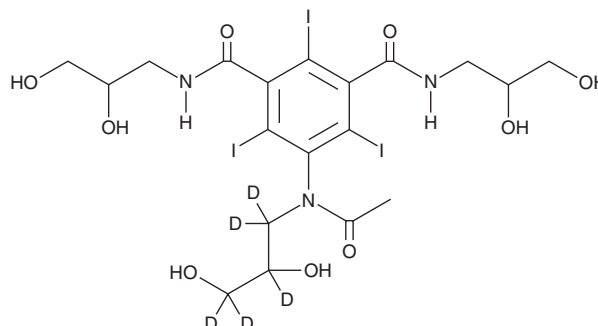


# PRODUCT INFORMATION



Iohexol-d<sub>5</sub>  
Item No. 28540

**CAS Registry No.:** 928623-33-0  
**Formal Name:** 5-[acetyl(2,3-dihydroxypropyl-1,1,2,3,3-d<sub>5</sub>)amino]-N<sup>1</sup>,N<sup>3</sup>-bis(2,3-dihydroxypropyl)-2,4,6-triiodo-1,3-benzenedicarboxamide  
**MF:** C<sub>19</sub>H<sub>21</sub>D<sub>5</sub>I<sub>3</sub>N<sub>3</sub>O<sub>9</sub>  
**FW:** 826.2  
**Chemical Purity:** ≥95% (Iohexol)  
**Deuterium Incorporation:** ≥99% deuterated forms (d<sub>1</sub>-d<sub>5</sub>); ≤1% d<sub>0</sub>  
**Supplied as:** A 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-d<sub>5</sub> is intended for use as an internal standard for the quantification of iohexol (Item No. 23753) by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated *versus* unlabeled).

Iohexol-d<sub>5</sub> is supplied as a solid. A stock solution may be made by dissolving the iohexol-d<sub>5</sub> in the solvent of choice, which should be purged with an inert gas. Iohexol-d<sub>5</sub> is slightly soluble in methanol.

## Description

Iohexol is a non-ionic and water-soluble contrast agent.<sup>1</sup> 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.<sup>2</sup> 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).

### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

### WARRANTY AND LIMITATION OF REMEDY

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