

Catalog #10-4050 SKF-525A

62-68-0

Proadifen; N,N,Diethylaminoethyl 2,2diphenylvalerate hydrochloride Lot # FB1285

SKF-525A is a commonly used non-selective Cytochrome P450 inhibitor.¹ It is also a local anesthetic² acting via blockage of the acetylcholine receptor³ – it is a commonly used reagent to stabilize the desensitized state of muscle AChR⁴. SKF-525A also inhibits glibenclamide-sensitive K+ channels.⁵

- 1) Franklin and Hathaway (2008) 2-Diethylaminoethyl-2,2-diphenylvalerate-HCL)SKF525A) revisited: comparative cytochrome P450 inhibition in human liver microsomes by SKF525A, its metabolites, and SKF-acid and SKF-alcohol Drug Metab.Dispos. **36** 2539
- 2) Suarez-Kurtz and Bianchi (1970) Sites of action of SKF-525A in nerve and muscle J.Pharmacol.Exp.Ther. 172 33
- 3) Spitzmaul et al. (2009) The local anesthetics proadifen and adiphenine inhibit nicotinic receptors by different molecular mechanisms; Br.J.Pharmacol. **157** 804
- 4) Prince and Sine et al. (1999) Acetylcholine and epibatidine binding to muscle acetylcholine receptors distinguish between concerted and uncoupled models; J.Biol.Chem. **274** 19623
- 5) Sakust and Yoneda (1994) Inhibition by SKF 525A and quinacrine of endogenous glibenclamide-sensitive K+ channels in follicle-enclosed Xenopus oocytes; Eur.J.Pharmacol. **252** 117

PHYSICAL DATA

Molecular Weight: 389.96

Molecular Formula: C₂₃H₃₁NO₂·HCl

Purity: >98%

NMR: (Conforms)

Solubility: DMSO (20 mg/ml)

Physical Description: Beige solid

Storage and Stability: Store as supplied at -20°C for up to 1 year from the date of purchase. Solutions in

DMSO may be stored at -20°C for up to 3 months.