

## **Comparison The Anticancer Effect of Extract And Fraction *Calotropis gigantea* Radix On Human Colon Cancer WiDr And Breast Cancer T47D Cell Lines**

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The anticancer effect of extract And fraction *Calotropis gigantea* radix on human colon cancer WiDr And Breast Cancer T47D Cell Lines have been evaluated. The ethanolic extract was fractionated gradually with dicloromethane (DCM), ethyl acetate (EA) and butanol (BuOH) to yield four fractions including DCM fraction, EA fraction, BuOH fraction and water fraction. The anticancer effect was performed using MTT method. The IC<sub>50</sub> was used to express the anticancer potency. The result showed that extract and fraction of *Calotropis gigantea* radix have much more potent to colon cancer WiDr than breast cancer T47D cell lines. IC<sub>50</sub> on WiDr cell lines were etanol extract (44,2 µg/ml), DCM fraction (14,92 µg/ml), EA fraction (1,25 µg/ml), BuOH fraction (1,12 µg/ml) dan water fraction (>1000 µg/ml). IC<sub>50</sub> on T47D cell lines were etanol extract (89,75 µg/ml), DCM fraction (131,29 µg/ml), EA fraction (55,89 µg/ml), BuOH fraction (96,72 µg/ml), water fraction (>1000 µg/ml). DCM, EA and BuOH fractions are potential to be developed as an anticancer agent in colon cancer therapy.

Keyword: *comparison, anticancer, Calotropis gigantea*, , WiDr cells, T47D cells

Table 1: The IC<sub>50</sub> value of cytotoxic of ethanolic extract and fractions of *Calotropis gigantea* Radix on human colon cancer WiDr cell and breast cancer T47D cell

Samples	IC <sub>50</sub> (µg/ml)±STDEV on WiDr Cell lines	IC <sub>50</sub> (µg/ml)±STDEV on T47D Cell lines
Etanol extract	44.2±	89.75±
DCM Fraction	14.92±	131.29±
EA Fraction	1.25±	55.89±
BuOH Fraction	1.12±	96.72±