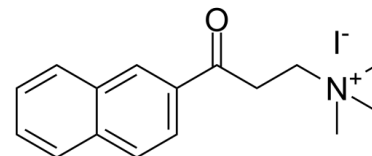


Data Sheet

Product Name:	β-NETA
Cat. No.:	CS-0089727
CAS No.:	31059-54-8
Molecular Formula:	C ₁₆ H ₂₀ INO
Molecular Weight:	369.24
Target:	AChE; Apoptosis
Pathway:	Apoptosis; Neuronal Signaling
Solubility:	DMSO : 31.25 mg/mL (84.63 mM; Need ultrasonic)



BIOLOGICAL ACTIVITY:

β-NETA is a potent and noncompetitive **choline acetyltransferase** (ChA; IC₅₀=76 μM) and **cholinesterase** (ChE; IC₅₀=40 μM) inhibitor. β-NETA weakly inhibits **acetylcholinesterase** (AChE; IC₅₀=1 mM)^{[1][2]}. IC₅₀ & Target: IC₅₀: 76 μM (ChA); 40 μM (ChE); 1 mM (AChE)^[1] **In Vitro:** β-NETA exhibits no effects at muscarinic receptors, ganglionic nicotinic receptors, skeletal muscular nicotinic receptors, cholinesterases or carnitine acetyltransferase at concentrations which inhibits ChA. At concentrations higher than the IC₅₀ value to inhibit ChA, β-NETA antagonizes the effect of acetylcholine (ED₅₀=100 μM), histamine and KCl-induced contractions in the guinea pig longitudinal ileal muscle^[2].

References:

[1]. Sastry BV, et al. Relationships between chemical structure and inhibition of choline acetyltransferase by 2-(alpha-naphthoyl)ethyltrimethylammonium and related compounds. *Pharmacol Res Commun.* 1988 Sep;20(9):751-71.

[2]. B V Sastry, et al. 2-(alpha-Naphthoyl)ethyltrimethylammonium iodide and its beta-isomer: new selective, stable and fluorescent inhibitors of choline acetyltransferase. *J Pharmacol Exp Ther.* 1988 Apr;245(1):72-80.

CAIndexNames:

2-Naphthalenepropanaminium, N,N,N-trimethyl-γ-oxo-, iodide (1:1)

SMILES:

O=C(C1=CC=C2C=CC=CC2=C1)CC[N+](C)(C)C.[I-]

Caution: Product has not been fully validated for medical applications. For research use only.

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