Preparation and investigations of antioxidative effect of gingerol from ginger (Zingiber officinale Roscoe) extract

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Abstract

Ginger (from the rhizomes of *Zingiber officinale* Roscoe) has been used for medical purpose for the treatment of a number of diseases including those affecting the digestive tract. Besides gingerol, some phenolic substances from plants of the ginger were reported to retain substantial antiinflammatory and antioxidative properties. We isolated gingerol from ethanol extract of dried rhizome of ginger by Sepacore (BÜCHI) preparative liquid chromatography on silica gel with a solvent system. Separation was performed using an isocratic elution (flow-rate 40 mL/min) with the mobile phase (hexane:ether=1:4). Injection volume was 20mL. Each fractions were analysed by HPLC. We also compared antioxidative effect of gingerol and other components by 1,1-diphenyl -2-picrylhydrazyl radical (DPPH) method.

References

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