

Two Novel Biscoumarins as Traditional Chinese Medicines: Crystal Structure and Anti-Gastrointestinal Cancer Activity

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SUMMARY. The synthesis and characterization of two novel biscoumarin derivatives (**1** and **2**) were realized by means of IR, ¹H NMR, HRMS and single crystal X-ray crystallography. The anti-gastrointestinal cancer activity of the two compounds were investigated against four human gastrointestinal cancer cells (GES-1, SGC-7901, BGC-823 and MGC-803) by MTT assay. It has been found that compound **2** exerted much more potent activity against the four cell lines than compound **1**.

RESUMEN. Se realizó la síntesis y caracterización de dos nuevos derivados de biscoumarina (**1** y **2**) por medio de IR, ¹H NMR, HRMS y cristalografía de cristal único. La actividad anti-cáncer gastrointestinal de los dos compuestos se investigó contra cuatro líneas celulares de cáncer gastrointestinal humano (GES-1, SGC-7901, BGC-823 y MGC-803) por ensayo de MTT. Se encontró que el compuesto **2** ejerce una actividad mucho más potente contra las cuatro líneas celulares que el compuesto **1**.

KEY WORDS: biscoumarin, gastrointestinal cancer, X-ray.

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