Cholesterol Sulfate (sodium salt)

Item No. 15106

CAS Registry No.: 2864-50-8

Formal Name: (3β)-3-(hydrogen sulfate)-cholest-5-en-3-ol, monosodium salt

Synonyms: SCS, Sodium Cholesteryl Sulfate

MF: C_{27}H_{45}O_{4}S • Na

FW: 488.7

Purity: ≥95%

Stability: ≥2 years at -20°C

Supplied as: A crystalline solid

Laboratory Procedures

For long term storage, we suggest that cholesterol sulfate (sodium salt) be stored as supplied at -20°C. It should be stable for at least two years.

Cholesterol sulfate (sodium salt) is supplied as a crystalline solid. A stock solution may be made by dissolving the cholesterol sulfate (sodium salt) in the solvent of choice. Cholesterol sulfate (sodium salt) is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. The solubility of cholesterol sulfate (sodium salt) in these solvents is approximately 10 and 20 mg/ml, respectively.

Cholesterol sulfate (sodium salt) is sparingly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

Cholesterol sulfate is an endogenous component of cell membranes where it serves as a substrate for steroid synthesis, influences lipid metabolism, stabilizes cell membranes, regulates the activity of functional proteins, and plays a role in keratinocyte differentiation and development of the epidermal barrier. ¹ This synthetic formulation can be used to form nonconventional liposomes in order to study cellular membrane properties.²

References


Related Products

For a list of related products please visit: www.caymanchem.com/catalog/15106

SafetY data

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Safety Data Sheet, which has been sent per email to your institution.

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