

# THE EFFECT OF PASAK BUMI'S ROOTS EXTRACT (*Eurycoma longifolia* Jack) TO THE APOPTOTIC ACTIVITIES AND Bcl2 EXPRESSION OF RAJI CELL LINES



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## INTRODUCTION

Pasak bumi's roots (*E. longifolia* Jack) has been used traditionally to treat cancer, even though the scientific base of this has not been completely investigated. The study was conducted to evaluate the effect of methanol extract of pasak bumi's roots on the apoptosis activity and bcl2 expression of Raji cell lines.

## MATERIALS AND METHODS

The apoptotic activities of methanol extract of pasak bumi's roots were tested on Raji cell lines by evaluating the number of cells using ethidium bromide colouring, whereas the expression of bcl2 on Raji cell lines were detected using immunocytochemistry technique.

## RESULT AND DISCUSSION

The result showed that methanol extract of pasak bumi's roots possessed cytotoxic effect without induction of apoptosis on Raji cell lines and expression of bcl2 is higher



Figure 3. Raji Cell Lines Was Given Methanol Extract of Pasak Bumi's Root 50 ug/ml ( Reduce Cell Without Apoptosis)



Figure 1. Raji Cell Lines



Figure 2. Raji Cell Lines Control ( No apoptosis)

## CONCLUSION

It can be concluded that methanol extract of pasak bumi's roots has cytotoxic activity without induction of apoptosis on Raji cell lines as indicated of bcl2 expression is higher.

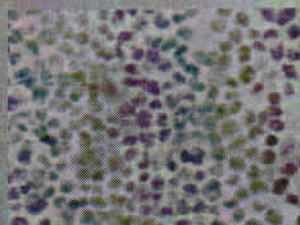


Figure 5. Raji Cell Lines Control (Bcl2 expression positive: nucleus and Cytoplasmic is brown)



Figure 4. Raji Cell Lines Was Given Methanol Extract of Pasak Bumi's Root 50 ug/ml (Bcl2 expression positive: nucleus and Cytoplasmic is brown)



# CERTIFICATE OF PARTICIPATION

This is to certify that

\_\_\_\_\_ has participated as

**PRESENTER**

in The International Conference on "Biotechnology for a Sustainable Future"  
15 - 16 September, 2009  
Bali, Indonesia  
held by Udayana University



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