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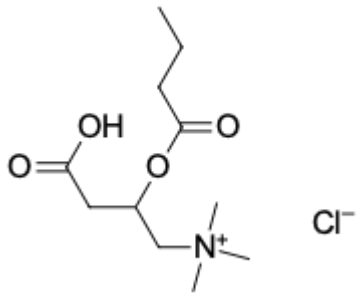
(C4) Butyrylcarnitine

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

Butyrylcarnitine, also known as (3R)-3-(butyryloxy)-4-(trimethylammonio)butanoate or L-carnitine butyryl ester, is classified as a member of the acylcarnitines. Acylcarnitines are organic compounds containing a fatty acid with the carboxylic acid attached to carnitine through an ester bond. Butyrylcarnitine may be used as an analytical reference standard for the separation and identification of underivatized butyryl-L-carnitine in human plasma samples using high-performance liquid chromatography coupled to tandem mass spectrometry (HPLC-MS/MS).

Butyrylcarnitine can be used to study its role in energy production and its metabolic effects, to understand metabolic diseases and conditions associated with mitochondrial dysfunction. Butyrylcarnitine is a major biological marker of short-chain acyl-CoA dehydrogenase deficiency, glutaric acidemia type II and isobutyrylglycinuria, and ethylmalonic encephalopathy.

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



Structure of (C4) Butyrylcarnitine

General properties

Appearance:	white solid
Molecular weight:	267.75
CAS number:	162067-50-7 (chloride), 25576-40-3 (inner salt)
Molecular formula:	$C_{11}H_{22}ClNO_4$
Solubility:	DMSO, DMF, ethanol
Quality control:	NMR ^1H 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.