

Cytotoxic Assay on Bacteriocin B25 produced by Marine *Lactobacillus pentosus* B25

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Abstract: *The in vitro antimicrobial efficiency of the bacteriocin B25 is well documented, however its clinical application needs investigation, as its toxicity may well be totally different in in vitro (haemolytic and bactericide activity in blood and toxicity towards traditional human cell lines). The cytotoxic result of bacteriocin on traditional human blood cells (lymphocytes) was evaluated by MTT assay. Inhibition of cell proliferation was quantitated. a gentle cytotoxic result of bacteriocin was found on lymphocytes. The bacteriocin concentration fifty µg/mL to two hundred µg/mL used and the death of lymphocytes was ascertained in bacteriocin treated lymphocytes, twenty µg/mL to a hundred and sixty µg/mL from concentration, when a hundred and sixty µL there have been not found any changes in lymphocytes. It had shown the gentle toxicity. The IC50 worth was obtained as a hundred and sixty µL +/-20 µL. The Student's two-tailed t-test was accustomed verify applied mathematics significance of the variations between untreated cells and cells treated with the varied concentrations of bacteriocin.*

Keywords: Toxicity, Bacteriocin, MTT Assay, Lymphocytes

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