Application of Porous Pyridinium Polymer for Solid-Phase Extraction of Liquiritin and Glycyrrhizic Acid from Licorice

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A pyridinium polymer was developed using a process involving polymerization and modification. The porous particles were used as a sorbent in a solid-phase extraction (SPE) process in order to isolate liquiritin and glycyrrhizic acid from licorice. In comparison with the C18 sorbent, the porous alkyl-pyridinium polymer sorbent exhibited higher selectivity. Quantitative analysis was carried out by using a C18 column. The two compounds exhibited a good linearity from 5×10-3 to 0.50 mg/mL (r2>0.99). The target compounds in commercial medicines were determined. The amount of the bioactive compounds that were extracted did not significantly decrease after the alkyl pyridinium polymer was recycled.