PRODUCT INFORMATION

BODIPY-Cholesterol
Item No. 24618

CAS Registry No.: 878557-19-8
Formal Name: (T-4)-(3b)-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
Synonym: BCh2
MF: C_{36}H_{51}BF_{2}N_{2}O
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-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.\textsuperscript{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.\textsuperscript{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