

***In vitro* and *in vivo* efficacy of *Caenorhabditis elegans* recombinant antimicrobial peptide
against Gram-negative bacteria**

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Supplementary Figure 1

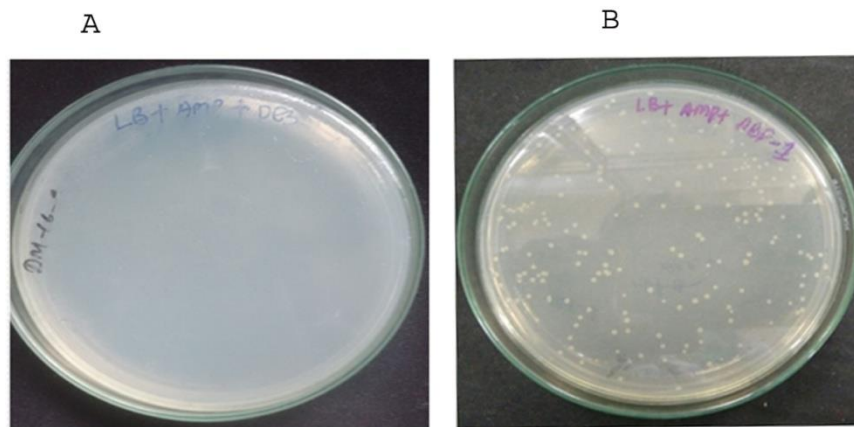


Figure S1: Transformation of pETDuet1-*abf-1* plasmid into DE3 *E. coli* cells.

Plasmids were inserted into *E. coli* DE3 cells using calcium chloride mediated heat shock method. Transformed cells were selected in LB agar plates containing ampicillin (100 $\mu\text{g/mL}$). **A)** LB ampicillin agar contains untransformed DE3 cells. **B)** LB ampicillin agar contains the DE3 transformed cells by pETDuet1-*abf-1* plasmid and yields white colonies.

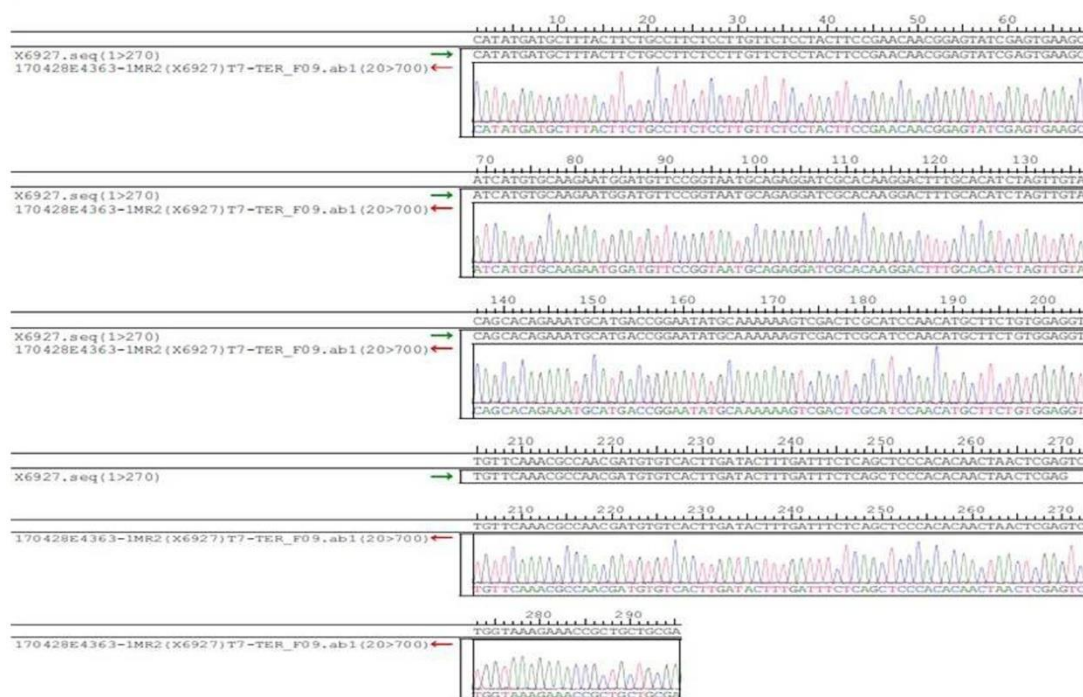


Figure S2: Nucleotide sequence of *abf-1* gene was determined by standard dideoxy (Sanger sequencing) method.

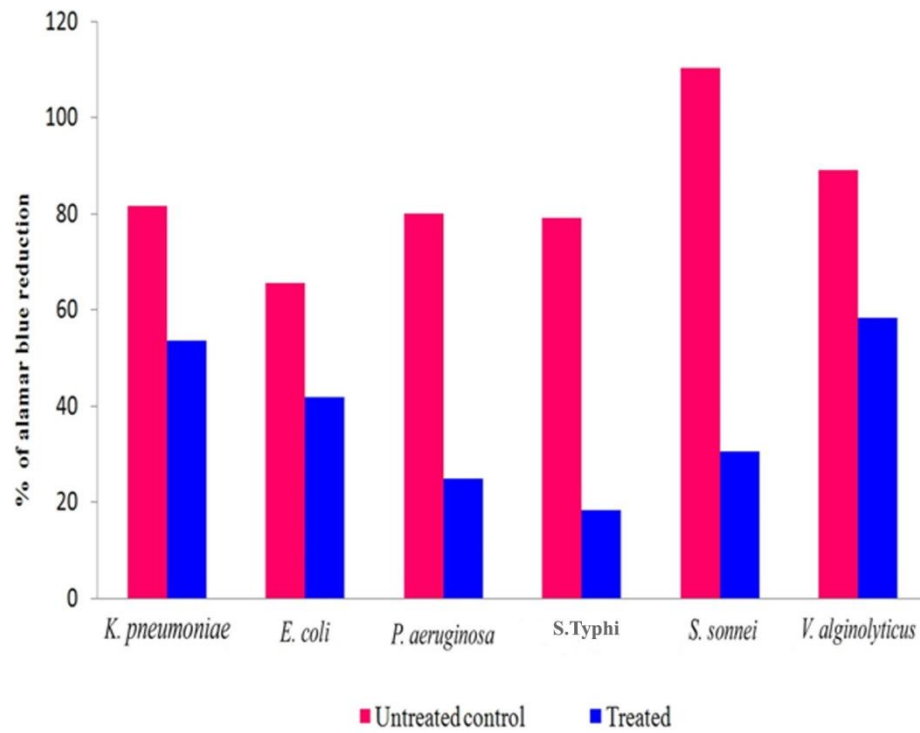


Figure S3: Treated Gram-negative bacteria after 1 h of incubation retained the blue colour confers the inhibition of growth compared to untreated control.

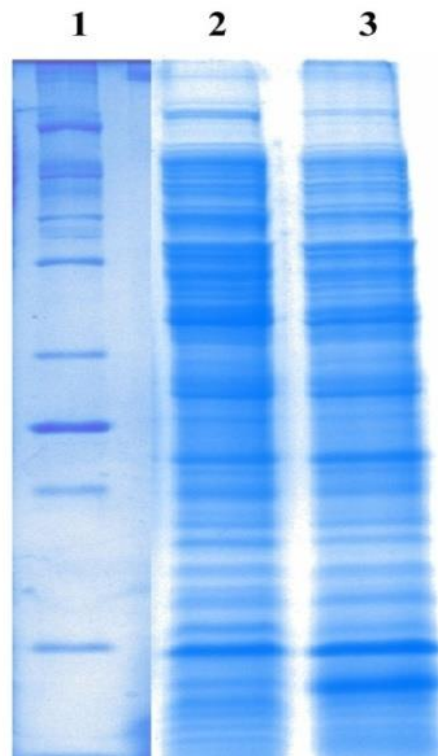


Figure S4: SDS-PAGE analysis shows *S. Typhi* proteome against ABF-1 proteins exposure. Lane 1 protein marker, Lane 2 is *S. Typhi* control sample and Lane 3 is *S. Typhi* treated sample, exposed with ABF-1 proteins. Protein Marker (Lane 1) has been cropped from separate gel.