Progesterone
Cell Culture Tested

Product Code: TC379

Product Description:
- Molecular weight: 314.46
- Molecular formula: C_{21}H_{30}O_{2}
- CAS No.: 57-83-0
- Synonym: 4-Pregnene-3,20-dione

Progesterone is a steroid hormone derived from cholesterol. It is one of the key female hormones synthesized in the ovary which plays a central role in regulation of the reproductive system.

Progesterone is a small hydrophobic molecule that can diffuse easily through the plasma membrane of cells. In cell culture systems, progesterone exerts a stimulatory effect on other hormones. The steroid hormone also regulates the proliferation and differentiation of various cell types such as endothelial cells, mammary epithelial cells, osteoblasts as well as cells of the central nervous system.

In cell culture applications, Progesterone is used at a working concentration of 10-50µg/ml.

Directions:
1. Dissolve 1mg Progesterone in 1ml of absolute ethanol.
2. Mix gently to ensure complete dissolution.
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.

Quality Control:
- Appearance: Colorless or white to off-white crystals or powder
- Solubility: 33.3mg soluble in 1ml of alcohol
- FTIR: Matches with standard pattern
- Assay: 97.00% - 103.00%
- Cell Culture Test: Passes

Storage and Shelf Life:
Store at 15-30°C in air tight container away from direct sunlight.
Use before expiry date given on the product label.

Disclaimer:
User must ensure suitability of the product(s) in their application prior to use. Products conform solely to the information contained in this and other related HiMedia™ publications. The information contained in this publication is based on our research and development work and is to the best of our knowledge true and accurate. HiMedia™ Laboratories Pvt. Ltd reserves the right to make changes to specifications and information related to the products at any time. Products are not intended for human or animal diagnostic or therapeutic use but for laboratory, research or further manufacturing use only, unless otherwise specified. Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents.