超高效液相色谱法测定复方川贝止咳糖浆的含量

［摘 要］**目的：**建立一种在双波长下同时测定甘草、化橘红中甘草酸、柚皮苷的含量的方法。**方法：**采用超高效液相色谱法，Aglient Poroshell 120EC-C18 色谱柱(50mm×2.1mm，1.9μm），流动相：乙腈（A 相）- 0.01%磷酸溶液（B 相），梯度洗脱，流速 0.2mL/min，检测波长 250nm 测定甘草酸铵，283nm 测定柚皮苷，进样量 2.0μl，柱温为 30℃。 **结果：**甘草酸铵质量在 61.5~152.63ng 与峰面积线性关系良好（R^2=0.9998），平均回收率为 100.4%，RSD 为 0.37%(n =9)。柚皮苷质量在 252.78~631.96ng 与峰面积线性关系良好（R^2=0.9993），平均回收率为 102.2%，RSD 为 1.36%(n =9)。 **结论：**此方法准确、高效，可用于测定复方川贝止咳糖浆的含量。

［关键词］复方川贝止咳糖浆；超高效液相色谱法；双波长；柚皮苷；甘草酸

Determination of Compound chuanbei Cough Syrup by Ultra High Performance Liquid Chromatography

[Abstract]Objective: To establish a method for simultaneous determination of glycyrrhizic acid and naringin in licorice and orange in two wavelengths. Method: Ultra-high performance liquid chromatography was adopted, Agilent Poroshell 120EC-C18 column (50 mm × 2.1 mm, 1.9 μm), mobile phase: acetonitrile (phase A) - 0.01% phosphoric acid solution (phase B), gradient elution ,and the flow rate was 0.2 mL/min, the ammonium glycyrrhizinate was measured at a detection wavelength of 250 nm, the naringin was measured at 283 nm, the injection amount was 2.0 μl, and the column temperature was 30 °C. Results: The quality of ammonium glycyrrhizinate was 61.5~152.63ng and it has a good linear relationship with the peak area (R2=0.9998). The average recovery was 100.4% and the RSD was 0.37% (n=9). The quality of naringin was 252.78~631.96ng with good linear relationship with peak area (R2=0.9993), the average recovery was 102.2%, and the RSD was 1.36% (n=9). Conclusion: The method is accurate and efficient, and it can be used to determine the content of compound Chuanbei cough syrup set.

[Key words] compound Chuanbei cough syrup; ultra-high performance liquid chromatography; dual wavelength; glycyrrhizic acid; naringin