

# PRODUCT INFORMATION



## BTC AM

Item No. 20424

**CAS Registry No.:** 176767-94-5  
**Formal Name:** N-[2-[(acetyloxy)methoxy]-2-oxoethyl]-N-[3-(2-benzothiazolyl)-6-[2-[2-[bis[2-[(acetyloxy)methoxy]-2-oxoethyl]amino]-5-methylphenoxy]ethoxy]-2-oxo-2H-1-benzopyran-7-yl]-glycine(acetyloxy) methyl ester

**Synonym:** BTC Acetoxymethyl ester

**MF:** C<sub>45</sub>H<sub>45</sub>N<sub>3</sub>O<sub>20</sub>S

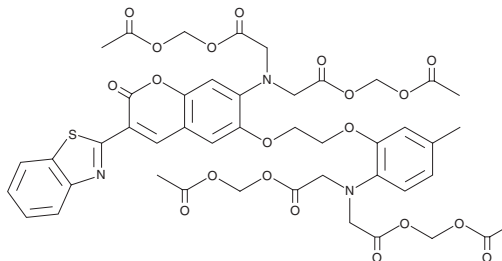
**FW:** 979.9

**Purity:** ≥90%

**Supplied as:** A 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

BTC AM is supplied as a solid. A stock solution may be made by dissolving the BTC AM in the solvent of choice, which should be purged with an inert gas. BTC AM is soluble in DMSO.

### Description

BTC AM is a cell-permeable acetoxy-methyl ester of BTC (Item No. 20423). As BTC AM enters cells, it is hydrolyzed by intracellular esterases to produce BTC. BTC is a low affinity calcium indicator ( $K_d = 7-26 \mu\text{M}$ ) that displays excitation/emission spectra of 401/529 nm, respectively. It exhibits a shift in the excitation maximum from approximately 480 to 401 nm upon calcium binding, enabling determination of ratiometric calcium measurements.<sup>1</sup> BTC is suitable for detecting elevated calcium levels associated with activation of smooth muscle, neurons, and intracellular calcium stores.<sup>1,2</sup>

### References

1. Sabnis, R. W. Handbook of biological dyes and stains: Synthesis and industrial applications. (2010).
2. Hyrc, K. L., Bownik, J. M., and Goldberg, M. P. Neuronal free calcium measurement using BTC/AM, a low affinity calcium indicator. *Cell Calcium* **24**(3), 165-175 (1998).

#### 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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#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897

[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM