Product Name: Pregnenolone sulfate sodium salt
CAS Number: 1852-38-6
IUPAC Name: (3β)-3-(Sulfooxy)-pregn-5-en-20-one sodium salt

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: \( \text{C}_{21}\text{H}_{31}\text{NaO}_{5}\text{S}.1\frac{1}{2}\text{H}_{2}\text{O} \)
Batch Molecular Weight: 445.54
Physical Appearance: White solid
Solubility: DMSO to 50 mM
Storage: Store at +4°C

2. ANALYTICAL DATA

\(^1\text{H NMR:}\) Consistent with structure
Mass Spectrum: Consistent with structure
Microanalysis: Carbon Hydrogen Nitrogen

Theoretical | 56.61 | 7.69
Found | 56.87 | 7.65

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

**Product Name:** Pregnenolone sulfate sodium salt  
**Catalog No.:** 5376  
**Batch No.:** 4

**CAS Number:** 1852-38-6  
**IUPAC Name:** (3β)-3-(Sulfooxy)-pregn-5-en-20-one sodium salt

**Description:**
Highly potent neurosteroid with multiple actions. Enhances intracellular Ca^{2+} upon NMDA receptor-mediated synaptic activity (EC_{50} \sim 2 \text{ pM}) and potentiates NMDA responses. Inhibitor at GABA_{A} receptors (IC_{50} values are 0.4 to >300 \text{ µM}, depending on specific subunit conformation). Activates CREB phosphorylation, augments LTP and cognitive behavior in rat memory models. Also activates TRPM3 channels.

**Physical and Chemical Properties:**
- **Batch Molecular Formula:** C_{21}H_{31}NaO_{5}S.1½H_{2}O  
- **Batch Molecular Weight:** 445.54  
- **Physical Appearance:** White solid

**Physical and Chemical Properties:**

**Storage:** Store at +4°C

**Solubility & Usage Info:**
DMSO to 50 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:**


