ELECTROCHEMICAL REDUCTION AND DETERMINATION OF AZATHIOPRINE

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Abstract: Sensitive method for the determination of azathioprine by differential-pulse polarography (DPP) is described . The cyclic voltammograms demonstrate the adsorption of the drug on the mercury electrode . The effect of different experimental parameters affecting the drug determination e.g. pH, supporting electrolyte nature, accumulation potential, accumulation time, presence of copper ions and other operational parameters are also mentioned. In pH 7.5, Britton-Robinson buffer, the calibration graph for the determination of azathioprine was linear in the range 5.0×10^{-5} - 5.0×10^{-7} M with RSD of 1.3. The detection limit was found to be 1.0×10^{-8} M. The degree of interference from some other purines, anions and metal ions on the azathioprine peak was evaluated. The method was applied to the determination of drug in commercially available dosage forms .