAAF}$_f | ctcggtggc**gctgca**ttctgcatc |
| *dgcJ*$^{GGAAF}$_r | gatgcagaa**tgcagc**gccaccgag |
| *dgcQ*_BamHI_f | cata**ggatcc**gaatcataaaaaagcaggttggg |
| *dgcQ*$^{6xHIS}$_XbaI_r | at**tctaga**ttagtgatggtgatggtgatgagcgttatcgctcgcga |

## VII. Primers used for cloning *nfrB*$^{3xFLAG}$ into pAP58:

| | |
|---|---|
| *NfrB*$^{3xFLAG}$*_f* | cacgacatcgactacaaggacgacgacgacaag**caactggagtccgaaaatg** |
| *NfrB*$^{3xFLAG}$*_r* | gtccttgtagtcaccgtcgtggtccttgtagtc**cgcaacctgttctgtgttta** |

## VIII. Primers used for chromosomal C-terminal 3xFLAG-tagging of *nfrB* via two-step mutagenesis:

| | |
|---|---|
| *nfrB_ccdB_f* | tcgttcagcaattaacgtgttgttattgcgccatgaacgcagttctctgccgctcggcaa **cgcatcgtggccggatcttgc** |
| *nfrB_ccdB_r* | ggcgttctgccgcgcttaatgtgttctgctggcgtgcttcattgtatagcgtatctgcct **cggataacagaaaggccggg** |
| *nfrB*$^{3xFLAG}$*_f* | tgccgcatcagttcctgttc |
| *nfrB*$^{3xFLAG}$*_r* | cagtgccaggatccgatcgt |