

Catalog	Unit
TBI1331 - 1MG	1 mg
TBI1331 - 5MG	5 mg

### Product Details

**Formal Name:** (3S,8S,9S,10R,13R,14S,17R)-17-[(2R,5S)-5-hydroxy-6-methylheptan-2-yl]-10,13-dimethyl-2,3,4,7,8,9,11,12,14,15,16,17-dodecahydro-1H-cyclopenta[a]phenanthren-3-ol

**Molecular Formula:** C<sub>27</sub>H<sub>46</sub>O<sub>2</sub>

**Formula Weight:** 402.66

**CAS Number:** 474-73-7

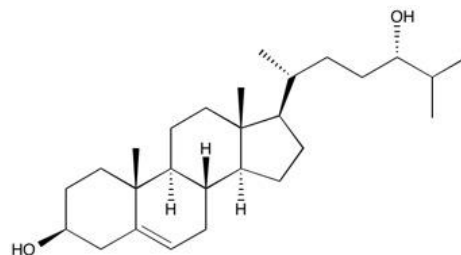
**Purity:** 99%

**Formulation:** Powder

**Solubility:** Soluble in DMSO (up to 10 mg/ml) or in Ethanol (up to 10 mg/ml)

**Storage:** -20°C

**Stability:** ≥ 2 years.



### Applications

LXR agonist, endogenous cholesterol metabolite

### Functions

24(S)-Hydroxycholesterol (474-73-7) is 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. 24S Hydroxycholesterol has also been found to be a high affinity ligand for ROR $\alpha$  and ROR $\gamma$  (K<sub>i</sub> = 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 $\beta$  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.

### Application Procedures

First dissolved in DMSO (up to 10 mg/ml) or ethanol (up to 10 mg/ml), then diluted to aqueous buffer. Solutions in DMSO or ethanol may be stored at -20°C for up to 2 months.

### Relative Products

TBI1170	Mitomycin C
TBI1345	E64, Cysteine protease inhibitor
TBI1347	E64d, Cysteine protease inhibitor
TBI2064	Chromomycin A3
TBI2069	Cytochalasin B
TBI2794	5-EDU, DNA Click labeling probe
TBI2071	Cytochalasin D
TBI1286	Bestatin, Aminopeptidase inhibitor
TBI2140	Gemcitabine
TBI2058	Aphidicolin, DNA polymerase Inhibitor

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