

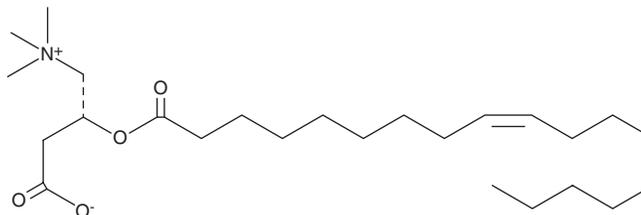
# PRODUCT INFORMATION



## Oleoyl-L-carnitine

Item No. 26557

**CAS Registry No.:** 38677-66-6  
**Formal Name:** 3-carboxy-N,N,N-trimethyl-2R-[[[(9Z)-1-oxo-9-octadecen-1-yl]oxy]-1-propanaminium, inner salt  
**Synonyms:** CAR 18:1, C18:1 Carnitine, L-Carnitine oleoyl ester, L-Oleoylcarnitine  
**MF:** C<sub>25</sub>H<sub>47</sub>NO<sub>4</sub>  
**FW:** 425.6  
**Purity:** ≥95%  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥2 years



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

### Laboratory Procedures

Oleoyl-L-carnitine is supplied as a solid. A stock solution may be made by dissolving the oleoyl-L-carnitine in the solvent of choice, which should be purged with an inert gas. Oleoyl-L-carnitine is soluble in organic solvents such as ethanol, methanol, DMSO, and dimethyl formamide (DMF). The solubility of oleoyl-L-carnitine in ethanol and DMF is approximately 20 mg/ml and approximately 14 mg/ml in DMSO. Oleoyl-L-carnitine is slightly soluble in methanol.

### Description

Oleoyl-L-carnitine is a long-chain acylcarnitine and an inhibitor of glycine transporter 2 (GlyT2; IC<sub>50</sub> = 340 nM).<sup>1,2</sup> It is selective for GlyT2 over GlyT1 (IC<sub>50</sub> = >10,000 nM). Plasma levels of oleoyl-L-carnitine are increased in patients with chronic kidney disease or end-stage renal disease receiving incident hemodialysis and these are associated with cardiovascular mortality.<sup>1</sup>

### Reference

1. Kalim, S., Clish, C.B., Wenger, J., *et al.* A plasma long-chain acylcarnitine predicts cardiovascular mortality in incident dialysis patients. *J. Am. Heart Assoc.* **2(6)**, e000542 (2013).
2. Carland, J.E., Mansfield, R.E., Ryan, R.M., *et al.* Oleoyl-L-carnitine inhibits glycine transport by GlyT2. *Br. J. Pharmacol.* **168(4)**, 891-902 (2013).

#### 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

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