

Antiproliferative Effect of *Angelica archangelica* Fruits

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The aim of this work was to study the antiproliferative effect of a tincture from fruits of *Angelica archangelica* and the active components using the human pancreas cancer cell line PANC-1 as a model. Significant dose-dependent antiproliferative activity was observed in the tincture with an EC₅₀ value of 28.6 µg/ml. Strong antiproliferative activity resulted from the two most abundant furanocoumarins in the tincture, imperatorin and xanthotoxin. The contribution of terpenes to this activity was insignificant. Imperatorin and xanthotoxin proved to be highly antiproliferative, with EC₅₀ values of 2.7 µg/ml and 3.7 µg/ml, respectively, equivalent to 10 and 17 µM. The results indicate that furanocoumarins account for most of the antiproliferative activity of the tincture.

Key words: *Angelica archangelica*, Xanthotoxin, Imperatorin