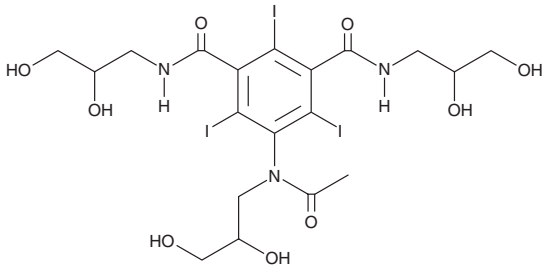
PRODUCT INFORMATION

Iohexol

Item No. 23753

CAS Registry No.:	66108-95-0
Formal Name:	5-[acetyl(2,3-dihydroxypropyl) amino]-N^1,N^3-*bis*(2,3-dihydroxypropyl)-2,4,6-triiodo-1,3-benzenedicarboxamide
MF:	$C_{19}H_{26}I_3N_3O_9$
FW:	821.1
Purity:	≥98% (mixture of isomers)
UV/Vis.:	λ_{max}: 245 nm
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Iohexol is supplied as a crystalline solid. A stock solution may be made by dissolving the iohexol in the solvent of choice, which should be purged with an inert gas. Iohexol is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of iohexol in ethanol is approximately 2 mg/ml and approximately 10 mg/ml in DMSO and DMF.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of iohexol can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of iohexol in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Iohexol is a non-ionic and water-soluble contrast agent.[1] It induces inhibition of electrical activity but has no excitatory effect *in vitro* in rat hippocampal slices and lacks any effect *in vivo* on ventral root flexes of feline spinal cord, indicating minimal neurotoxicity. Iohexol also induces a smaller decrease in contractile force than the ionic and high osmolarity contrast agent metrizoate in isolated rabbit hearts perfused with a 350 mg/ml solution.[2] Formulations containing iohexol have been used for visualization of arteries, veins, the urinary tract, and joints using X-ray and computed tomography (CT) scan imaging techniques.

References

1. Bryan, R.N., Centeno, R.S., Hershkowitz, N., *et al.* Neurotoxicity of iohexol: A new nonionic contrast medium. *Radiology* **145(2)**, 379-382 (1982).
2. Almén, T. and Bååth, L. Effects of iopentol, iohexol and metrizoate on the contractility of the isolated rabbit heart. *Acta Radiol. Suppl.* **370**, 61-63 (1987).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM