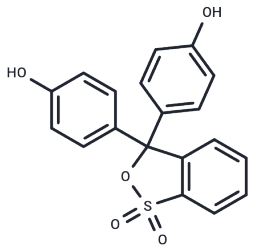
Data Sheet (Cat.No.T0347)

TargetMol

Phenol Red

Chemical Properties



CAS No. : 143-74-8

Formula: C19H14O5S

Molecular Weight: 354.38

Storage: Keep away from direct sunlight,Store under nitrogen
Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	Phenol Red (Sulfonphthal) is a pH indicator, red dye, and diagnostic aid for measurement of renal function. It is used also for researches of the gastrointestinal and other systems.
Targets(IC50)	Others
In vitro	Instructions for use I. Solution preparation 1. Preparation of mother solution: Dissolve Phenol in an appropriate solvent. Phenol is soluble in alkaline solutions, such as sodium hydroxide or sodium carbonate solutions. The commonly used concentration is 5 mg/mL or 20 mg/mL. 2. Preparation of working solution: The commonly used final concentration of Phenol is 15-20 mg/L. Note: Please filter and sterilize: Filter with a 0.22 μm filter membrane to ensure that the solution is sterile. Dispense the solution into a light-proof container and store at 4°C or -80°C. II. Operation steps Indication function: Phenol changes color in the pH range of 6.8-8.2, which can indicate the pH state of the culture medium. 1. Application in pH determination Measurement range: Phenol is suitable for determination of pH 6.5-8.4. 1). Sample preparation: Take 10 mL of the test solution in a colorimetric cup. 2) Add indicator: Add appropriate amount of phenol red solution (e.g. 6 drops) and mix well. 3) Colorimetric determination: Use a colorimeter to measure the absorbance at an appropriate wavelength, or compare with a standard colorimetric card to determine the pH value. The above information is based on published literature. Experimental procedures should be appropriately modified to meet specific research demands.

Solubility Information

Solubility	DMSO: 247 mg/mL (696.99 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween-80+45% Saline: 3.3 mg/mL (9.31 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.8218 mL	14.1091 mL	28.2183 mL
5 mM	0.5644 mL	2.8218 mL	5.6437 mL
10 mM	0.2822 mL	1.4109 mL	2.8218 mL
50 mM	0.0564 mL	0.2822 mL	0.5644 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.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Morgan A, et al. Caution for the routine use of phenol red - It is more than just a pH indicator. Chem Biol Interact. 2019 Sep 1;310:108739.