# **PRODUCT** INFORMATION



## Calcein UltraBlue<sup>™</sup> AM

Item No. 20639

Synonym:	Calcein UltraBlue™ Acetoxymethyl ester
FW:	788.7
Purity:	≥90%
Ex./Em. Max:	360/445 nm
Supplied as:	A solid
Storage:	-20°C
Stability:	≥4 years
Special Conditions: Light sensitive	
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.	

#### Laboratory Procedures

Calcein UltraBlue<sup>™</sup> AM is supplied as a solid. A stock solution may be made by dissolving the Calcein UltraBlue™ AM in the solvent of choice. Calcein UltraBlue™ AM is soluble in the organic solvent DMSO, which should be purged with an inert gas.

#### Description

Calcein UltraBlue™ AM is a fluorogenic dye that is used to assess cell viability. As the acetoxymethyl ester, Calcein UltraBlue<sup>™</sup> AM is non-fluorescent but cell-permeant and is hydrolyzed to the fluorescent probe Calcein UltraBlue™ (Item No. 20638) by intracellular esterases. Calcein UltraBlue™ is retained by living cells and displays excitation/emission maxima of 360/445 nm, respectively. Calcein UltraBlue™ AM is a dark blueemitting variant of the green fluorophore calcein AM (Item No. 14948), which has been used to evaluate cell viability and cytotoxicity.<sup>1,2</sup>

#### References

- 1. Bratosin, D., Mitrofan, L., Palii, C., et al. Novel fluorescence assay using calcein-AM for the determination of human erythrocyte viability and aging. Cytometry 66(1), 78-84 (2005).
- 2. Lévesque, A., Paquet, A., and Pagé, M. Measurement of tumor necrosis factor activity by flow cytometry. Cytometry 20(2), 181-184 (1995).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFFTY 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

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 01/06/2023

### 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