Bacteriocins are ribosomally synthesised antimicrobial peptides whose production is generally controlled by the three component Quorum sensing mechanism. In lactic acid bacterium, Enterococcus faecium strain LR/6 we have identified and sequenced enterocinA operon. Detailed bioinformatics analysis has shown that an IS element is present within the promoter of entA. The presence of this IS element has created a ~1.5kb distance between the sites LR and RR required for the binding of activated response regulator protein. The binding of the response regulator (EntR) is required to activate the ent promoters. There are two transposase sequences too, present in the operon one which disrupts entK and the other just downstream entR. Our functional analysis has shown that presence of these insertions may lead to shutting of the two promoters entA and entT (coding for ABC transporter). Our study also suggests that though the strain LR/6 possess full entA operon there is no synthesis of EntA. In order to confirm this entA was heterologously expressed in E.coli and purified as a fused protein with His tag present at its N terminus. It was observed that the lactic acid bacteria tested, showed differential sensitivity to the fused enterocinA and the cleaved active enterocinA. This indicated that probably the mechanism of binding of enterocin to different target strains may be different as the two proteins are likely to have different structural conformations.