SZABO SCANDIC

Part of Europa Biosite

Produktinformation

- Forschungsprodukte & Biochemikalien
- Zellkultur & Verbrauchsmaterial
- Diagnostik & molekulare Diagnostik
- Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!

Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

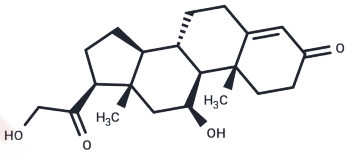
linkedin.com/company/szaboscandic

Data Sheet (Cat.No.T0948L)

TargetMol

Corticosterone

Chemical Properties



CAS No. : 50-22-6

Formula: C21H30O4

Molecular Weight: 346.46

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Biological Description

Description	Corticosterone (Kendall's compound B) is an adrenocortical steroid with salocorticoid and glucocorticoid activity that is orally active. Corticosterone is involved in the regulation of energy, immune responses, and stress responses in the body.
Targets(IC50)	Glucocorticoid Receptor,Endogenous Metabolite
In vitro	**METHODS**: The mouse mammary hyperplastic epithelial cell line TM10 was treated with Corticosterone (50-200 μM) for 24-72 h. The cell number was detected by crystal violet staining. **RESULTS**: Corticosterone significantly inhibited cell growth by 50, 57, and 76% after treatment with 50, 100, and 200 μM for 72 hours. [1] **METHODS**: Human neuroblastoma cells SK-N-BE(2)C were treated with Corticosterone (1-100 nM) for 1-14 days, and gene expression levels were measured by RT-PCR. **RESULTS**: Corticosterone increased NET mRNA levels in SK-N-BE(2)C cells. [2]
In vivo	**METHODS**: To investigate the effects on depressive-like behavior in mice, corticosterone (20 mg/kg, suspended in physiological saline containing 0.1% DMSO and 0.1% Tween-80) was injected subcutaneously into C57BL/6N mice once daily for 1-5 weeks. **RESULTS**: Repeated injections of corticosterone increased immobility behavior in a time-dependent manner in the forced swimming and tail suspension tests. At the same time, this injection pattern had a time-dependent effect on tyrosine hydroxylase levels in the mouse hippocampus. These **RESULTS** are consistent with correlations in models of stress-induced depression. [3] **METHODS**: To investigate the modulatory effects on fear, Corticosterone (2 mg/kg, 2.5% EtOH in saline) was injected intraperitoneally into C57Bl/6 mice trained in an auditory fear conditioned reflex paradigm. **RESULTS**: Corticosterone affected memory consolidation and recovery; in male mice, corticosterone consistently increased freezing behavior to tones, whereas in female mice, corticosterone reduced freezing behavior 24 h after training. [4]
Cell Research	HEK293 cells are grown in 6-cm dishes in 10% fetal bovine serum DMEM medium. When cells are 90% confluent, the medium is changed to 0.5% fetal bovine serum DMEM to limit serum-induced up-regulation of SGK. For in vitro phosphorylation analysis, the following approach is used. HEK293 cells are transfected with or without SGK1 small interfering RNA. One day after transfection, cells are treated without or with 100 nM corticosterone for 30 min, washed, and maintained in 0.5% fetal bovine serum DMEM for 1.5 h. Then cells are lysed in the CytoBuster protein extraction reagent containing

protease inhibitors. Cell lysates are centrifuged at 16,000 × g at 4 °C for 20 min. The supernatants (40 µl, ~ 50 µg of total protein) are incubated with 1 µg of purified GST fusion protein of wild-type GDI or its mutants for 30 min at 30 °C in the reaction buffer (30 mM HEPES, pH 7.5, 10 mM MgCl2, 30 µM ATP, 1 µCi of [γ-32P]ATP, 100 nM calyculin, 1 µM okadaic acid). SDS-PAGE is carried out, and phosphorylated GDI is visualized with autoradiography.(Only for Reference)

Solubility Information

Solubility	Ethanol: 3.5 mg/mL (10 mM), DMSO: 45 mg/mL (129.89 mM), (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.8863 mL	14.4317 mL	28.8634 mL
5 mM	0.5773 mL	2.8863 mL	5.7727 mL
10 mM	0.2886 mL	1.4432 mL	2.8863 mL
50 mM	0.0577 mL	0.2886 mL	0.5773 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Reference

Jiang W, et al. Mechanisms of energy restriction: effects of corticosterone on cell growth, cell cycle machinery, and apoptosis. Cancer Res. 2002 Sep 15;62(18):5280-7.