

研究简报

异喹啉酸衍生物刷型手性键合固定相的制备及在联萘酚衍生物拆分中的应用

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收稿日期 2006-6-5 修回日期 网络版发布日期 2006-12-28 接受日期

摘要 在(S)-THIQCA环上引入 n 酸基团, 制备了一种新型的刷型手性固定相(CSP), 并用于联萘酚及其衍生物的拆分, 探讨了改性剂对色谱行为的影响.

关键词 [异喹啉酸衍生物](#) [手性固定相](#) [联萘酚衍生物](#) [有机改性剂](#)

分类号 [0657](#)

Preparation of Isoquinolinecarboxylic Acid Derivative as Brush-type Chiral Stationary Phase and Its Application in the Enantiomeric Resolutions of Binaphthol Derivatives

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Abstract A novel chiral stationary phase(CSP) for HPLC was prepared by synthesizing 3,5-dinitrobenzoyl-(S)-1,2,3,4-tetrahydro-3-isoquinolinecarboxylic acid as chiral selector and bonding it with 3-aminopropylsilane modified silica. The resolutions of 8 enantiomers of binaphthol and its derivatives were achieved by using hexane-ethanol-acetic acid(98:2:0.5, volume ratio) as mobile phase with a column temperature 30 °C and detected at ultraviolet 254 nm. The effects of acetic acid and alcohol organic modifiers on retention and resolutions of the analytes were examined. The enantioselectivities α of the analytes on CSP could be improved by adding acetic acid to mobile phase due to masking effect of H⁺ on the residing silanol and amino group.

Key words [Isoquinoline derivative](#) [Chiral stationary phase](#) [Binaphthol derivative](#) [Organic modifier](#)

DOI:

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