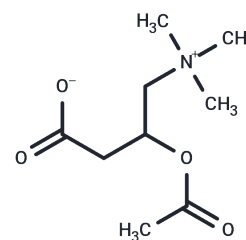


Acetylcarnitine

Chemical Properties

CAS No. :	14992-62-2
Formula:	C ₉ H ₁₇ NO ₄
Molecular Weight:	203.24
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small>



Biological Description

Description	Acetylcarnitine (ALCAR) is a blood-brain barrier-permeable endogenous acetylated derivative of carnitine. It provides energy to neurons by facilitating fatty acid transport into mitochondria for beta-oxidation, exhibiting antioxidant and neuroprotective activities in Alzheimer's models.
Targets(IC50)	Antioxidant, Mitochondrial Metabolism
In vitro	Acetylcarnitine (10 mM) generates acetyl-CoA in ACLY/ACSS2-deficient cells, restoring histone acetylation and cell proliferation [2].

Solubility Information

Solubility	H ₂ O: 200 mg/mL (984.06 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.9203 mL	24.6015 mL	49.2029 mL
5 mM	0.9841 mL	4.9203 mL	9.8406 mL
10 mM	0.492 mL	2.4601 mL	4.9203 mL
50 mM	0.0984 mL	0.492 mL	0.9841 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Bai N, He K, Roller M, Lai CS, Bai L, Pan MH. Flavonolignans and other constituents from *Lepidium meyenii* with activities in anti-inflammation and human cancer cell lines. *J Agric Food Chem*. 2015 Mar 11;63(9):2458-63.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481