

PRODUCT INFORMATION



Pentadecanoyl-L-carnitine (chloride)

Item No. 37677

CAS Registry No.: 173686-57-2

Formal Name: (R)-3-carboxy-N,N,N-trimethyl-2-[(1-oxopentadecyl)oxy]-1-propanaminium, monochloride

Synonyms: CAR 15:0, C15:0 Carnitine, L-Carnitine pentadecanoyl ester, L-Pentadecanoylcarnitine

MF: $C_{22}H_{44}NO_4 \cdot Cl$

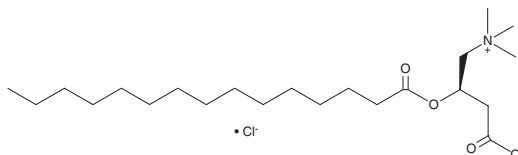
FW: 422.0

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

Pentadecanoyl-L-carnitine (chloride) is supplied as a solid. A stock solution may be made by dissolving the pentadecanoyl-L-carnitine (chloride) in the solvent of choice, which should be purged with an inert gas. Pentadecanoyl-L-carnitine (chloride) is slightly soluble in DMSO.

Description

Pentadecanoyl-L-carnitine is a cannabinoid (CB) receptor agonist (EC_{50} s = 3.7 and 3.2 μM for CB_1 and CB_2 receptors, respectively, in a cAMP modulation assay).¹ It is also an agonist at the serotonin (5-HT) receptor subtypes 5-HT_{1A} and 5-HT_{1B} (EC_{50} s = 9.6 and 9.3 μM , respectively) and an antagonist at histamine H₁ and H₂ receptors (EC_{50} s = 10.9 and 6.1 μM , respectively). Pentadecanoyl-L-carnitine inhibits T cell proliferation in an SAg primary human cell system and reduces chemokine (C-C) motif ligand 2 (CCL2) levels in an Mphg primary human cell system.

Reference

1. Venn-Watson, S., Reiner, J., and Jensen, E.D. Pentadecanoylcarnitine is a newly discovered endocannabinoid with pleiotropic activities relevant to supporting physical and mental health. *Sci. Rep.* **12**(1), 13717 (2022).

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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