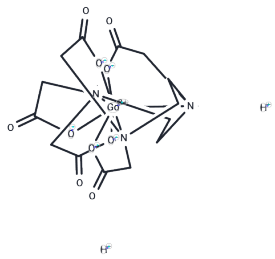
Data Sheet (Cat.No.T19332)

TargetMol

Gadopentetic acid

Chemical Properties



CAS No. : 80529-93-7

Formula: C14H20GdN3O10

Molecular Weight: 547.57

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	Gadopentetic acid (gadolinium complex) (Gd-DTPA) is an paramagnetic contrast agent commonly implemented by a bolus intravenous injection (i.v.) in Dynamic contrast-enhanced MRI (DCE-MRI) studies.
Targets(IC50)	Others
In vivo	The initial concentration of Gadopentetic acid (Gd-DTPA) in the plasma ([Gd-DTPA0]) is an important parameter for DCE-MRI.?[Gd-DTPA0] is related to the administered bolus dose and varies with subjects.?A bolus of 0.025 mmol/kg Gd-DTPA offers shorter acquisition time and less exposure of subjects, with a half-life of 37.3 mins, a mean residence time of 53.8 mins, and an AUC of 3.37 ± 0.47 mmol/min/L.

Solubility Information

Solubility	H2O: 100 mg/mL (182.63 mM),Sonication is recommended. DMSO: < 1 mg/mL (insoluble or slightly soluble), (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.8263 mL	9.1313 mL	18.2625 mL
5 mM	0.3653 mL	1.8263 mL	3.6525 mL
10 mM	0.1826 mL	0.9131 mL	1.8263 mL
50 mM	0.0365 mL	0.1826 mL	0.3653 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

Wan C, et al. Gd-DTPA-induced dynamic metabonomic changes in rat biofluids. Magn Reson Imaging. 2017 Dec; 44:15-25.

Taheri S, et al. Analysis of pharmacokinetics of Gd-DTPA for dynamic contrast-enhanced magnetic resonance imaging. Magn Reson Imaging. 2016 Sep;34(7):1034-40.

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