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### FABRIC PHASE SORPTIVE EXTRACTION FOR THE DETERMINATION OF LOCAL ANESTHETICS FROM BIOLOGICAL SAMPLES

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A novel, simple and sensitive high-performance liquid chromatography with ultraviolet detection (HPLC-UV) method has been developed and validated for simultaneous quantification of three local anesthetics namely lidocaine, prilocaine and dibucaine in blood serum and urine. New sorptive technique has been used for preconcentration of anesthetics in the various samples of blood serum and urine followed by the HPLC-UV detection. Various factors which can influence the performance of fiber phase extraction like extraction time, back extraction time, eluting solvent and volume of extracting solvent etc were optimized. The chromatographic separation was achieved using a simple mobile phase consisting of acetonitrile: water (70:30 v/v) at an isocratic flow of 0.5mL/min using HPLC (Dionex softron GmbH, Germany) setup consisted of a P 680 quaternary solvent delivery pump, a column o C18 column (100 × 4.6 mm, i.d., 5 μm) and UV detector. The separation was performed on wavelength of 230nm. The calibration curves of target analytes were prepared in the concentration range 5–500 ng/mL with good coefficient of determination values ( $R^2 > 0.992$ ). The limits of detection range from 0.050 to 0.160 μg/mL.