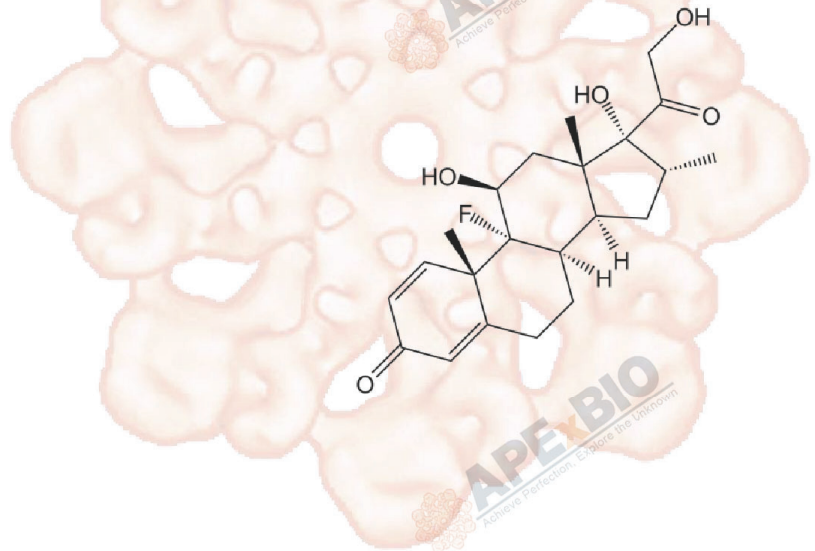


Product Data Sheet

Dexamethasone (DHAP)

Cat. No.:	A2324
CAS No.:	50-02-2
Formula:	C ₂₂ H ₂₉ FO ₅
M.Wt:	392.46
Synonyms:	
Target:	Ubiquitination/ Proteasome
Pathway:	Autophagy
Storage:	Store at -20°C



Solvent & Solubility

insoluble in H₂O; ≥ 19.623 mg/mL in DMSO; ≥ 5.18 mg/mL in EtOH

In Vitro

Preparing Stock Solutions	Solvent	Mass		
		1mg	5mg	10mg
	Concentration			
	1 mM	2.5480 mL	12.7402 mL	25.4803 mL
	5 mM	0.5096 mL	2.5480 mL	5.0961 mL
	10 mM	0.2548 mL	1.2740 mL	2.5480 mL

Please refer to the solubility information to select the appropriate solvent.

Biological Activity

Shortsummary

Glucocorticoidan; anti-inflammatory

IC₅₀ & Target

In Vitro

Cell Viability Assay

Cell Line: Human osteosarcoma cell lineMG-63

Preparation method:

The solubility of this compound in DMSO is >19.6mg/mL. General tips for obtaining a higher concentration: Please warm the tube at 37°C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Reacting conditions:

100 nM; 0-36 h

	Applications:	In human osteoblast-like cell line MG-63, Dexamethasone (Dex) exhibited dose-dependently upregulating RhoB protein expression. Dex treatment for above 2 days could significantly inhibit the growth of MG-63 cells in a dose dependent way.
In Vivo	Animal experiment	
	Animal models:	LPS-induced neuroinflammation mice
	Dosage form:	0.25 mg/kg; intravenous (IV) or intranasal (IN).
	Applications:	In LPS-induced neuroinflammation mice, IN administration of DX significantly reduced the level of IL-6 in the brain extracts and reduced the percentage of GFAP+ brain cells one day after treatment. Compared with IV route, higher levels of DX are observed in the cerebrovasculature of mice after IN administration.
	Other notes:	Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

Product Citations

See more customer validations on www.apexbt.com.

References

- [1]. Diao F1, Chen K2,3, Wang Y1, et al. Involvement of small G protein RhoB in the regulation of proliferation, adhesion and migration by dexamethasone in osteoblastic cells. PLoS One. 2017 Mar 21;12(3):e0174273.
- [2]. Meneses G1, Gevorkian G1, Florentino A1, et al. INTRANASAL DELIVERY OF DEXAMETHASONE EFFICIENTLY CONTROLS LPS-INDUCED MURINE NEUROINFLAMMATION. Clin Exp Immunol. 2017 Jul 28.

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APEX BIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Short-term storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.



APExBIO Technology

www.apexbt.com

7505 Fannin street, Suite 410, Houston, TX 77054.

Tel: +1-832-696-8203 | Fax: +1-832-641-3177 | Email: info@apexbt.com

