PRODUCT INFORMATION

Epiallopregnanolone
Item No. 18431

CAS Registry No.: 567-01-1
Formal Name: (3β,5α)-3,21-dihydroxy-pregn-20-one
Synonyms: 5α-Pregnan-20-one, 3β,21-dihydroxy-5α-Pregnan-20-one, 3β,5α-Tetrahydrodeoxycorticosterone, 3β,5α-Tetrahydroprogesterone
MF: C21H34O3
FW: 334.5
Purity: ≥95%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid

Laboratory Procedures

For long term storage, we suggest that epiallopregnanolone be stored as supplied at -20°C. It should be stable for at least two years.

Epiallopregnanolone is supplied as a crystalline solid. A stock solution may be made by dissolving the epiallopregnanolone in the solvent of choice. Epiallopregnanolone is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of epiallopregnanolone in these solvents is approximately 25 mg/ml.

Epiallopregnanolone is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, epiallopregnanolone should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. Epiallopregnanolone has a solubility of approximately 0.5 mg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Neuroactive steroids (widely known as neurosteroids), including progesterone (Item No. 15876) and several of its metabolites, have been shown to mediate some of their physiological effects though a modulatory site on GABA_A receptors. Epiallopregnanolone is a metabolite of progesterone and a 3β-isomer of allopregnanolone (Item No. 16930), which has been shown to enhance GABA neurotransmission. Epiallopregnanolone is inactive as a GABA_A receptor modulator and is used as a control substance to examine GABA neurotransmission.

References