

## **Estimation of Enantioresolution of Multiple Stereogenic Drugs Using Mobilized and/or Immobilized Polysaccharide-Based HPLC Chiral Stationary Phases**

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**Abstract :** Enantioseparation of drugs with multiple stereogenic centers is challenging. This study objectives to evaluate the efficiency of different mobilized and/or immobilized polysaccharide-based chiral stationary phases to separate enantiomers of some drugs containing multiple stereogenic centers namely indenolol, nadolol, labetalol. The critical mobile phase variables (composition of organic solvents, acid/base ratios) were carefully studied to compare the retention time and elution order of all isomers. Different chromatographic parameters such as capacity factor (k), selectivity ( $\alpha$ ) and resolution (Rs) were calculated. Experimental conditions and the possible chiral recognition mechanisms have been discussed.

**Keywords :** HPLC, polysaccharide columns, enantio-resolution, indenolol, nadolol, labetalol

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