

PRODUCT INFORMATION



Gadobutrol

Item No. 39649

CAS Registry No.: 770691-21-9

Formal Name: (SA-8-1425362'5')-[rel-10-[(2R,3S)-2-(hydroxy-κO)-3-hydroxy-1-(hydroxymethyl)propyl]-1,4,7,10-tetraazacyclododecane-1,4,7-triacetato(3-)-κN¹,κN⁴,κN⁷,κN¹⁰,κO¹,κO⁴,κO⁷]-gadolinium

MF: C₁₈H₃₁GdN₄O₉

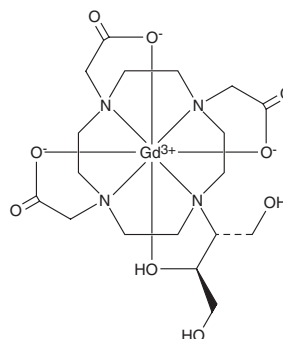
FW: 604.7

Purity: ≥95%

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

Gadobutrol is supplied as a solid. A stock solution may be made by dissolving the gadobutrol in the solvent of choice, which should be purged with an inert gas. Gadobutrol is soluble in methanol.

Description

Gadobutrol is a gadolinium-based MRI contrast agent.¹ It enhances the visibility of hepatic tumors in a rat model of hepatocellular carcinoma (HCC) induced by N-nitrosomorpholine when administered at a dose of 0.1 mmol/kg. Gadobutrol (0.1 mmol/kg per day for three weeks) increases memory deficits in the passive avoidance test and decreases immobility time in an open field test in rats.² Formulations containing gadobutrol have been used as contrast agents for diagnostic MRI in adults and children.

References

1. Kawai, J., Takahashi, M., Kato, N., *et al.* Comparison of a 1.0 molar and a 0.5 molar formulation of gadobutrol in dynamic MR imaging of the liver in rats with hepatocellular carcinoma. *Magn. Reson. Imaging* **17**(1), 91-97 (1999).
2. Solmaz, V., Köse Özlece, H., Fatih Bozkurt, M., *et al.* Repeated gadoteric acid and gadobutrol exposure causes deterioration of behavior and memory functions in rats: MRI, histopathological and biochemical evidence. *Brain Res.* **1754**:147256, (2021).

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.

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