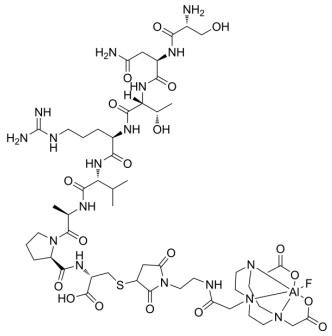
AlF-NOTA-c-d-VAP

Cat. No.:	HY-D2334
Molecular Formula:	$C_{51}H_{83}AlFN_{17}O_{19}S$
Molecular Weight:	1316.35
Target:	HSP
Pathway:	Cell Cycle/DNA Damage; Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	AlF-NOTA-c-d-VAP is a peptide positron emission tomography (PET) probe that used for targeted tumor imaging of GRP78. AlF-NOTA-c-d-VAP demonstrates high stability in vitro and in vivo[1].
In Vivo	Micro-PET imaging, pharmacokinetic analysis, and biodistribution studies were carried out in tumor-bearing mice to evaluate the probe's performance. AlF-NOTA-c-DVAP is radiolabeled in just 25 min with a high yield of 51%, a radiochemical purity of 99%, and molar activity within the range of 20-50 GBq/μmol. Dynamic PET imaging of AlF-NOTA-c-DVAP in tumors showed rapid uptake and sustained retention, with minimal background uptake. Biodistribution studies revealed rapid blood clearance and excretion through the kidneys following a single-compartment reversible metabolic model[1]. In PET imaging, the T/M ratios for A549 tumors (high GRP78 expression), MDA-MB-231 tumors (medium expression), and HepG2 tumors (low expression) at 60 min postintravenous injection are 10.48%, 6.25%, and 3.15% ID/g, respectively[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Jiawen Huang, et al. Synthesis and Evaluation of [18F]AlF-NOTA-c-DVAP: A Novel PET Probe for Imaging GRP78 in Cancer. Mol Pharm. 2024 Mar 30.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA