

## **Lumiprobe Corporation**

201 International Circle, Suite 135 Hunt Valley, Maryland 21030

**USA** 

Phone: +1 888 973 6353 Fax: +1 888 973 6354 Email: order@lumiprobe.com

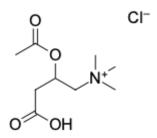
## (C2) Acetylcarnitine

http://www.lumiprobe.com/p/acetylcarnitine

Acetylcarnitine is an ester of the amino acid carnitine with an acetyl group, the first representative of short-chain acylcarnitines.

The product is used primarily as a control for MS/MS.

Acetyl-L-carnitine, like other carnitines, is involved in the transport of fatty acids into mitochondria for  $\beta$ -oxidation and energy production. Acetylcarnitine easily penetrates the blood-brain barrier (BBB) and has an effect on the central nervous system (CNS), is used as a neuroprotector, a neurotrophic drug, and has a cholinomimetic effect. It is also a key molecule in the study of aging and related metabolic processes, due to its involvement in lipid metabolism and the production of acetyl-CoA, a central metabolite in many biosynthetic and energy pathways.



## Structure of (C2) Acetylcarnitine

## **General properties**

Appearance: white solid Molecular weight: 239.70

CAS number: 14992-62-2 (inner salt); 5080-50-2 (hydrochloride)

 $Molecular\ formula:\ C_9H_{18}CINO_4$ 

Solubility: DMF, DMSO, ethanol

Quality control: NMR <sup>1</sup>H and HPLC-MS (95+%)

Storage conditions: 24 months after receival at -20°C in the dark. Transportation: at room temperature for up to 3 weeks.

Desiccate.

Legal statement: This Product is offered and sold for research purposes only. It has not been tested for safety and

efficacy in food, drug, medical device, cosmetic, commercial or any other use. Supply does not express or imply authorization to use for any other purpose, including, without limitation, in vitro diagnostic purposes, in the manufacture of food or pharmaceutical products, in medical devices or in cosmetic

products.