

1. Introduction

Study of enantioselective properties of biologically active compounds is an important stage of drug evaluation. Different separation techniques including gas chromatography, high performance liquid chromatography (HPLC), capillary zone electrophoresis, micellar electrokinetic chromatography or capillary electrochromatography have been widely applied to the separation of enantiomeric compounds¹.

Among them HPLC resulted to be the most employed tool especially in pharmaceutical routine analysis since offering excellent reproducibility and robustness. Miniaturization has become an important trend in the development of this technique. Capillary liquid chromatography (cLC) has certain advantages over classical high-performance liquid chromatography. Miniaturization of the column inner diameter leads to a decrease in the stationary phase quantity and permits the use of expensive materials for the column preparation. Lower dilution of the samples and suppressed extracolumn bandbroadening help in attaining higher separation efficiencies^{2,3}. Whilst chiral stationary phases (CSPs) for HPLC are commercially available, chiral capillary columns must be prepared as laboratory filled ones. Therefore, the comparison of results obtained by HPLC and cLC

on stationary phases based on the same type of chiral selector is very useful for evaluation of the possibility of application of chiral cLC.

Nowadays, many chiral stationary phases are available in LC. Among them amylose- or cellulose-^{4,5}, protein-⁶ and cyclodextrin-⁷ bonded CSPs were successfully employed for enantioseparation of wide range of structurally different compounds. Chiral stationary phases based on macrocyclic antibiotics (MAs) were also used for chiral separation of many types of analytes^{8,9}. MAs contain a number of stereogenic centers and functional groups, which offer multiple interaction possibilities for many chiral molecules.

Recent chiral stationary phase development is, along with introduction of novel or modified chiral selectors, focused on preparation of supports with higher coverage of chiral selectors in order to get an improved stereoselective interaction and capacity with analytes¹⁰.