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UJI AKTIVITAS ANTIKANKER FRAKSI KLOROFORM DAUN PEPAYA (CARICA PAPAYA L.) TERHADAP KULTUR SEL MIELOMA MENCIT

FAKULTAS FARMASI UNIVERSITAS AIRLANGGA
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Lembar Pengesahan

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ABSTRACT

Anticancer Activity Assay of Chloroform Fraction from Papaya Leaves (Carica papaya L.) To Culture of Mieloma Cell of Mice

This research was done to assay anticancer activity of chloroform fraction from papaya leaves (Carica papaya L.) to culture of mieloma cell of mice. The anticancer activity was determined using cell viability method which is based on the cell resistance ability against cytotoxic materials. Trypan blue 0.4% staining is used to differ the morphology between the death and live cells. The death ones would be stained blue while the live remain unstained.

The chloroform fraction from papaya leaves was made into six different concentration of trial solution (25,1 ppm; 50,2 ppm; 75,3 ppm; 100,4 ppm; 150,6 ppm and 200,8 ppm). Etoposide was used as positive control in three different concentration (1 ppm; 10 ppm; and 20 ppm) while RPMI 1640 was used as negative control. Both control and trial solution were mixed with the mieloma cell suspension in microwell plate and incubated in 5% CO₂ incubator, with pH 7,4-7,7 at 37°C for 24 hours.

The cell viability data will be analysed using one way Annova and probit. The result is that chloroform fraction of papaya leaves is found to have anticancer activity with LC₅₀ 104,4053 μg/mL, but less potential compare to NCI requirements.

Thin layer chromatography was used to identify the phytochemical content of chloroform fraction of papaya leaves. The thin layer chromatogram profile suggested that chloroform fraction of papaya leaves contains alkaloids.

Keywords: Carica papaya L., cell viability method, culture of mieloma cell of mice