

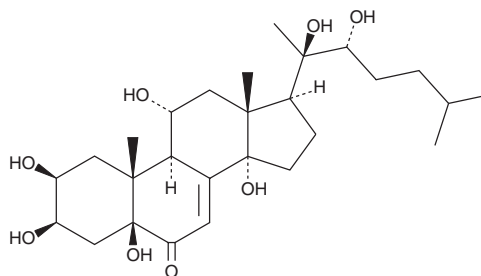
PRODUCT INFORMATION



Muristerone A

Item No. 11741

CAS Registry No.: 38778-30-2
Formal Name: 2 β ,3 β ,5 β ,11 α ,14,20,22R-heptahydroxy-cholest-7-en-6-one
Synonym: Mur A
MF: C₂₇H₄₄O₈
FW: 496.6
Purity: \geq 95%
Supplied as: A solid
Storage: -20°C
Stability: \geq 4 years



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

Laboratory Procedures

Muristerone A is supplied as a solid. A stock solution may be made by dissolving the muristerone A in the solvent of choice, which should be purged with an inert gas. Muristerone A is soluble in organic solvents such as acetic acid, ethanol, methanol, and DMSO.

Description

Muristerone A is a natural analog of 20-hydroxyecdysone (Item No. 16145). It is an agonist of the ecdysteroid receptor ($K_d = 1$ nM), a nuclear receptor that heterodimerizes with a retinoid X receptor ortholog and regulates arthropod development.¹⁻³ Muristerone A is used as an agonist in ecdysone-inducible gene expression systems in mammalian cells.^{4,5} However, it inhibits apoptosis in the human colon carcinoma cell line RKO by inducing the upregulation of Bcl-xL, suggesting limitations in its use in certain types of studies.⁶

References

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2. Landon, T.M., Sage, B.A., Seeler, B.J., *et al.* Characterization and partial purification of the *Drosophila* Kc cell ecdysteroid receptor. *J. Biol. Chem.* **263**(10), 4693-4697 (1988).
3. Lezzi, M., Bergman, T., Henrich, V.C., *et al.* Ligand-induced heterodimerization between the ligand binding domains of the *Drosophila* ecdysteroid receptor and ultraspiracle. *Eur. J. Biochem.* **269**(13), 3237-3245 (2002).
4. No, D., Yao, T.-P., and Evans, R.M. Ecdysone-inducible gene expression in mammalian cells and transgenic mice. *Proc. Natl. Acad. Sci. USA* **93**(8), 3346-3351 (1996).
5. Saez, E., Nelson, M.C., Eshelman, B., *et al.* Identification of ligands and coligands for the ecdysone-regulated gene switch. *Proc. Natl. Acad. Sci. USA* **97**(26), 14512-14517 (2000).
6. Oehme, I., Bösser, S., and Zörnig, M. Agonists of an ecdysone-inducible mammalian expression system inhibit Fas Ligand- and TRAIL-induced apoptosis in the human colon carcinoma cell line RKO. *Cell Death Differ.* **13**(2), 189-201 (2006).

WARNING

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

SAFETY DATA

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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