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Ring Open to Mono Ester of Norcantharidin Derivatives Also Can Inhibit Hep G2 Cell Line?

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***SUMMARY*. Starting from maleic anhydride, followed by the cyclo-addition, bromination and alcoholysis with different alcohols, the corresponding monoacid esters were successfully synthesized in medium to high yields. The structures were identified by ^{1}H NMR, ^{13}C NMR and IR spectroscopy. And the anti-tumor activity human hepatoma cell line Hep G2 was evaluated *in vitro* by MTT assay. The preliminary experimental results showed that 5, 6-dibromo norcantharidin mono metylester (C1) has a strong anti-hepatoma activity in Hep G2 cell line *in vitro,* indicating that ring open to mono ester of norcantharidin derivatives can also inhibit Hep G2 cell lines.**

RESUMEN. Partiendo del anhídrido maleico, seguido de ciclo-adición, bromación y alcohólisis con diferentes alcoholes, se sintetizaron con éxito sus ésteres monoácidos correspondientes con rendimientos medios a altos. Las estructuras se identificaron mediante ^{1}H NMR, ^{13}C NMR y espectroscopía IR. La línea celular de hepatoma humano de actividad antitumoral Hep G2 se evaluó *in vitro* mediante ensayo de MTT. Los resultados experimentales preliminares mostraron que 5, 6-dibromo norcantaridina mono metiléster (C1) tiene una fuerte actividad antihepatoma en la línea celular Hep G2 *in vitro,* lo que indica que el anillo abierto al monoéster de derivados de norcantharidina también puede inhibir las líneas celulares Hep G2.

KEY WORDS: anti-hepatoma, inhibition, *in vitro,* norcantharidin, ring-open, synthesis.

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