Data Sheet (Cat.No.T0050)

TargetMol

Ampyrone

Chemical Properties

CAS No. : 83-07-8

Formula: C11H13N3O

Molecular Weight: 203.24

Storage: 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	Ampyrone (4-Aminoantipyrine) is a reagent for glucose determination in the presence of peroxidase and phenol.
Targets(IC50)	COX,Drug Metabolite
In vitro	The level of glutathione(GSH) in single erythrocytes is impacted slightly at low AAP(4-aminoantipyrine) concentrations probably due to the protection of glutathione reductase. When AAP concentration further increases, AAP has a significant influence on GSH[2].
In vivo	4-aminoantipyrine (4-AA) is not genotoxic and mutagenic in vivo, it can interfere with DNA damaging agents biological activities and may reduce the effectiveness of DNA damage-based chemotherapy[3].
Cell Research	Erythrocytes in PBS are incubated for 2 h at ambient temperature (without mixing) with AAP in concentrations from 1 × 10−6 mol/L to 1 × 10−3 mol/L. Sample of erythrocytes without AAP is used as control. After the exposure of AAP, erythrocytes are washed with borate buffer (pH 9.0) 2 times by centrifuging and determined for GSH. (Only for Reference)

Solubility Information

Solubility	Ethanol: 40 mg/mL (196.81 mM),Sonication is recommended. H2O: 37 mg/mL (182.05 mM),Sonication is recommended. DMSO: 74.29 mg/mL (365.53 mM) (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: 10 mg/mL (49.2 mM),Solution. *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	4.9203 mL	24.6015 mL	49.2029 mL
5 mM	0.9841 mL	4.9203 mL	9.8406 mL
10 mM	0.492 mL	2.4601 mL	4.9203 mL
50 mM	0.0984 mL	0.492 mL	0.9841 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

Vinagre AM, et al. Braz J Med Biol Res. 2016, 49(3).
Teng Y, et al. J Hazard Mater. 2011, 192(3):1766-1771.
Berno CR, et al. Mutat Res Genet Toxicol Environ Mutagen. 2016, 805:19-24.