

漢方製剤中のプエラリン, ダイジン, ペオニフロリン,
リクイリチン, ケイ皮酸, ケイヒアルデヒド,
グリチルリチンの同時HPLC定量分析

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**Simultaneous High-Performance Liquid Chromatographic
Determination of Puerarin, Daidzin, Paeoniflorin, Liquiritin,
Cinnamic acid, Cinnamaldehyde and Glycyrrhizin in Kampo Medicines**

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ABSTRACT We report a high-performance liquid chromatographic method to determine the quantities of puerarin, daidzin, paeoniflorin, liquiritin, cinnamic acid, cinnamaldehyde and glycyrrhizin in Kampo medicine. All seven compounds were separated in less than 30 min with a Wakosil-II 5C18 AR column by linear gradient elution using 0.01% (v/v) phosphoric acid-acetonitrile (0 min 90:10, 10 min 88:12, 22 min 70:30, 30 min 30:70) as the mobile phase at a flow-rate of 1.0 ml min⁻¹, and detection at 250 nm. The detection limits of these compounds are 0.15-0.3 μ M with response linearity. This method was applied to determine the quantities in eight Kampo decoctions; Mao-to, Makyo-yokukan-to, Makyo-kanseki-to, Yokuinin-to, Sho-seiryu-to, Keima-kakuhan-to, Kakkon-to and Kakkon-to-ka-senkyu-sin'i. Glycyrrhizin content was lower in both the decoction and the methanol-diluted decoction of Sho-seiryu-to compared with the others. Low pH due to organic acids of Schisandrae fructus in the decoction caused inhibition for glycyrrhizin dissolution in Sho-seiryu-to.

抄録 プエラリン, ダイジン, ペオニフロリン, リクイリチン, ケイ皮酸, ケイヒア

ルデヒド，グリチルリチンの同時HPLC定量法を確立し，8種類の桂麻剤の煎液中の含量を分析した．その結果，小青竜湯の構成生薬である五味子の有機酸による酸性化によって，グリチルリチンの抽出抑制が起きていることを証明した．