

Dexamethasone

Catalog Number: 5000222

RUO: For Research Use Only. Not for use in diagnostic procedures.

Product Information

Synonyms: Decaject, Decameth, Decaspray, Dexasone, Hexadecadrol

Chemical Name: (8S,9R,10S,11S,13S,14S,16R,17R)-9-fluoro-11,17-dihydroxy-17-(2-hydroxyacetyl)-10,13,16-

trimethyl-6,7,8,11,12,14,15,16-octahydrocyclopenta[a]phenanthren-3-one

Molecular Formula: C₂₂H₂₉FO₅ **Molecular Weight:** 392.5 **CAS Number:** 50-02-2

Purity: ≥98% **Applications:** FA

Formulation: Crystalline solid

Storage: Product should be kept at -20°C.

Description

Dexamethasone is a synthetic anti-inflammatory and immunosuppressant steroid. It has a stronger affinity for the glucocorticoid receptor than the natural hydrocortisone ligand. Dexamethasone is reported to inhibit mature dendritic cell differentiation and to promote the differentiation of human mesenchymal cells.

Preparation & Storage

Soluble in organic solvents such as ethanol or DMSO.

References

- 1. Haynesworth, S. E., Baber, M. A., Caplan, A. I. (1996). Cytokine expression by human marrow-derived mesenchymal progenitor cells in vitro: Effects of dexamethasone and IL- 1α .; Journal of cellular physiology,;166(3), 585-592.
- 2. Han, J., Thompson, P., Beutler, B. (1990). Dexamethasone and pentoxifylline inhibit endotoxin-induced cachectin/tumor necrosis factor synthesis at separate points in the signaling pathway.;The Journal of experimental medicine,;172(1), 391-394.
- 3. Larsson, E. L. (1980). Cyclosporin A and dexamethasone suppress T cell responses by selectively acting at distinct sites of the triggering process.;The Journal of Immunology,;124(6), 2828-2833.