PRODUCT INFORMATION



7-keto-25-hydroxy Cholesterol

Item No. 25973

CAS Registry No.: 64907-23-9

Formal Name: 3β,25-dihydroxy-cholest-5-en-7-one

MF: $C_{27}H_{44}O_3$ FW: 416.6 **Purity:** ≥95% Supplied as: A solid -20°C Storage: Stability: ≥4 years

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

Laboratory Procedures

7-keto-25-hydroxy Cholesterol is supplied as a solid. A stock solution may be made by dissolving the 7-keto-25-hydroxy cholesterol in the solvent of choice, which should be purged with an inert gas. 7-keto-25-hydroxy Cholesterol is soluble in organic solvents such as chloroform and methanol.

Description

7-keto-25-hydroxy Cholesterol is an oxysterol and a proposed metabolite of 7-keto cholesterol (Item No. 16339) and 7-dehydro cholesterol (Item No. 14612). It binds to and activates Smoothened (Smo) at the conserved extracellular cysteine-rich domain (CRD) in a reporter assay. It also increases EGF high affinity binding site numbers in normal rat kidney (NRK) cells.²

References

- 1. Myers, B.R., Sever, N., Chong, Y.C., et al. Hedgehog pathway modulation by multiple lipid binding sites on the smoothened effector of signal response. Dev. Cell. 26(4), 346-357 (2013).
- 2. Astruc, M.E. and Lahoua, Z. Potentiation by cholesterol and vitamin D₃ oxygenated derivatives of arachidonic acid release and prostaglandin E2 synthesis induced by the epidermal growth factor in NRK 49F cells: The role of protein kinase C. Cell Signal. 6(7), 763-775 (1994).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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