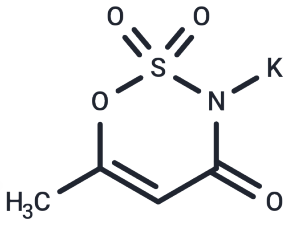
Data Sheet (Cat.No.T0940)

TargetMol

Acesulfame Potassium

Chemical Properties



CAS No. : 55589-62-3

Formula: C4H4KNO4S

Molecular Weight: 201.24

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	Acesulfame potassium is a non-nutritive sweetener.
Targets(IC50)	ERK,Others,PD-1/PD-L1,Autophagy,mTOR
In vitro	In male Wistar rats, Acesulfame potassium (150 mg/kg) has been shown to induce insulin secretion.
In vivo	In cells expressing hTAS2R44 (EC50=2.5 mM), Acesulfame potassium induces a significant increase in intracellular solute calcium (Ca 2+) levels.

Solubility Information

Solubility	H2O: 37 mg/mL (183.86 mM),Sonication is recommended. DMSO: 260 mg/mL (1291.99 mM),Sonication is recommended. Ethanol: < 1 mg/mL (insoluble or slightly soluble), (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: 10 mg/mL (49.69 mM),Solution. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (9.94 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	4.9692 mL	24.846 mL	49.6919 mL
5 mM	0.9938 mL	4.9692 mL	9.9384 mL
10 mM	0.4969 mL	2.4846 mL	4.9692 mL
50 mM	0.0994 mL	0.4969 mL	0.9938 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

Kuhn C, et al. J Neurosci, 2004, 24(45), 10260-10265.
Liang Y, et al. Horm Metab Res, 1987, 19(7), 285-289.
Zheng Y, et al. J Gastrointest Surg, 2013, 17(1), 153-158.
Dasgupta J, et al. Toxicol Appl Pharmacol, 2006, 217(2), 216-224.
Zhao GQ, et al. Cell, 2003, 115(3), 255-266.