

Dexamethasone

Cell Culture Tested

Product Code: TC277

Product Description:

Molecular weight: 392.46

Molecular formula: $C_{22}H_{29}FO_5$

CAS No.: 50-02-2

Synonym: 9 α -Fluoro-16 α -methylprednisolone,
Prednisolone F

Dexamethasone is a synthetically prepared glucocorticoid. Because of its role in cell proliferation, signaling and differentiation, Dexamethasone is widely used in apoptosis and cell signaling studies. Its effects vary depending on cell type.

Dexamethasone is used as a medium supplement for thawing, plating and maintenance of hepatocytes. It exerts a protective role on cell survival by prolonging cell viability and inhibiting apoptosis in cultured hepatocytes. In combination with other molecules such as ascorbic acid, β -glycerophosphate and isobutyl methyl xanthine, Dexamethasone is used to promote and regulate osteogenesis and adipogenesis and further maturation of mesenchymal progenitor cells.

Directions:

For cell culture applications, Dexamethasone is used at a working concentration of 1-500ng/ml.

1. Prepare stock solutions of Dexamethasone in ethanol.
2. Vortex the solution until Dexamethasone is completely dissolved.

3. Sterilize by filtration through a sterile membrane filter of porosity 0.22 microns or less.
4. Store the stock solutions at -20°C in small aliquots to prevent repeated freeze-thawing.
5. Dilute the stock with sterile cell culture grade water to prepare working solutions.

Quality Control:

Appearance

White crystals or crystalline powder

Solubility

Clear, colorless solution in ethanol and DMSO at 25mg/ml; Insoluble in water

Assay

NLT 97%

Cell Culture Test

Passes

Storage and Shelf Life:

Store powder at 2-8°C in air tight container away from direct sunlight.

Use before expiry date given on the product label.

Revision No.: 0 / 2015

Disclaimer:

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