

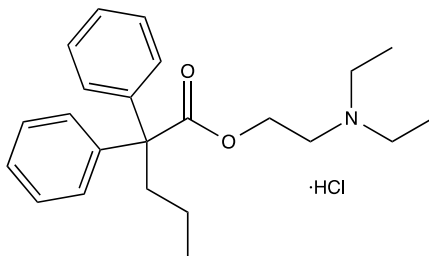
**Catalog #10-4050**

**SKF-525A**

62-68-0

Proadifen; N,N-Diethylaminoethyl 2,2-diphenylvalerate hydrochloride

Lot # FB1285



SKF-525A is a commonly used non-selective Cytochrome P450 inhibitor.<sup>1</sup> It is also a local anesthetic<sup>2</sup> acting via blockage of the acetylcholine receptor<sup>3</sup> – it is a commonly used reagent to stabilize the desensitized state of muscle AChR<sup>4</sup>. SKF-525A also inhibits glibenclamide-sensitive K<sup>+</sup> channels.<sup>5</sup>

- 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<sup>+</sup> channels in follicle-enclosed Xenopus oocytes*; Eur.J.Pharmacol. **252** 117

**PHYSICAL DATA**

Molecular Weight:	389.96
Molecular Formula:	C <sub>23</sub> H <sub>31</sub> NO <sub>2</sub> ·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.

**Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.**

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