Dexamethasone

CATALOG #: 1042-1G. -10G

AMOUNT: 1 g, 10 g

LOT#:

CAS NUMBER: 50-02-2

MOLECULAR WEIGHT: 392.5

MOLECULAR FORMULA: C₂₂H₂₉FO₅

PURITY: >99% by TLC

SOLUBILITY: Soluble in ethanol (25 mg/ml)

STORAGE CONDITIONS: Store powder at -20 °C for up to 1 year. Store

solutions at -20°C for up to 3 months.

DESCRIPTION:

An anti-inflammatory glucocorticoid. Inhibits the expression of the inducible but not the constitutive nitric oxide synthase in vascular endothelial cells (IC $_{50}$ =5 nM). Enhances active cation transport in aortic smooth muscle cells by stimulating the Na $^+$ -K $^+$ pump. Has anti-inflammatory and anti-rheumatic properties. Induces apoptosis in human thymocytes. In general, 500-1000 nM of dexamethasone is sufficient to induce apoptosis following a 6-hour incubation at 37°C (1, 2).

REFERENCES:

- Martin, S.J., et al. (1995) J. Exp. Med. 182:1545-1556.
- Fearnhead, H.O., et al. (1994) Biochem. Pharmacol. 48:1073-1079.

FOR RESEARCH USE ONLY! Not to be used in humans.

RELATED PRODUCTS:

Apoptosis Detection Kits & Reagents

- Annexin V Kits & Bulk Reagents
- Caspase Assay Kits & Reagents
- Mitochondrial Apoptosis Kits & Reagents
- Nuclear Apoptosis Kits & Reagents
- · Apoptosis Inducers and Set
- Apoptosis siRNA Vectors

Cell Fractionation System

- Mitochondria/Cytosol Fractionation Kit
- Nuclear/Cytosol Fractionation Kit
- Membrane Protein Extraction Kit
- Cytosol/Particulate Rapid Separation Kit
- Mammalian Cell Extraction Kit
- FractionPREP Fractionation System

Cell Proliferation & Senescence

- · Quick Cell Proliferation Assay Kit
- Senescence Detection Kit
- High Throughput Apoptosis/Cell Viability Assay Kits
- LDH-Cytotoxicity Assay Kit
- Bioluminescence Cytotoxicity Assay Kit
- Live/Dead Cell Staining Kit

Cell Damage & Repair

- HDAC Fluorometric & Colorimetric Assays & Drug Discovery Kits
- HAT Colorimetric Assay Kit & Reagents
- DNA Damage Quantification Kit
- Glutathione & Nitric Oxide Fluorometric & Colorimetric Assay Kits

Signal Transduction

- cAMP & cGMP Assay Kits
- Akt & JNK Activity Assay Kits
- Beta-Secretase Activity Assay Kit

Adipocyte & Lipid Transfer

- Recombinant Adiponectin, Survivin, & Leptin
- CETP Activity Assay & Drug Discovery Kits
- PLTP Activity Assay & Drug Discovery Kits
- Total Cholesterol Quantification Kit

Molecular Biology & Reporter Assays

- siRNA Vectors
- Cloning Insert Quick Screening Kit
- Mitochondrial & Genomic DNA Isolation Kits
- 5 Minutes DNA Ligation Kit
- 20 Minutes Gel Staining/Destaining Kit
- β-Galactosidase Staining Kit & Luciferase Reporter Assay Kit

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