

Cyclic voltammetric study of the nitro radical anion from nitrendipine generated electrochemically

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Electrochemical studies on nitrendipine using mixed aqueous/dimethylformamide (DMF) solvent have allowed us to generate the one-electron reduction product, the nitro radical anion, RNO.⁻². The voltammetric technique has been employed to study the tendency of RNO.⁻² to undergo further chemical reactions. The electrochemical process corresponds to a dimerization reaction that is initiated electrochemically. The cyclic voltammetric technique has allowed the rate constant and the half-life time to be determined for the decay of RNO.⁻² in aqueous DMF mixed media and by extrapolation in aqueous media. © 1992.