

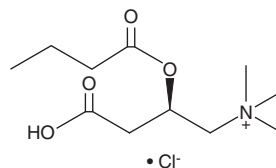
# PRODUCT INFORMATION



## Butyryl-L-carnitine (chloride)

Item No. 26542

**CAS Registry No.:** 162067-50-7  
**Formal Name:** (2R)-3-carboxy-N,N,N-trimethyl-2-(1-oxobutoxy)-1-propanaminium, monochloride  
**Synonyms:** L-Butyrylcarnitine, CAR 4:0, C4:0 Carnitine, L-Carnitine butyryl ester  
**MF:** C<sub>11</sub>H<sub>22</sub>NO<sub>4</sub> • Cl  
**FW:** 267.8  
**Purity:** ≥95%  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years



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

### Laboratory Procedures

Butyryl-L-carnitine (chloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the butyryl-L-carnitine (chloride) in the solvent of choice, which should be purged with an inert gas. Butyryl-L-carnitine (chloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of butyryl-L-carnitine (chloride) in ethanol and DMF is approximately 20 mg/ml and approximately 10 mg/ml in DMSO.

### Description

Butyryl-L-carnitine is a butyrate ester of carnitine.<sup>1</sup> It is an inhibitor of intestinal transporters, blocking carnitine uptake by the carnitine transporter and glycine transport by the amino acid transporter in human retinal pigment epithelial (HRPE) cells (IC<sub>50</sub>s = 1.5 μM and 4.6 mM, respectively).

### Reference

1. Srinivas, S.R., Prasad, P.D., Umopathy, N.S., *et al.* Transport of butyryl-L-carnitine, a potential prodrug, via the carnitine transporter OCTN2 and the amino acid transporter ATB<sup>0+</sup>. *Am. J. Physiol. Gastrointest. Liver Physiol.* **293**(5), G1046-G1053 (2007).

**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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