Product Name: Probenecid

CAS Number: 57-66-9

IUPAC Name: 4-(Dipropylsulfamoyl)benzoic acid

1. PHYSICAL AND CHEMICAL PROPERTIES

   Batch Molecular Formula: \( C_{13}H_{19}NO_4S \)
   Batch Molecular Weight: 285.36
   Physical Appearance: White solid
   Solubility: DMSO to 100 mM, ethanol to 100 mM
   Storage: Store at RT
   Batch Molecular Structure:

2. ANALYTICAL DATA

   HPLC: Shows 98.1% purity
   \(^1\)H NMR: Consistent with structure
   Mass Spectrum: Consistent with structure
   Microanalysis: Carbon Hydrogen Nitrogen

   Theoretical 54.72 6.71 4.91
   Found 54.8 6.74 4.94

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use
**Product Name:** Probenecid  
**CAS Number:** 57-66-9  
**IUPAC Name:** 4-(Dipropylsulfamoyl)benzoic acid

**Description:**  
Inhibitor of multidrug resistance-associated proteins (MRP). Inhibits organic acid transport in the kidney and other organs. Also exhibits inhibitory activity against pannexin 1 channels (IC\textsubscript{50} ~ 150 μM).

**Physical and Chemical Properties:**  
**Batch Molecular Formula:** C\textsubscript{13}H\textsubscript{14}NO\textsubscript{2}S  
**Batch Molecular Weight:** 285.36  
**Physical Appearance:** White solid  
**Minimum Purity:** >98%

**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:**