WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
Buyer agrees to purchase the material subject to Cayman’s Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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PRODUCT INFORMATION

α-NETA
Item No. 15125

CAS Registry No.: 31059-54-8
Formal Name: N,N,N-trimethyl-γ-oxo-2-naphthalenepropanaminium, moniodide
MF: C_{16}H_{20}NO • I
FW: 369.2
Purity: ≥97%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

α-NETA is supplied as a solid. A stock solution may be made by dissolving the α-NETA in the solvent of choice. α-NETA is soluble in organic solvents such as methanol and DMSO, which should be purged with an inert gas. The solubility of α-NETA in DMSO is approximately 3 mg/ml.

Description

Choline acetyltransferase (ChAT) mediates the synthesis of the neurotransmitter acetylcholine from acetyl-CoA and choline. In addition to its critical role in neurosignaling, deficiencies in ChAT are linked to congenital myasthenic syndromes, Alzheimer’s disease, and multiple sclerosis.1-3 α-NETA is a stable, non-competitive, and slowly reversible inhibitor of ChAT (IC_{50} = 9 μM).4,5 This naturally fluorescent compound is a poor inhibitor of cholinesterases and carnitine acetyltransferase.5 α-NETA is commonly used in cells in culture.6,7

References