Catalog # 10-2924

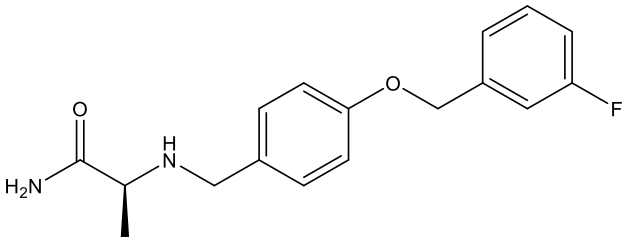
Safinamide

CAS# 133865-89-1

(S)-(+)-2-[[4-(3-Fluorobenzoxy)benzyl]amino]propanamide;

FCE-26743; PNU-151774E; NW-1015

Lot # X109156



A selective and reversible inhibitor of monoamine oxidase B (MAO-B, IC_{50}=98 nM with greater than 100-fold selectivity over MAO-A.[1] Displays anticonvulsant activity[2] and protects against kainate-induced seizures and hippocampal neurodegeneration in rat models[3]. Reduces overactive glutamatergic signaling via use-dependent sodium channel blockade.[4] A novel therapeutic for Parkinson's disease with multiple modes of action.[5] Effective as an add-on to dopamine agonist therapy in early Parkinson's.[6]

1) Strolin Benedetti *et al*. (1994), *The anticonvulsant FCE 26743 is a selective and short-acting MAO-B inhibitor devoid of inducing properties towards cytochrome P450-dependent testosterone hydroxylation in mice and rats* J. Pharm. Pharmacol., **46** 814
2) Fariello *et al*. (1998), *Preclinical evaluation of PNU-151774E as a novel anticonvulsant*; J. Pharmacol. Exp. Ther. **285** 397
3) Maj *et al*. (1998), *PNU-151774E protects against kainite-induced status epilepticus and hippocampal lesions in the rat*; Eur, J. Pharmacol., **59** 27
4) Gardoni *et al*. (2018), *Safinamide Modulates Striatal glutamatergic Signaling in a Rat Model of Levodopa-Induced Dyskinesia*; J. Pharamcol. Exp. Ther., **367** 442
5) Caccia *et al*. (2006), *Safinamide: from molecular targets to a new anti-Parkinson drug*; Neurology, **67(7 Suppl. 2)** S18
6) Schapira *et al*. (2013), *Long-term efficacy and safety of safinamide as add-on therapy in early Parkinson's disease*; Eur. J. Neurol., **20** 271

PHYSICAL DATA

Molecular Weight:	302.34
Molecular Formula:	$C_{17}H_{19}FN_2O_2$
Purity:	98% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (up to 50 mg/ml)
Physical Description:	White solid
Storage and Stability:	Store as supplied desiccated at -20°C for up to 2 years from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 3 months.

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