APPLICATION NOTE



Chiral separation of beta blocker pindolol enantiomers

Pindolol is a non-selective beta-blocker used for treatment of hypertension and angina pectoris. It is applied as a racemate, although only the (S)-form is the active stereoisomer.



YMC offers immobilised chiral phases that can be used either in normal or reversed phase mode as well as in SFC mode. CHIRAL ART Cellulose-SC is a very versatile phase to separate many chiral substances. YMC have developed two isocratic applications to separate the pindolol enantiomers in NP or RP mode. Both methods offer a high resolution. The NP application provides more potential for a preparative scale up, while the RP approach separates the enantiomers in a shorter time.

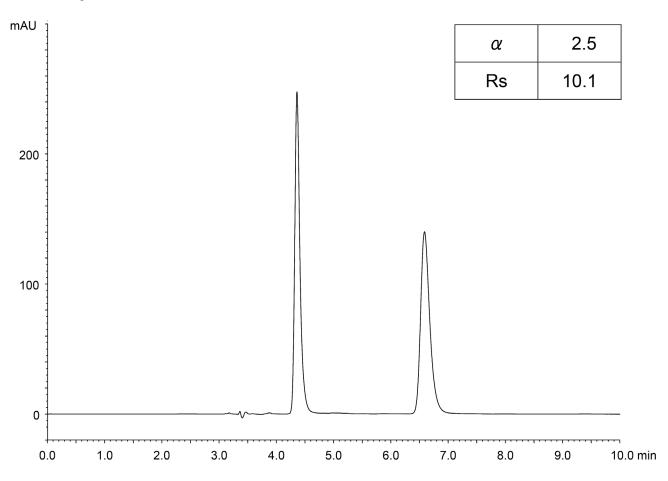
Pindolol

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Normal phase method



Column: CHIRAL ART Cellulose-SC, 5 µm, (250 x 4.6 mm ID)

Part No.: KSC99S05-2546WT

Eluent: n-hexane / ethanol / diethylamine (40/60/0.1)

Flow rate: 1.0 mL/min

Detection: UV at 265 nm

Injection: 10 µl (100 µg/ml)

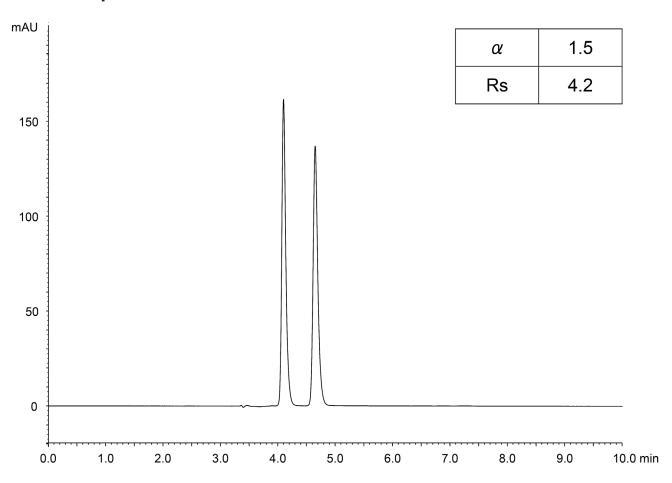
Temperature: 25°C

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Reversed phase method



Column: CHIRAL ART Cellulose-SC, 5 µm, (250 x 4.6 mm ID)

Part No.: KSC99S05-2546WT

Eluent: methanol / diethylamine (100/0.1)

Flow rate: 1.0 mL/min
Detection: UV at 265 nm
Injection: 10 µl (100 µg/ml)

Temperature: 25°C