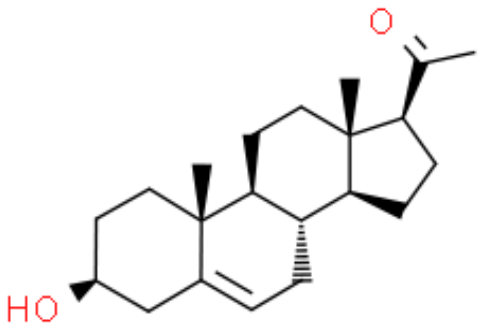
Product Data Sheet

Cas No.:	145-13-1	Cat. No:	PC66840
Product Name:	Pregnenolone.		
Product synonym:	妊娠烯醇酮;3-羟基-5-妊烯酮;5-孕甾烯-3β-醇-20-酮;3β-羟基孕甾-5-烯-20-酮;苯酮;妊烯醇酮;孕烯醇酮;孕甾烯醇酮;1-羟基环己基甲酸;Pregnenolone 孕烯醇酮;Pregnenolone 孕甾烯醇酮 标准品;妊娠烯醇酮,Pregnenolone;妊娠烯醇酮,孕烯醇酮;妊娠烯醇酮、孕烯醇酮;孕烯醇酮 标准品;孕烯雌酮;孕烯醇酮.孕烯醇酮醋酸酯;孕烯醇酮/妊烯醇酮		
Chemical name:	Pregnenolone.		
MF:	C21H32O2	FW:	316.4776
Purity:	≥99%	Batch No.:	-
Storage:			
Structural formula:			
λmax:	-	Formulation:	-
Solubility :			
SMILES :	O([H])[C@@]1([H])C([H])([H])C([H])([H])[C@@]2(C([H])([H])[H])C(C1([H])[H])=C([H])C([H])([H])[C@]1([H])[C@]2([H])C([H])([H])C([H])([H])[C@]2(C([H])([H])[H])[H])[C@@]([H])(C(C([H])([H])[H])=O)C([H])([H])C([H])([H])[C@]21[H]		
InChI Code:	-		
InChI Key:			
WARNING This product is not for human or veterinary use.			

Product Description

Pregnenolone (3β-Hydroxy-5-pregnen-20-one) 是一种功能强大的神经甾体，是包括甾体酮在内的各种甾体激素的主要前体。Pregnenolone 是大麻素 CB1 受体的信号传导特异性抑制剂，抑制由 CB1 受体介导的四氢大麻酚 (THC) 的作用。Pregnenolone 可以保护大脑免受大麻中毒。Pregnenolone 也是一种 TRPM3 通道激活剂，也可以弱激活 TRPM1 通道。Pregnenolone (3β-Hydroxy-5-pregnen-20-one) 是一种功能强大的神经甾体，是包括甾体酮在内的各种甾体激素的主要前体。Pregnenolone 是大麻素 CB1 受体的信号传导特异性抑制剂，抑制由 CB1 受体介导的四氢大麻酚 (THC) 的作用。Pregnenolone 可以保护大脑免受大麻中毒。Pregnenolone 也是一种 TRPM3 通道激活剂，也可以弱激活 TRPM1 通道。

生物活性	Pregnenolone (3β-Hydroxy-5-pregnen-20-one) is a powerful neurosteroid, the main precursor of various steroid hormones including steroid ketones. Pregnenolone acts as a signaling-specific inhibitor of cannabinoid CB1 receptor, inhibits the effects of tetrahydrocannabinol (THC) that are mediated by the CB1 receptors. Pregnenolone can protect the brain from cannabis intoxication. Pregnenolone is also a TRPM3 channel activator, and also can weakly activate TRPM1 channels.

IC50 & Target[1][2]	CB1 Human Endogenous Metabolite
体外研究(In Vitro)	CB1 receptor stimulation increases brain Pregnenolone levels, which in turn exerts a negative feedback on the activity of the CB1 receptor antagonizing most of the known behavioral and somatic effects of THC. Pregnenolone likely acts as a signaling-specific negative allosteric modulator binding to a site distinct from that occupied by orthosteric ligands. Pregnenolone does not modify agonist binding but only agonist efficacy. The effect of THC is significantly attenuated when slices are pre-treated with Pregnenolone 100 nM (15.1±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).Medlife has not independently confirmed
体内研究(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.Medlife has not independently confirmed the accuracy of these methods. They are for reference only.
包装储存	Powder； -20°C； 3 years; 4°C； 2 years；
溶解度数据	体外研究: DMSO : 25 mg/mL(78.99 mM;ultrasonic and warming and heat to 60°C) H_2O : 0.1 mg/mL(0.32 mM;Need ultrasonic) 配制储存液