

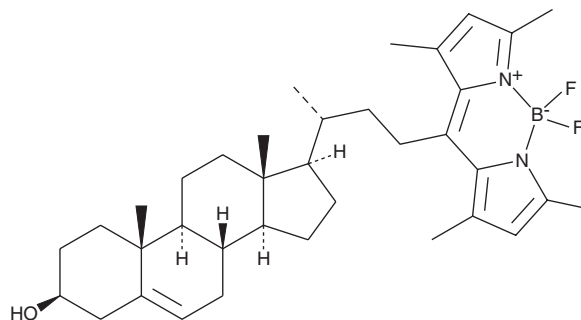
PRODUCT INFORMATION



BODIPY-Cholesterol

Item No. 24618

CAS Registry No.: 878557-19-8
Formal Name: (T-4)-[(3 β)-24-(3,5-dimethyl-1H-pyrrol-2-yl- κ N)-24-(3,5-dimethyl-2H-pyrrol-2-ylidene- κ N)chol-5-en-3-olato]difluoro-boron
Synonym: BCh2
MF: C₃₆H₅₁BF₂N₂O
FW: 576.6
Purity: \geq 98%
UV/Vis.: λ_{max} : 243, 306, 496 nm
Ex./Em. Max: 480/508 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: \geq 2 years



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

Laboratory Procedures

BODIPY-cholesterol is supplied as a crystalline solid. A stock solution may be made by dissolving the BODIPY-cholesterol in the solvent of choice. BODIPY-cholesterol is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of BODIPY-cholesterol in ethanol is approximately 0.5 mg/ml and approximately 1 mg/ml in DMSO and DMF.

BODIPY-cholesterol is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, BODIPY-cholesterol should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. BODIPY-cholesterol has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

BODIPY-cholesterol is a biologically active and cell-permeable analog of cholesterol that is tagged with a fluorescent BODIPY group at carbon 24.^{1,2} It co-localizes with dehydroergosterol, a marker of cholesterol, in HeLa cells and is trafficked from the plasma membrane to the endocytic recycling compartment in BHK cells.² BODIPY-cholesterol displays excitation/emission maxima of 480/508 nm, respectively, and has been used to monitor sterol uptake and inter-organelle sterol flux in cells.

References

1. Li, Z., Mintzer, E., and Bittman, R. First synthesis of free cholesterol-BODIPY conjugates. *J. Org. Chem.* **71**(4), 1718-1721 (2006).
2. Wüstner, D., Solanko, L., Sokol, E., *et al.* Quantitative assessment of sterol traffic in living cells by dual labeling with dehydroergosterol and BODIPY-cholesterol. *Chem. Phys. Lipids* **164**(3), 221-235 (2011).

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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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