

**Product Name:** Allopregnanolone

**Catalog No.:** 3653

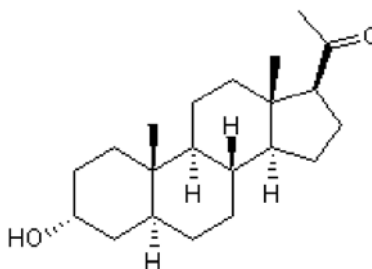
**Batch No.:** 5

CAS Number: 516-54-1

IUPAC Name: (3 $\alpha$ ,5 $\alpha$ )-3-Hydroxy-pregnan-20-one

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>21</sub>H<sub>34</sub>O<sub>2</sub>  
**Batch Molecular Weight:** 318.49  
**Physical Appearance:** White solid  
**Solubility:** DMSO to 100 mM  
 ethanol to 100 mM  
**Storage:** Store at RT  
**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**TLC:** R<sub>f</sub> = 0.4 (Ethyl acetate:Petroleum ether [1:2])  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure  
**Optical Rotation:** [α]<sub>D</sub> = +96.3 (Concentration = 1, Solvent = Chloroform)  
**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	79.19	10.76	
Found	79.3	10.99	0.1

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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**Description:**

Allopregnanolone is a GABA<sub>A</sub> receptor positive allosteric modulator. Neuroactive steroid.

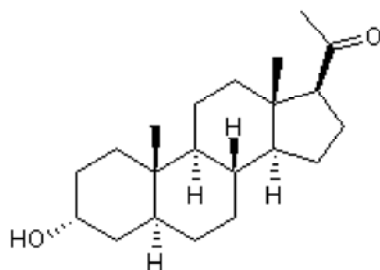
**Physical and Chemical Properties:**

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Batch Molecular Weight: 318.49

Physical Appearance: White solid

**Batch Molecular Structure:**



**Storage:** Store at RT

**Solubility & Usage Info:**

DMSO to 100 mM

ethanol to 100 mM

**Stability and Solubility Advice:**

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

**SOLIDS:** Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

**SOLUTIONS:** We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

**References:**

**Agis-Balboa *et al*** (2006) Characterization of brain neurons that express enzymes mediating neurosteroid biosynthesis. *Proc.Natl.Acad.Sci.USA* **103** 14602.

**Belelli and Lambert** (2005) Neurosteroids: endogenous regulators of the GABA<sub>A</sub> receptor. *Nat.Rev.Neurosci.* **6** 565. PMID: 15959466.

**Puia *et al*** (1990) Neurosteroids act on recombinant human GABA<sub>A</sub> receptors. *Neuron* **4** 759. PMID: 2160838.

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