

1. ABSTRACT

ANALYSIS OF KETOPROFEN, METHYLPARABEN AND PROPYLPARABEN BY MICELLAR ELECTROKINETIC CHROMATOGRAPHY

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In this study, a new micellar electrokinetic chromatography (MEKC) has been developed for the simultaneous analysis of ketoprofen, methylparaben and propylparaben. Separations were carried out in a fused silica capillary (50 cm × 75 μm i.d.) at 30 kV with UV detection at 200 nm. The optimal background electrolyte was 50 mM tricine buffer (pH* 8.3) containing 30 mM sodium dodecyl sulfate as a surfactant and 15 % (V/V) methanol. Rectilinear calibration ranges were 10.0 – 200 mg/100ml for ketoprofen, 0.2 – 4.0 mg/100ml for methylparaben and 0.1 – 2.0 mg/100ml for propylparaben. The MEKC method was applied to the determination of the analytes in pharmaceutical preparation. The total analysis time was <13 min.