

# PRODUCT INFORMATION



## IMCTA-C14 (trifluoroacetate salt)

Item No. 40230

**Formal Name:** (2R,3R,4S,5S,6R)-2-(((2R,3R,4S,5S,6S)-3,4-dihydroxy-6-(hydroxymethyl)-5-(tetradecylamino)tetrahydro-2H-pyran-2-yl)oxy)-6-(hydroxymethyl)tetrahydro-2H-pyran-3,4,5-triol, trifluoroacetate salt

**MF:**  $C_{26}H_{51}NO_{10} \cdot CF_3COOH$

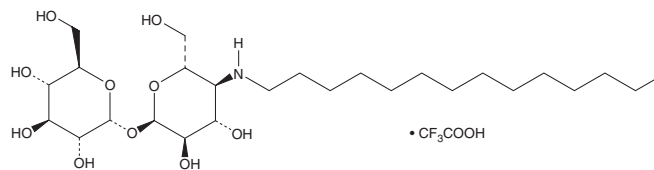
**FW:** 651.7

**Purity:**  $\geq 90\%$

**Supplied as:** A powder

**Storage:**  $-20^\circ C$

**Stability:**  $\geq 4$  years



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

### Laboratory Procedures

IMCTA-C14 (trifluoroacetate salt) is supplied as a powder. A stock solution may be made by dissolving the IMCTA-C14 (trifluoroacetate salt) in the solvent of choice, which should be purged with an inert gas. IMCTA-C14 (trifluoroacetate salt) is soluble in organic solvents such as methanol and DMSO. It is also soluble in water. We do not recommend storing the aqueous solution for more than one day.

### Description

IMCTA-C14 is a detergent and derivative of the microbial metabolite 4-trehalosamine (Item No. 40229).<sup>1</sup> It has a critical micelle concentration (CMC) of 0.11 mM and a hydrophilic-lipophilic balance (HLB) value of 9.72. IMCTA-C14 (0.05 and 0.5%) extracts proteins, including membrane proteins, from OVK18 ovarian cancer cells. It is active against several strains of various bacteria (MICs = 8-128  $\mu g/ml$ ) and is cytotoxic against a panel of 52 cancer cell lines (IC<sub>50</sub>s = 2.9-29.2  $\mu g/ml$ ). IMCTA-C14 (50  $\mu M$ ) induces autophagy in OVK18 cells.

### Reference

1. Wada, S.I., Arimura, H., Nagayoshi, M., et al. Rediscovery of 4-trehalosamine as a biologically stable, mass-producible, and chemically modifiable trehalose analog. *Adv. Biol. (Weinh)* **6(6)**, e2101309 (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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