

PRODUCT INFORMATION



Tigloyl-L-carnitine (chloride)

Item No. 30994

Formal Name: 3-carboxy-N,N,N-trimethyl-2-[[[(2E)-2-methyl-1-oxo-2-buten-1-yl]oxy]-1-Propanaminium, inner salt, monochloride

Synonyms: CAR 5:1, C5:1 Carnitine, L-Carnitine tigloyl ester, L-Carnitine tiglyl ester, L-Tigloylcarnitine, L-Tiglylcarnitine

MF: $C_{12}H_{22}NO_4 \cdot Cl$

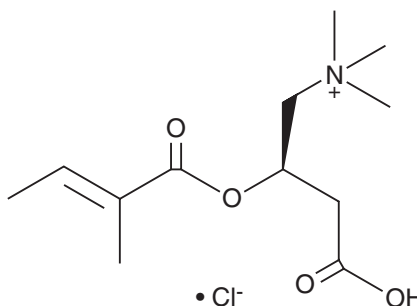
FW: 279.8

Purity: $\geq 95\%$

Supplied as: A solid

Storage: $-20^{\circ}C$

Stability: ≥ 4 years



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

Laboratory Procedures

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

Description

Tigloyl-L-carnitine is a short-chain acylcarnitine composed of tiglic acid and L-carnitine (Item No. 21489). Plasma levels of tigloyl-L-carnitine are increased in several melanoma mouse xenograft models compared with non-tumor bearing mice.¹ Tigloyl-L-carnitine levels are increased in dried blood spots from neonates with mitochondrial acetyl-CoA acetyltransferase (T2) deficiency, an inborn error of isoleucine metabolism characterized by ketoacidosis.²

References

1. Weber, D.D., Thapa, M., Aminzadeh-Gohari, S., *et al.* Targeted metabolomics identifies plasma biomarkers in mice with metabolically heterogeneous melanoma xenografts. *Cancers (Basel)* **13**(3), 434 (2021).
2. Fukao, T., Zhang, G.X., Sakura, N., *et al.* The mitochondrial acetoacetyl-CoA thiolase (T2) deficiency in Japanese patients: Urinary organic acid and blood acylcarnitine profiles under stable conditions have subtle abnormalities in T2-deficient patients with some residual T2 activity. *J. Inherit. Metab. Dis.* **26**(5), 423-431 (2003).

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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