

Analisis fitokimia dan efek antiproliferatif marine makroalga *eucheuma* sp. terhadap sel kanker kolorektal HCT-116 = Phytochemical analysis and anticancer activity of seaweed *eucheuma* sp. against colon HCT-116 cells

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Abstrak

ABSTRAK

Eucheuma cottonii memiliki aktivitas antikanker yang cukup aktif. Nilai IC50 terendah dimiliki oleh ekstrak etil asetat dari *Eucheuma spinosum*. Sebagai kesimpulan, ekstrak etil asetat dari *Eucheuma spinosum* memiliki potensi sebagai agen antikanker yang paling poten.

ABSTRACT

Seaweed macroalgae, as marine natural products has showed a potent anticancer activity. Therefore, in this research, we analyse the phytochemical content of *Eucheuma* sp. that came from Labuhan Haji Beach, Nusa Tenggara Barat and its anticancer activity to further develop it as anticancer agent. Method. Hexane, ethyl acetate, ethanol, and chloroform extracts of seaweed were tested using Thin Layer Chromatography to the amount of metabolite content of the extract. Finally, the anticancer activity was tested using MTT Assay. The result of this test is expressed in percentage inhibition and IC50 value. Results. Phytochemical analysis showed almost all extracts of *Eucheuma spinosum* contain flavonoid and triterpenoid. Thin Layer Chromatography showed ethyl acetate and hexane extract have three similar Rf factors that can show that these extracts contain similar metabolites. MTT assays showed that *Eucheuma* sp. has moderately active anticancer activity. Conclusion. The results of this study show that *Eucheuma* sp. has moderately active anticancer activity. Ethyl acetate extract of *Eucheuma spinosum* has the smallest value of IC50. To sum up, ethyl acetate extract of *Eucheuma spinosum* showed the strongest antiproliferative activity, so this can be one of the most potential anticancer drug.