

INTISARI

ARIANTO., 2020. KAJIAN AKTIVITAS SITOTOKSIK *Garcinia L.* TERHADAP BERBAGAI KULTUR SEL KANKER RAHIM DAN PENGARUHNYA TERHADAP EKSPRESI GEN BERBAGAI PROTEIN, SKRIPSI, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI, SURAKARTA.

Kanker Rahim adalah pertanaman sel – sel yang tidak normal yang tumbuh di rahim atau mulut rahim sepertiga bagian bawah uterus berbentuk silindris, menonjol dan berhubungan dengan vagina melalui ostium uteri eksternum. Penelitian ini bertujuan untuk mengetahui potensi sitotoksik *Garcinia sp.* terhadap kajian pustaka berbagai kultur sel kanker rahim dan pengaruhnya terhadap ekspresi gen berbagai protein.

Penelitian ini diawali dengan ekstraksi daun manggis. Ekstraksi dilakukan dengan menggunakan metode maserasi. Kandungan kimia daun manggis kemudian diuji dengan metode tabung dan KLT. Kajian aktivitas sitotoksik dilakukan dengan menggunakan pustaka review untuk mengetahui aktivitas sitotoksik *Garcinia sp.* terhadap berbagai kultur sel kanker rahim dan pengaruhnya terhadap ekspresi gen berbagai protein.

Hasil uji kandungan kimia daun manggis mengandung polifenol, flavonoid, tannin, saponin, dan triterpenoid. Hasil kajian pustaka aktivitas sitotoksik menunjukkan bahwa *Garcinia sp.* mempunyai aktivitas sitotoksik terhadap berbagai sel kanker rahim (HeLa, SiHa, HCE-1) dan memberikan pengaruh terhadap ekspresi gen berbagai protein (Bcl2, *Caspase*, Sitokrom-C, Bax, TR3, hnRNPK).

Kata kunci : Sitotoksik, *Garcinia sp.*, Sel HeLa, Sel SiHa,

ABSTRACT

ARIANTO., 2020. STUDY OF *Garcinia* L. CYTOTOXIC ACTIVITY OF VARIOUS CERVICAL CANCER CELL CULTURES AND ITS EFFECT ON GENE EXPRESSION OF VARIOUS PROTEIN, THESIS, FACULTY OF PHARMACY, SETIA BUDI UNIVERSITY, SURAKARTA.

Cervical cancer is abnormal cell that grow in part of female reproductive system, also called the neck of the uterus, the cervix connect the uterus to the vagina. This research purpose is to investigate the cytotoxic activity of *Garcinia* sp. on the study of various cervical cancer cells cultures and its effect on gene expression of various of various protein.

This research started with extraction of mangosteen leaf with maseration method. Mangosteen leaves were tested by tube method and TLC method to know the component in it. of The study of cytotoxic activity was carried out using review jornal to know the cytotoxic activity of *Garcinia* sp. on various cervical cancer cells culture and its effect on gene expression of various protein.

The result of of this study was extract of mangosteen leaves contains pholiphenols, flavonoids, tannins, saponins, and triterpenoids compounds. Journal review of cytotoxic activity showed that *Garcinia* sp. had cytotoxic activity on various cancer cells (HeLa cells, SiHa cells, HCE-1 cells) and effect to increase or depress gene expression of various protein (Bcl2, *Caspase*, Sitochrome-C, Bax, TR3, hnRNPK).

Keywords: Cytotoxic, *Garcinia* sp, cell HeLa, cell SiHa,

