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DATASHEET

Corticosterone

Product overview

Name	Corticosterone
Cat No	HB2808
Biological action	Agonist
Purity	>98%
Description	Endogenous gluococorticoid. MR and GR agonist.

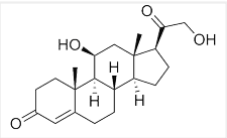
Biological Data

Biological description	Endogenous gluococorticoid. Acts as a mineralcorticoid (MR) and glucocorticoid receptor (GR) agonist. Involved in a wide range of biological processes and shows a variety of effects.

Solubility & Handling

Storage instructions	Room temperature
Solubility overview	Soluble in DMSO (100 mM) and in ethanol (10 mM)
Important	This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use.

Chemical Data

Chemical name	(11β)-11,21-Dihydroxypregn-4-ene-3,2 0-dione
Molecular Weight	346.46
Chemical structure	
Molecular Formula	$C_{21}H_{30}O_4$
CAS Number	50-22-6
PubChem identifier	5753
SMILES	C[C@]12CCC(=O)C=C1CC[C@@H]3[C@@H]2[C@H](C[C@]4([C@H]3CC[C@@H]4C(=O)CO)C)O
InChi	InChI=1S/C21H30O4/c1-20-8-7-13(23)9-12(20)3-4-14-15-5-6-16(18(25)11-22)21(15,2)10-17(24)19(14)20/h9,14-17,19,22,24H,3-8,10-11H2,1-2H3/t14-,15-,16+,17-,19+,20-,21-/m0/s1
InChiKey	OMFXVFTZEKFJBZ-HJTSIMOOSA-N
MDL number	MFCD00037715
Appearance	White solid

References

Hippocampal corticosterone impairs memory consolidation during sleep but improves consolidation in the wake state.

Kelemen E *et al* (2014) Hippocampus 24(5)

PubMedID 24596244

Corticosterone rapidly increases thorns of CA3 neurons via synaptic/extranuclear glucocorticoid receptor in rat hippocampus.

Yoshiya M *et al* (2013) Front Neural Circuits 7
PubMedID 24348341

Corticosterone acts in the nucleus accumbens to enhance dopamine signaling and potentiate reinstatement of cocaine seeking.

Graf EN *et al* (2013) J Neurosci 33(29)
PubMedID 23864669