Cytotoxic property of cowanin, isolated compound from the bark of Asam Kadis on T47D breast cancer cell line

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Breast cancer is one cancer with the highest of frequency occurrence among other types of cancer in women. Meanwhile anticancer drugs that exist today do not provide optimum results in therapy because less selectivity. Therefore, there is a needed to find new drug source from natural origin. One of the efforts was to evaluate cytotoxic activity in vitro of cowanin compound from the bark of Asam kandis (Garcinia cowa Roxb) against T47D breast cancer cells. The potency of cowanin were tested using MTT method, a colorimetric assay based on capacity of mitochondria succinate dehydrogenase enzymes in living cells to reduce MTT salt into an insoluble, colored formazan product which was measured spectrophotometrically. Cowanin compound made into a solution of the test preparation in four concentrations is 0.1μg/mL, 1 μg/mL, 10μg/mL, and 100μg/mL. Testing has been done giving IC₅₀ values cowanin compounds against T47D breast cancer cells amounted to 6.986±0.786μg/mL. Statistical analysis showed that the compound cowanin of bark of asam kandis can inhibit the growth of breast cancer cells T47D significantly at a concentration of 100μg/mL (P<0.05).

Biography
Elidahanum Husni has completed his PhD in 2015 at Andalas University. She is the Head of Pharmacognosy Laboratory, Faculty of Pharmacy, Andalas University. She has published more than 15 papers in reputed journals.

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