

# Pregnenolone

## Catalog No: tcsc1970



### Available Sizes

**Size:** 1g

**Size:** 5g



### Specifications

**CAS No:**

145-13-1

**Formula:**

$C_{21}H_{32}O_2$

**Pathway:**

Autophagy;GPCR/G Protein;Metabolic Enzyme/Protease

**Target:**

Autophagy;Cannabinoid Receptor;Endogenous Metabolite

**Purity / Grade:**

>98%

**Solubility:**

DMSO : 12.5 mg/mL (39.50 mM; Need ultrasonic); H<sub>2</sub>O :

**Alternative Names:**

Arthenolone;3β-Hydroxy-5-pregnen-20-one

**Observed Molecular Weight:**

316.48

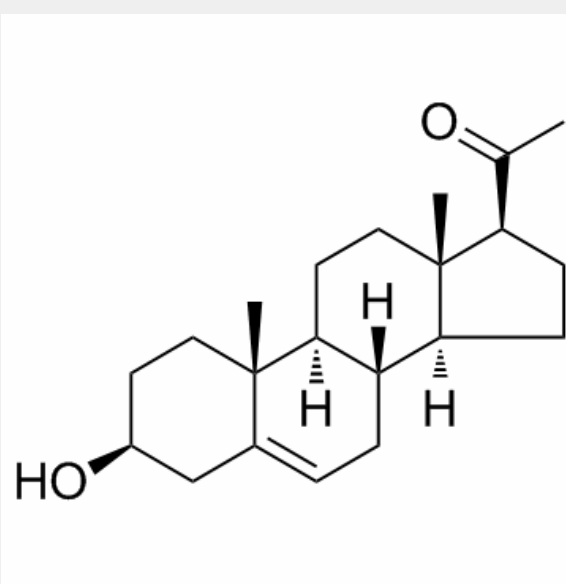
## Product Description

Pregnenolone acts as a signaling-specific inhibitor of **cannabinoid CB1 receptor**, reduces several effects of tetrahydrocannabinol (THC).

IC50 & Target: Cannabinoid CB1 receptor<sup>[1]</sup>

***In Vitro:*** The effect of THC is significantly attenuated when slices are pre-treated with Pregnenolone 100 nM ( $15.1 \pm 1.8$  % of inhibition). These effects are likely due to a pre-synaptic action of Pregnenolone. Thus, Pregnenolone blocks the increase in paired-pulse ratio (PPR) induced by THC but does not modify either the amplitude or the decay time of miniature EPSC (mEPSC)<sup>[1]</sup>.

***In Vivo:*** Pregnenolone administration (2-6 mg/kg) blocks THC-induced food-intake in Wistar rats and in C57BL/6N mice, and blunts the memory impairment induced by THC in mice, but it does not modify these behaviors *per se*. Injections of Pregnenolone (2 and 4mg/kg) before each self-administration session reduce the intake of WIN 55,212-2 and reduce the break-point in a progressive ratio schedule<sup>[1]</sup>.



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!