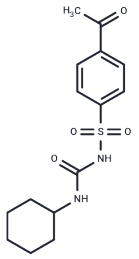
Data Sheet (Cat.No.T0816)

TargetMol

Acetohexamide

Chemical Properties



CAS No. : 968-81-0

Formula: C15H20N2O4S

Molecular Weight: 324.40

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	Acetohexamide (Acetohexamid) is an intermediate-acting, first-generation sulfonylurea with hypoglycemic activity. It inhibits sulfonylurea receptor 1 (SUR1) linked to the inwardly rectifying potassium channel (KIR6.2) with Ki values of 22.9 and 14.2 μM in HEK293 cells transfected with the human receptor and in rat brain, respectively. Acetohexamide is metabolized in the liver to its active metabolite hydroxyhexamide.
Targets(IC50)	Others,NADPH,Potassium Channel

Solubility Information

Solubility	DMSO: 30 mg/mL (92.48 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Corn Oil: 2 mg/mL (6.17 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	3.0826 mL	15.4131 mL	30.8261 mL
5 mM	0.6165 mL	3.0826 mL	6.1652 mL
10 mM	0.3083 mL	1.5413 mL	3.0826 mL
50 mM	0.0617 mL	0.3083 mL	0.6165 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

Aldawsari H, et al. Int J Pharm. 2013 Sep 10;453(2):315-21.
McMahon RE, et al. The nature of the metabolites of acetohexamide in the rat and in the human. J Pharmacol Exp Ther. 1965 Aug;149(2):272-9.
Imamura Y, et al. Hypoglycemic effect of S(-)-hydroxyhexamide, a major metabolite of acetohexamide, and its enantiomer R(+)-hydroxyhexamide. Life Sci. 2001 Sep 7;69(16):1947-55.
Gopalakrishnan M, et al. Pharmacology of human sulphonylurea receptor SUR1 and inward rectifier K(+) channel Kir6.2 combination expressed in HEK-293 cells. Br J Pharmacol. 2000 Apr;129(7):1323-32.

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