

tri-tert-butyl 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetate

Cat. No. CEGZ-6898

Lot. No. (See product label)

Introduction

Description

tri-tert-butyl 1,4,7,10-Tetraazacyclododecane-1,4,7,10-tetraacetate is a protected derivative of the macrocyclic chelator DOTA in which three of the four acetic acid arms are masked as tert-butyl esters. The single free carboxylic acid allows covalent conjugation to amines, peptides, antibodies, or other biomolecules, after which the tert-butyl esters are removed by acidolysis to restore full metal-chelating capacity.

Applications

Used as a key intermediate in the synthesis of DOTA-conjugated peptides, antibodies, and small molecules for radiometal labeling, magnetic resonance imaging contrast agent research, and targeted radionuclide studies.

Synonyms

DOTA tris(t-butyl ester); tri-tert-butyl 2,2',2''-(1,4,7,10-tetraazacyclododecane-1,4,7,10-triyl)triacetate with one free acetic acid arm; DOTA(tBu)₃

Product Information

CAS No. 137076-54-1

Molecular Formula C₂₈H₅₂N₄O₈

Molecular Weight 572.7

Notes For research and development use only.

Storage and Shipping Information

Storage Store in a tightly closed container in a cool, dry place.