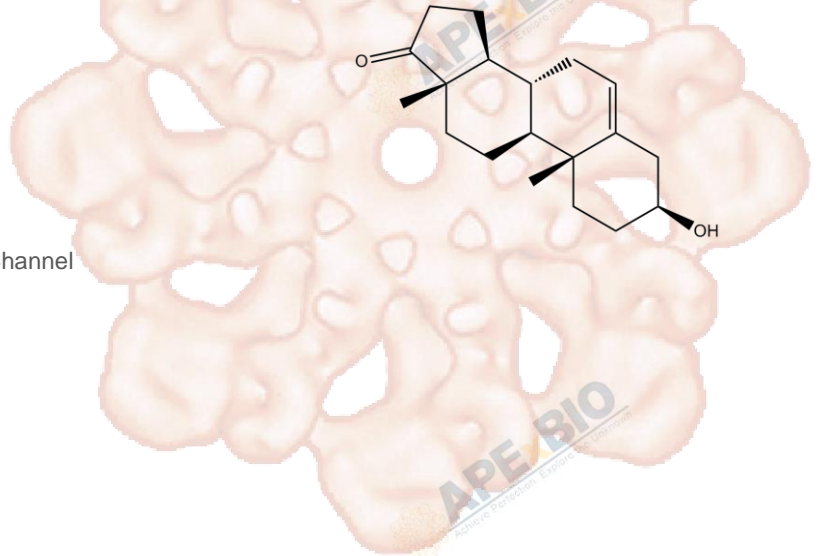


Product Data Sheet

Dehydroepiandrosterone (DHEA)

Cat. No.:	B1375
CAS No.:	53-43-0
Formula:	C19H28O2
M.Wt:	288.42
Synonyms:	
Target:	Membrane Transporter/Ion Channel
Pathway:	Calcium Channel
Storage:	Store at -20°C



Solvent & Solubility

insoluble in H₂O; ≥13.7 mg/mL in DMSO; ≥58.6 mg/mL in ETOH

In Vitro

Preparing Stock Solutions	Solvent	Mass	1mg	5mg	10mg
			Concentration		
	1 mM		3.4672 mL	17.3358 mL	34.6717 mL
	5 mM		0.6934 mL	3.4672 mL	6.9343 mL
	10 mM		0.3467 mL	1.7336 mL	3.4672 mL

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

Biological Activity

Shortsummary

Endogenous steroid hormone

IC₅₀ & Target

In Vitro

Cell Viability Assay

Cell Line:	Cysticerci; hippocampal
Preparation method:	This compound is soluble in DMSO and in ethanol. 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:	1.7, 3.5, 7 μM for 1-10 days; or 10–100 nM for 6–8 h

	Applications:	Treatment of <i>T. crassiceps</i> with DHEA decreased reproduction, motility and viability in a dose- and time-dependent fashion [1]. Moreover, Pre-treatment with DHEA (10–100 nM for 6–8 h) protected hippocampal neurons against excitatory amino acid (0.1, 1, 10, and 50 mM)-induced neurotoxicity in vitro [2].
In Vivo	Animal experiment	
	Animal models:	Ovarian cortical autograft ('normograft') model; or rats model
	Dosage form:	DHEA single rod implants (length 5 cm, diameter 3.35 mm), subcutaneous administration for 10 weeks.
	Applications:	DHEA promoted granulosa cell proliferation and increased the follicular anti-Mullerian hormone (AMH) expression at the preantral and early antral follicle stages [3]. Moreover, DHEA protected hippocampal neurons against N-methyl-D-aspartic acid (NMDA)-induced neurotoxicity in vivo [2].
	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

- Vargas-Villavicencio, J. A., Larralde, C. and Morales-Montor, J. (2008) Treatment with dehydroepiandrosterone in vivo and in vitro inhibits reproduction, growth and viability of *Taenia crassiceps* metacestodes. *Int J Parasitol.* 38, 775-781
- Kimonides, V. G., Khatibi, N. H., Svendsen, C. N., Sofroniew, M. V. and Herbert, J. (1998) Dehydroepiandrosterone (DHEA) and DHEA-sulfate (DHEAS) protect hippocampal neurons against excitatory amino acid-induced neurotoxicity. *Proc Natl Acad Sci U S A.* 95, 1852-1857
- Narkwichean, A., Jayaprakasan, K., Maalouf, W. E., Hernandez-Medrano, J. H., Pincott-Allen, C. and Campbell, B. K. (2014) Effects of dehydroepiandrosterone on in vivo ovine follicular development. *Hum Reprod.* 29, 146-154

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.



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