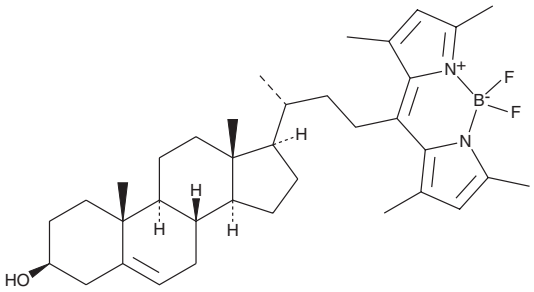
PRODUCT INFORMATION

BODIPY 480/508-Cholesterol

Item No. 24618

CAS Registry No.:	878557-19-8
Formal Name:	(T-4)-[(3β)-24-(3,5-dimethyl-1H-pyrrol-2-yl-κN)-24-(3,5-dimethyl-2H-pyrrol-2-ylidene-κN)chol-5-en-3-olato]difluoro-boron
Synonyms:	BCh2, Green BODIPY-Cholesterol
MF:	$C_{36}H_{51}BF_2N_2O$
FW:	576.6
Purity:	≥98%
UV/Vis.:	λ_{max}: 243, 306, 496 nm
Ex./Em. Max:	480/508 nm
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥2 years



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

Laboratory Procedures

BODIPY 480/508-cholesterol is supplied as a crystalline solid. A stock solution may be made by dissolving the BODIPY 480/508-cholesterol in the solvent of choice. BODIPY 480/508-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 480/508-cholesterol in ethanol is approximately 0.5 mg/ml and approximately 1 mg/ml in DMSO and DMF.

BODIPY 480/508-cholesterol is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, BODIPY 480/508-cholesterol should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. BODIPY 480/508-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 480/508-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 480/508-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).

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