

Supporting Information

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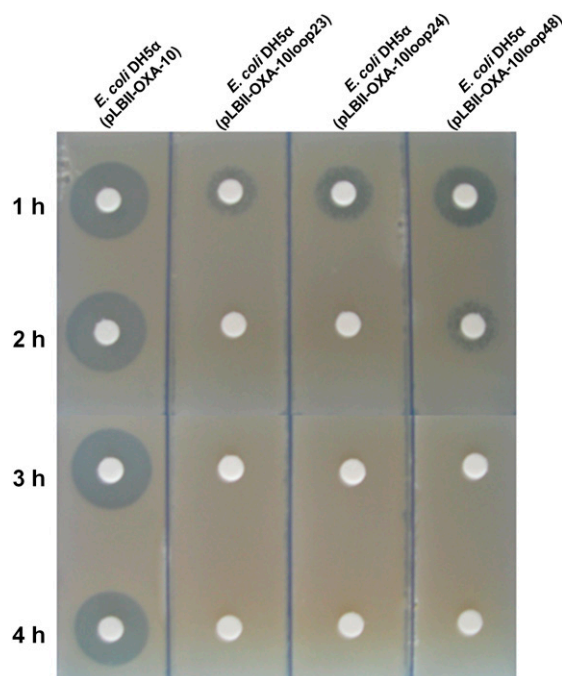


Fig. S1. Results of the carbapenemase plate assay (see *Materials and Methods* for details) obtained after incubating imipenem with crude extracts of *Escherichia coli* DH5 α carrying plasmids pLBII-OXA10, pLBII-OXA10loop23, pLBII-OXA10loop24, and pLBII-OXA10loop48 producing the wild-type and the OXA-10 loop variants in which the β 5– β 6 loop has been substituted with that found in the carbapenemases OXA-23, OXA-24, and OXA-48, respectively. A strain carrying the empty vector was used as a negative control and gave results similar to that observed with *E. coli* DH5 α (pLBII-OXA10) (Table 2).

Table S1. Peptide mass fingerprint analysis performed on purified OXA-10 and OXA-10 loop variants

| Enzyme | Fragment sequence | Calculated mass (Da) | Observed mass (Da) |
|--------------|---|----------------------|--------------------|
| OXA-10 | T ²⁰⁶ GFSGVGTESNPGVAWWWVGVVEK ²²⁸ | 2450.18 | 2449.93 |
| OXA-10loop24 | T ²⁰⁶ GWGMGVTPQVGWWWVGVVEK ²²⁸ | 2260.10 | 2260.10 |
| OXA-10loop48 | T ²⁰⁶ GYSTR/IEPK/IGWWWVGVVEK ²²⁸ | 1259.66 | 1259.51 |

Only the peptide fragment(s) including the β 5– β 6 loop residues, obtained after trypsin proteolysis, are shown. Additional trypsin cleavage sites were introduced in the OXA-10loop48 variant (as indicated by the backslashes), generating two additional small peptide fragments which could not be observed in our setup; thus, the size reported in the table refers to the fragment including residues I²¹⁹–K²²⁸.