

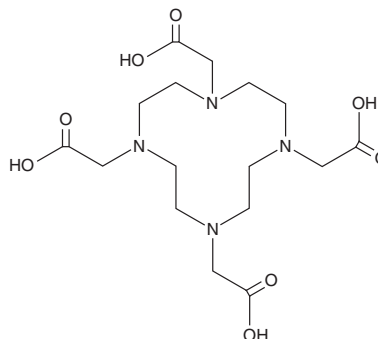
PRODUCT INFORMATION



DOTA

Item No. 43655

CAS Registry No.: 60239-18-1
Formal Name: 1,4,7,10-tetraazacyclododecane-1,4,7,10-tetraacetic acid
Synonyms: NSC 681107, Tetraxetan
MF: 404.4
FW: C₁₆H₂₈N₄O₈
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

DOTA is supplied as a solid. A stock solution may be made by dissolving the DOTA in the solvent of choice, which should be purged with an inert gas. DOTA is sparingly soluble (1-10 mg/ml) in acetonitrile.

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 DOTA can be prepared by directly dissolving the solid in aqueous buffers. DOTA is slightly soluble (0.1-1 mg/ml) in PBS (pH 7.2). We do not recommend storing the aqueous solution for more than one day.

Description

DOTA is a macrocyclic chelator.¹ It has been conjugated to radioligands for use in PET imaging of neuroendocrine tumors and for tissue distribution studies *in vivo*.²

References

1. Wild, D., Schmitt, J.S., Ginja, M., *et al.* DOTA-NOC, a high-affinity ligand of somatostatin receptor subtypes 2, 3 and 5 for labelling with various radiometals. *Eur. J. Nucl. Med. Mol. Imaging* **30(10)**, 1338-1347 (2003).
2. Dam, J.H., Langkjær, N., Baun, C., *et al.* Preparation and evaluation of [¹⁸F]AIF-NOTA-NOC for PET imaging of neuroendocrine tumors: Comparison to [⁶⁸Ga]Ga-DOTA/NOTA-NOC. *Molecules* **27(20)**, 6818 (2022).

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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