Cytotoxic constituents from Strophanthus divaricatus

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Strophanthus divaricatus is a small evergreen shrubs which is rarely found in Taiwan. The Genus Strophanthus is well known for producing cardiac glycosides and some of which exhibiting antitumor activity.

Isolates were purified by silica gel. Structural elucidation were accomplished by H-, ¹³C-NMR, HMBC, HMQC, COSY, NOESY and MS spectra. Cytotoxicity were evaluated by MTT assay. Through the screening on the basis of the two different types of cancers, including oral cancer (SCC-2095) and acute myeloid leukemia (THP-1), the crude extract of *S. divaricatus* (SD) possessed cytotoxicity in this screening against these two cancer cell lines. The IC₅₀ value of SD is about at 0.96-1.37μg/mL after 48hrs treatment. The isolation and characterization of one cardenolide cardiac glycoside, divostroside was also reported.

This potent anti-tumor action of SD suggested that might be potential value to do the further investigation of its anticancer activity.