

Cytotoxic and Apoptotic Effects of Ethanolic Extract of *Physallis angulata* L. on Myeloma Cell Line

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ABSTRACT

Result from various study showed that cancer is still the major cause of death in Indonesia as well as in the world. Therefore, research to develop new cancer drug is important. Ceplukan (*P. angulata* L.) is one of the potential plant that can be developed as anticancer agent. The aim of this research were to examine the cytotoxic and apoptotic effect of ethanolic extract of *P. angulata* on Myeloma cells.

The cytotoxic effect of *P. angulata* extract determine using MTT method, followed by observation the effect of ethanol extract of *P. angulata* on the cell proliferation. The effect on apoptosis was observed by doublestaining method using ethidium bromide-acridyne orange.

Results showed that ethanolic extract of *P. angulata* has cytotoxic effects on Myeloma cells with IC50 value of 70,92 ug/ml and had inhibitory effect on proliferation of Myeloma cells. Ethanolic extract of *P. angulata* induced apoptosis on Myeloma cells.

Key words: *Physallis angulata*, Myeloma cells, cytotoxic, apoptosis