URN etd-0407109-183716-1309
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Statistics This thesis had been viewed 46 times. Download 0 times.
Department
Year 2006
Semester 1
Degree Master
Type of Document Master's Thesis
Language zh-TW.Big5 Chinese
Title Synthesis of Molecularly Imprinted Polymer for Recognition of Berberine
Date of Defense 0000-00-00
Page Count 103

Keyword
Berberine
Molecularly Imprinting Polymer
Equilibrium Adsorption

Abstract
The UV study revealed that berberine might be formal a more stable cyclic hydrogen bonds with acylamide. Therefore, the selective and affinitive molecularly imprinting polymers were prepared from berberine and a template, two functional monomers (methacrylic acid and acylamide) and two crosslinker (ethylene glycol diglycidyl ether and trimethylolpropane trimethacrylate) in there different solvents (chloroform, dimethyl sulfoxide and methanol). They were characterized with FTIR, TGA and SEM, and were used to compare the adsorption capacity with berberine and palmatine.
The equilibrium adsorption studies were fitted into there adsorption isotherm models, namely, Langmuir, Freundlich and Dubinin- Radushkevich. Finally, they were used to extract berberine and palmatine in the solid-phase extraction with different ratio of solvents (chloroform and methanol).
Advisory Committee Chen Arh-Hwang - advisor

Files No Any Full Text File.
Date of Submission 2007-08-23