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**EVALUATION THE CYTOTOXIC EFFECT OF *ENTEROCOCCUS FAECIUM*  
FILTRATE AGANIST L20 B CELLS**

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**ABSTRACT**

Inhibitory activity of *Enterococcus faecium* concentrated filtrate was studied against L<sub>20</sub>B. The isolate obtained from the faeces of a newborn baby and identified according to cultural characteristics and biochemical testes using Rapid ID-32 strep. Isolate was grown in De Man Rogosa and Sharpe (MRS) broth. Cell lines were examined microscopically after 24 hrs of exposure to the bacterial filtrate. The cytotoxic effect and the cytological changes of *E. faecium* filtrate was a dose-dependent manner. The lowest concentrations (2 ng/ml) show significance induction on cell viability. There was no cytotoxic effect on cell line treating with the lower concentration. While the higher concentrations (2, 0.2) mg/ml inhibited cell growth. The inhibitory rate were 36.17%, 35.46% respectively.

**Keywords:** *Enterococcus faecium* Filtrate, L<sub>20</sub>B Cell Line, Cytotoxic Effect

**INTRODUCTION**

*Enterococci* are Gram-positive cocci that often occur in pairs (diplococci) or short chains and are difficult to distinguish from Streptococci on physical characteristics alone. Two species are common commensal organisms in the intestines of humans: *E. faecalis* (90-95%) and *E. faecium* (5-10%) there are rare clusters of infections with other species including *E. casseliflavus* and *E. raffinosus* [1]. Members of the genus *Enterococcus* were classified as Group D

Streptococcus until 1984 when genomic DNA analysis indicated that a separate genus classification would be appropriate [2].

*Enterococcus faecium* and *E. faecalis* are indigenous species in the gastrointestinal tracts of humans and animals, significant attention has been focused on the development of these strains as probiotics because of their beneficial health effects in the host, which include the inhibition of