Iopromide

Cat. No.: HY-B1362

CAS No.: 73334-07-3

Molecular Formula: $C_{18}H_{24}I_3N_3O_8$

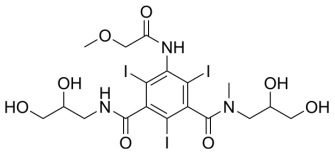
Molecular Weight: 791.11

Target: Others

Pathway: Others

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	2 years
	-20°C	1 year



SOLVENT & SOLUBILITY

In Vitro

H_2O : 100 mg/mL (126.40 mM; Need ultrasonic)
DMSO : 100 mg/mL (126.40 mM; Need ultrasonic)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	1.2640 mL	6.3202 mL	12.6405 mL
5 mM	0.2528 mL	1.2640 mL	2.5281 mL
10 mM	0.1264 mL	0.6320 mL	1.2640 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: PBS
   Solubility: 100 mg/mL (126.40 mM); Clear solution; Need ultrasonic
2. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.5 mg/mL (3.16 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (3.16 mM); Clear solution
4. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (3.16 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Iopromide is a non-ionic, monomeric, iodine-based contrast medium for intravascular administration.

In Vivo

Contrast medium-induced nephropathy can be induced by tail intravenous administration of iopromide[1]. In randomized controlled trials, the global image quality and diagnostic quality with iobitridol does not differ from those with other low-

osmolar contrast media (iohexol, iopromide, iopamidol, iomeprol and ioxaglate) or the iso-osmolar contrast medium iodixanol in adults or children undergoing radiographic imaging. Large post-marketing surveillance studies have confirmed that iobitridol produces good or excellent opacification and is an effective contrast agent in the vast majority of patients. Iobitridol is generally well tolerated and had a tolerability profile similar to that of other low-osmolar and iso-osmolar contrast media. Thus, iobitridol is an effective intravascular agent for contrast enhancement in diagnostic imaging[2].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

PROTOCOL

Animal Administration [1]

Mice: Male C57/BL6J mice are randomly divided into 7 groups: control, diabetes mellitus (D), CIN, diabetes mellitus+CIN (DC), diabetes mellitus+Breviscapine (DB), CIN+Breviscapine (CIN+B) and diabetes mellitus+CIN+Breviscapine (DCB). After the model of diabetes mellitus is established, mice are prohibited drinking water for one night, and then mice are injected at a dose of 10 mL/kg iopromide via tail vein administration over the course of 1 minute. Then the mice are treated intragastrically with or without Breviscapine (10 mg/kg/d) for 4 weeks. Other mice groups except for Breviscapine treatment groups (DB, DCB and CIN+B) are administered the same volume of phosphate buffered solution intragastrically for 4 weeks. Then mice are sacrificed by an intraperitoneal injection of chloral hydrate[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- Chemosphere. 2019 Jun;225:378-387.

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REFERENCES

[1]. Jiang W, et al. Breviscapine attenuatted contrast medium-induced nephropathy via PKC/Akt/MAPK signalling in diabetic mice. Am J Transl Res. 2016 Feb 15;8(2):329-41.

[2]. McCormack PL, et al. Iobitridol: a review of its use as a contrast medium in diagnostic imaging. Clin Drug Investig. 2013 Feb;33(2):155-66.

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