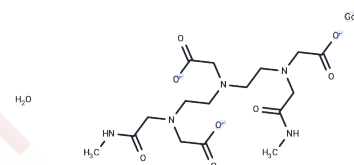


Gadodiamide Hydrate

Chemical Properties

CAS No. : 122795-43-1
 Formula: C₁₆H₂₈GdN₅O₉C₁₆H₂₈GdN₅O₉·xH₂O
 Molecular Weight: 591.67
 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	Gadodiamide Hydrate (Omniscan), a nonionic Gd ³⁺ chelate, is frequently injected i.v. into magnetic resonance imaging (MRI) to enhance contrast.
Targets(IC50)	Others
In vivo	Gadodiamide results in half-life of 18, 38, and 75 minutes in rats, rabbits, and monkeys, respectively. Gadodiamide is shown to be excreted rapidly, primarily through the kidneys. [1] Gadodiamide, when administered i.v. as gadodiamide injection at a dosage of 0.3 mmol/kg, is stable in vivo and that the very major part of the dose (> 99%) is excreted in urine as an unchanged complex. [2] Gadodiamide produces focal and generalized myoclonus over several hours. Gadodiamide itself produces lesions in the central cerebellar regions resembling in character and severity those produced by the gadodiamide formulation, but not others. [3] Gadodiamide travels quickly throughout the ventricular system from the lateral ventricular site of injection to the fourth ventricle and foramina of Luschka and Magendie within 2 min. [4] Gadodiamide results in transient but statistically significant decreases in aortic pressure, left ventricular pressure, indices of left ventricular contractility and relaxation, and systemic and pulmonary vascular resistance, and increases in aortic blood flow in anesthetized dogs. Gadodiamide injection produces less severe alterations in hemodynamics than gadopentetate dimeglumine. [5]

Solubility Information

Solubility	DMSO: 16 mg/mL (27.04 mM), Sonication and heating are recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	--

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.6901 mL	8.4507 mL	16.9013 mL
5 mM	0.338 mL	1.6901 mL	3.3803 mL
10 mM	0.169 mL	0.8451 mL	1.6901 mL
50 mM	0.0338 mL	0.169 mL	0.338 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

Harpur ES, et al. Invest Radiol, 1993, 28, S28-43.

Normann PT, et al. Eur J Drug Metab Pharmacokinet, 1995, 20(4), 307-313.

Ray DE, et al. AJNR Am J Neuroradiol, 1998, 19(8), 1455-1462.

Bui JD, et al. Neuroscience, 1999, 90(3), 1115-1122.

Peters JL, et al. Acta Radiol, 1993, 34(5), 510-516.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481