

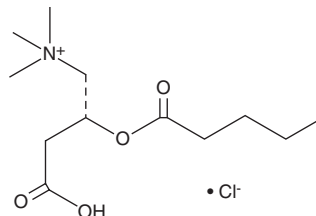
PRODUCT INFORMATION



Valeryl-L-carnitine (chloride)

Item No. 26563

CAS Registry No.: 162040-64-4
Formal Name: 3-carboxy-N,N,N-trimethyl-2R-[(1-oxopentyl)oxy]-1-propanaminium, monochloride
Synonyms: CAR 5:0, C5:0 Carnitine, L-Carnitine valeryl ester, L-Valerylcarnitine
MF: $C_{12}H_{24}NO_4 \cdot Cl$
FW: 281.8
Purity: $\geq 98\%$
Supplied as: A solid
Storage: $-20^{\circ}C$
Stability: ≥ 2 years



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

Laboratory Procedures

Valeryl-L-carnitine (chloride) is supplied as a solid. A stock solution may be made by dissolving the valeryl-L-carnitine (chloride) in the solvent of choice, which should be purged with an inert gas. Valeryl-L-carnitine (chloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of valeryl-L-carnitine (chloride) in these solvents is approximately 25, 20, and 15 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of valeryl-L-carnitine (chloride) can be prepared by directly dissolving the solid in aqueous buffers. The solubility of valeryl-L-carnitine (chloride) in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Valeryl-L-carnitine is a short-chain acylcarnitine and a derivative of L-carnitine (Item No. 21489). Valeryl-L-carnitine levels increase in the serum of rhesus monkeys following exposure to 7 and 10 Gray units (Gy) of ionizing radiation.¹

Reference

1. Pannkuk, E.L., Laiakis, E.C., Authier, S., *et al.* Targeted metabolomics of nonhuman primate serum after exposure to ionizing radiation: Potential tools for high-throughput biodosimetry. *RSC Adv.* **6**(56), 51192-51202 (2016).

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.

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