

ALF-NOTA-c-d-VAP

Chemical Properties

CAS No. :

Formula: C₅₁H₈₃AlFN₁₇O₁₉S

Molecular Weight:

Keep away from direct sunlight

Storage:

Store at -20°C

Actual storage temperature shall be subject to the COA.

Biological Description

Description	ALF-NOTA-c-d-VAP is a peptide-based PET probe designed for targeting and imaging tumors via GRP78. It exhibits high stability both in vitro and in vivo.
Targets(IC50)	HSP
In vivo	In tumor-bearing mice, micro-PET imaging, pharmacokinetic analysis, and biodistribution studies were conducted to evaluate the probe's performance. ALF-NOTA-c-DVAP was radiolabeled in just 25 minutes, achieving a yield of 51% and a radiochemical purity of 99%, with a molar activity ranging from 20-50 GBq/μmol. Dynamic PET imaging of ALF-NOTA-c-DVAP in tumors demonstrated rapid uptake and prolonged retention with minimal background uptake. Biodistribution studies indicated quick blood clearance and renal excretion, following a single-compartment reversible metabolism model. In PET imaging, the T/M ratios in A549 tumors (high GRP78 expression), MDA-MB-231 tumors (moderate expression), and HepG2 tumors (low expression) were 10.48%, 6.25%, and 3.15% ID/g, respectively, 60 minutes after intravenous injection of ALF-NOTA-c-d-VAP.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286

E_mail:info@targetmol.com

Address:34 Washington Street,Wellesley Hills,MA 02481