# Data Sheet (Cat.No.T1688)



## Pregnanediol

#### **Chemical Properties**

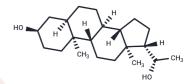
CAS No.: 80-92-2

Formula: C21H36O2

Molecular Weight: 320.51

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year



### **Biological Description**

Description	Pregnanediol (5Beta-Pregnane-3Alpha,20alpha-Diol) is an inactive metabolite of PROGESTERONE by reduction at C5, C3, and C20 position. Pregnanediol(5Beta-Pregnane-3Alpha,20alpha-Diol) has two hydroxyl groups, at 3-alpha and 20-alpha. It is detectable in URINE after OVULATION and is found in great quantities in the pregnancy urine.
Targets(IC50)	Estrogen/progestogen Receptor,Endogenous Metabolite
Kinase Assay	Gelatin (0.1% (w/v) is added to standard LaemmLi acrylamide polymerization mixture. Tissue extract is mixed 1:2 with sample buffer [250 mM Tris-Cl pH 6.8, 10% (w/v) SDS, 20% (v/v) glycerol, 0.005% (w/v) bromphenol blue]. Serum is diluted 1:10 with electrophoresis buffer (2.5 mM Tris, 20 mM glycine, 0.005% SDS) and mixed 1:2 with sample buffer. Twenty µLs are loaded after 10-min incubation at room temperature without boiling. After electrophoresis at 90 V, the gels are soaked in 2.5% (w/v) Triton X-100, incubated 2 to 3 days at 37°C in gelatin digestion buffer [50 mM Tris-Cl, pH 8.0, 8 mM CaCl2, 10 mM ZnSO2, 0.02% (w/v) NaN3], stained in 0.05% Coomassie blue R-250 in acetic acid/methanol/water (1:4.5:4.5 by volume), destained in 10% acetic acid and 5% methanol, and scanned for lysis band intensity. The lysis band intensity is proportional to gelatinase activity and is quantified densitometrically by using One-Dimensional Scan software. The result, a number between 0.07 and 3.75, is normalized to the protein content by dividing the densitometry result with the relative optical density from the BCA protein assay kit result. The result is used for the analysis as the arbitrary unit. For the total MMP activity results of lysis bands of pro-MMP-9, active MMP-9, pro-MMP-2, and active MMP-2 are added. A protein size marker is used to determine the correct size.

#### **Solubility Information**

Solubility	DMSO: Slightly soluble,		
	(< 1 mg/ml refers to the product slightly soluble or insoluble)		

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#### **Preparing Stock Solutions**

	1mg	5mg	10mg
1 mM	3.120 mL	15.6001 mL	31.2003 mL
5 mM	0.624 mL	3.120 mL	6.2401 mL
10 mM	0.312 mL	1.560 mL	3.120 mL
50 mM	0.0624 mL	0.312 mL	0.624 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

#### Reference

Blackwell LF, et al. Hum Reprod. 2013 Dec;28(12):3306-15.

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