Significant role of Asn-247 and Arg-64 residues in close proximity of active site in maintaining catalytic function of CTX-M-15 type β-lactamase

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Running title: Role of amino acid residues present near the active site.

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Figure S1:



Figure S1: Shows agarose gels of double digestion products of pQE-2 vector harbouring $bla_{CTX-M-15}$, $bla_{CTX-M-15(N247V)}$ and $bla_{CTX-M-15(R64L)}$ by NdeI and HindIII restriction enzymes. All the darker bands of 4.8 kb corresponds to pQE-2 vector and faint band in lane B, C corresponds to CTX-M-15 gene (of 800 bp), faint band in lane A corresponds to the CTX-M-15 (N247V) mutant gene (of 800 bp) and in lane D corresponds to CTX-M-15 (R64L) mutant gene (of 800 bp). Lane M is DNA ladder.

Figure S2:



Figure S2: Shows SDS polyacrylamide gels of soluble protein fractions from *E. coli* BL21 cells harbouring CTX-M-15 gene, CTX-M-15 (N247V) mutant gene and CTX-M-15 (R64L) mutant gene, induced with 0.2 mM IPTG. Lane A and C show CTX-M-15 protein/enzyme of 31kDa. Lane B shows CTX-M-15 (N247V) mutant protein/enzyme of 31 kDa and lane D shows CTX-M-15 (R64L) mutant protein/enzyme of 31 kDa. Lane M is prestained protein ladder.