



Antiproliferative Effect of Extracts and Fractions from the Calcareous Sponge *Leucetta aff. floridana* from the Colombian Caribbean

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SUMMARY. Three tumor cell lines of lung (A549), colon (HT29) and breast (MDA-MB-231) were used to evaluate the antiproliferative effect of ethanol and dichloromethane extracts and seven fractions obtained by flash column chromatography from the most bioactive extract of the sponge *Leucetta aff. floridana*. Ethanol extract showed antiproliferative activity on three cell lines, whereas dichloromethane extract exhibited low activity. Four ethanol fractions showed antiproliferative activity, which was higher on A549 (IC₅₀ for all four fractions: < 1.0 µg/mL), followed by HT29 (IC₅₀: 2.5 µg/mL; 2.2 µg/mL; 13.2 µg/mL and 15.8 µg/mL) and finally, MDA-MB-231 (IC₅₀: 2.8 µg/mL, 8.3 µg/mL; 13.3 µg/mL and 20.5 µg/mL). GC-MS analysis of the highest activity fraction permitted to identify sixteen fatty acids among saturated, branched-saturated, monounsaturated and polyunsaturated of which hexadecanoic and hexadecenoic acids were the most abundant fatty acids.

KEY WORDS: Antiproliferative activity, Fatty acids, *Leucetta aff. floridana*.

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