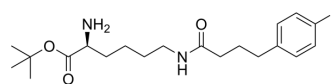


Lys(CO-C3-p-I-Ph)-O-tBu

Cat. No.:	HY-158122
CAS No.:	2703051-80-1
Molecular Formula:	C ₂₀ H ₃₁ IN ₂ O ₃
Molecular Weight:	474.38
Target:	DNA-PK
Pathway:	Cell Cycle/DNA Damage; PI3K/Akt/mTOR
Storage:	-20°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (210.80 mM; Need ultrasonic)

Concentration	Mass			
	1 mg	5 mg	10 mg	
1 mM	2.1080 mL	10.5401 mL	21.0801 mL	
5 mM	0.4216 mL	2.1080 mL	4.2160 mL	
10 mM	0.2108 mL	1.0540 mL	2.1080 mL	

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

Lys(CO-C3-p-I-Ph)-O-tBu is a pharmacokinetic modifier (PK modifier) that can improve the PK properties of PSMA ligand molecules. Lys(CO-C3-p-I-Ph)-O-tBu can increase the residence time of PSMA ligand in plasma by increasing its binding capacity to albumin. Lys(CO-C3-p-I-Ph)-O-tBu also reduces salivary gland absorption, possibly extending the half-life of the active compound. Ac-PSMA-trillium is a suitable PSMA-targeting compound that has different biological applications after modification with different radioactive isotopes. If labeled with ¹¹¹In, it can be used as DOTA chelating agent and imaging agent. Or labeled with ²²⁵Ac as a Macropa chelator for targeted radionuclide therapy (TRT) in the study of metastatic castration-resistant prostate cancer (mCRPC)^{[1][2]}.

REFERENCES

- [1]. Sun M, et al. Prostate-Specific Membrane Antigen (PSMA)-Targeted Radionuclide Therapies for Prostate Cancer. *Curr Oncol Rep.* 2021 Mar 29;23(5):59.
- [2]. Zitzmann-Kolbe S, et al., Preclinical evaluation of an actinium-225 labeled PSMA-targeting small molecule (225Ac-PSMA-Trillium (BAY 3563254)) for the treatment of metastatic castration resistant prostate cancer (mCRPC)[J]. *Cancer Research*, 2024, 84(6_Supplement): 6033-6033.

Caution: Product has not been fully validated for medical applications. For research use only.

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