



Anticancer Activity of *Hibiscus sabdariffa.L*(Flowers) against Human Liver Cancer (HepG2) Cell Line

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Abstract:Objective: To investigate the anticancer activity of the flower of *Hibiscus sabdariffa* Linn(Roselle) against human hepatoma cell line (HepG2).

Methods:In vitro anticancer activity was carried out to screen cytotoxicity potency of the solid obtained from ethyl acetate fraction from *Hibiscus Sabdariffa.L* flower extract at different concentrations against HepG2 cell line. The MTT (methylthiazolyldiphenyl- tetrazolium bromide) assay for cell viability and markers is predictable to confirm the cytotoxicity.

Results:The solid obtained from ethyl acetate fraction from the flower extract of *Hibiscus Sabdariffa.L* was tested for its anticancer activity against HepG2 cell lines (liver cancer) at various concentrations by MTT assay. It was confirmed that the IC₅₀ value of this sample was 171 ± 8.3 µg/ml against Liver Cancer HepG2 cell line.

Conclusions:*Hibiscus Sabdariffa.L* is a potential plant with anticancer activity. The isolation of the pure compounds and determination of the bioactivity of individual compounds will be further performed.

Keywords:*Hibiscus sabdariffa.L; anti-cancer activity; MTT assay; HepG2 cell line; cytotoxicity*

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