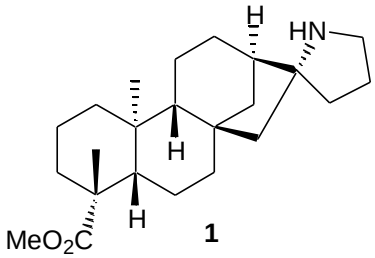
a 2020 0034

The invention relates to a natural compound derivative that has selective cytotoxic properties in relation to certain lines of human cancer cells and can be used as a chemotherapeutic agent for the treatment of oncologic diseases. In particular, an *ent*-kaurenoic acid derivative is described which contains a 2-spiropyrrolidine moiety and its cytotoxic activity. More precisely, the structure of the claimed compound includes the *ent*-kauranic carbon backbone specifically functionalized in cycle D with a spiropyrrolidine moiety (1).



1

The parent tetracyclic diterpenoids are easily available from sunflower waste (*Helianthus annuus*).
The cytotoxic activity of compound (1) is confirmed by inhibition at micromolar and submicromolar concentrations of at least 50% of cells multiplication belonging to several tumor cell lines. The selective action of the claimed compound is confirmed by high values of the selectivity index, given as the ratio of IC_{50} for normal cells to IC_{50} for corresponding tumor cells.

Claims: 2
Fig.: 4