

(+)-Diasesamin (**1**), (+)-sesamin (**2**), (+)-episesamin, stearic acid, palmitic acid, a mixture of  $\beta$ -sitosterol and stigmasterol, and a mixture of  $\beta$ -sitosterol-D-glucoside and stigmasterol-D-glucoside were isolated from the stems of *Cinnamomum camphora* (L.) Presl.. Among these compounds, **1** is obtained for the first time from a natural source. The cytotoxicity of **2** on Hep G2 and HeLa cell cancer lines was also investigated. The flow cytometric assay results indicated that **2** elicited a decrease in the percentage of the S phase of the cell cycle in Hep G2 cells after incubation for 24 h. These results reflect that **2** inhibited the DNA synthetic event in Hep G2 cells.