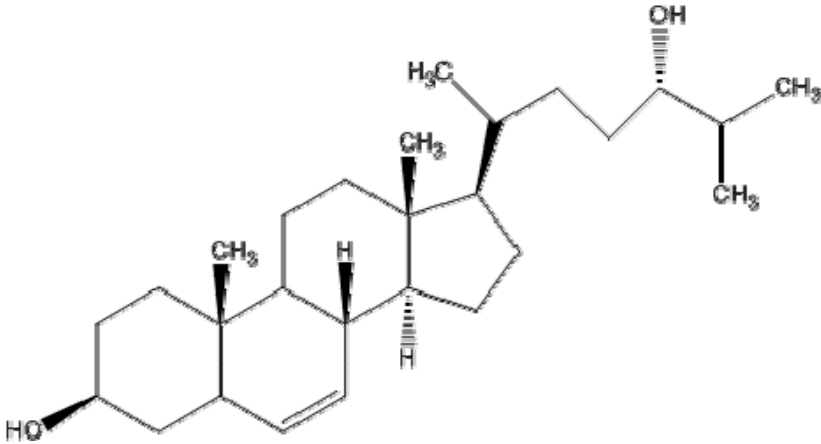


24(S)-Hydroxycholesterol

Cerebrosterol, Cholest-5-ene-3,24-diol, (24S)-24-Hydroxycholesterol, cholest-5-en-3beta,24S-diol

Instruction Manual

Catalog Number	PK-CA577-2411-1
Description	An important cholesterol metabolite (cholesterol 24-hydroxylase) found in the brain. It is an endogenous agonist of the nuclear receptor LXR. It has been shown to induce cell death in neuroblastoma cells, possibly via a necroptosis pathway. 24(S)-Hydroxycholesterol has also been found to be a high affinity ligand for ROR α and ROR γ ($K_i = 25$ nM). 24(S)-Hydroxycholesterol levels are elevated in the cerebral spinal fluids of patients with neurodegenerative diseases suggesting possible clinical applications. It was also able to reduce A β production and increase ER-resident immature amyloid precursor protein (APP) levels in human neuroblastoma SH-Sy5Y cells and CHO cells via inhibition of intracellular amyloid precursor protein trafficking.
Quantity	1 mg
Sequence / Molecular Weight / Molecular Formula	402.66 Da; C ₂₇ H ₄₆ O ₂
Chemical Structure	
Purity	≥99% (as determined by HPLC)
Appearance / Formulation / Solubility	White solid. Soluble in DMSO (~10 mg/ml) or EtOH (~10 mg/ml).
Storage & Stability	Store desiccated at -20°C. Protect from air, light and moisture.
Applications	See Description.
References	Leoni, V., et al. (2006). <i>Neurosci. Lett.</i> 397 , 83-87; Kolsch, H., et al. (2001). <i>J. Neural Transm.</i> 108 , 475-488.
Caution	Do not take internally. Wear gloves and mask when handling the product! Avoid contact by all modes of exposure.

FOR IN VITRO RESEARCH USE ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC PROCEDURES.