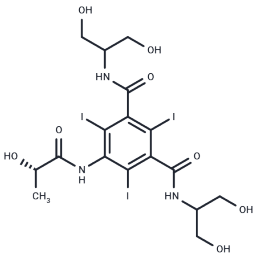
Data Sheet (Cat.No.T1576)

TargetMol

Iopamidol

Chemical Properties



CAS No. : 60166-93-0

Formula: C17H22I3N3O8

Molecular Weight: 777.09

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	Iopamidol (SQ-13396) is a benzenedicarboxamide compound. It has a role as a radioopaque medium, an environmental contaminant and a xenobiotic.
Targets(IC50)	Others
In vitro	Iopamidol significantly decreases the rate of atrial contraction to a greater extent than either formulation of iodixanol. Iopamidol decreases papillary muscle force development more than the sodium formulation of iodixanol[3].
In vivo	Iopamidol increases systolic blood pressure (SBP), mean arterial pressure (MAP), and peak left ventricular pressure (LVP). Iopamidol increases LVP and LV end diastolic pressure to a greater extent than the cationic formulation of iodixanol. Thus iopamidol affects cardiovascular parameters more than iodixanol[3].
Cell Research	Chondrocytes are plated on 96 well plates at a density of 1 x 106 cells/cm2 . After overnight incubation in standard tissue culture conditions, contrast agents (including iopamidol) are introduced to wells in varying concentrations. Following 16 hour incubation with PBS and contrast agents, chondrocyte viability is assessed using the Live/Dead stain kit and quantified using the CellTiter-Glo Luminescent Cell Viability Assay. (Only for Reference)

Solubility Information

Solubility	Ethanol: < 1 mg/mL (insoluble or slightly soluble), H2O: 92 mg/mL (118.39 mM),Sonication is recommended. DMSO: 247.5 mg/mL (318.5 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 (4.25 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	1.2869 mL	6.4343 mL	12.8685 mL
5 mM	0.2574 mL	1.2869 mL	2.5737 mL
10 mM	0.1287 mL	0.6434 mL	1.2869 mL
50 mM	0.0257 mL	0.1287 mL	0.2574 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

Longo DL, et al. Magn Reson Med. 2011, 65(1):202-11.
Xu S, Wang L, Zhao L. Clinical application value of brain CT perfusion imaging in the treatment of acute ischemic stroke thrombolytic therapy. Experimental and Therapeutic Medicine. 2019 May;17(5):3971-3976
Doan R, et al. 55th Annual Meeting of the Orthopaedic Research Society. Poster No.2166
Dundore RL, et al. Invest Radiol. 1991, 26(8):715-21.
Xu S, Wang L, Zhao L. Clinical application value of brain CT perfusion imaging in the treatment of acute ischemic stroke thrombolytic therapy[J]. Experimental and therapeutic medicine. 2019 May;17(5):3971-3976.