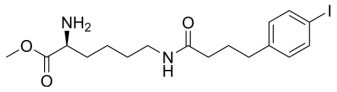
Lys(CO-C3-p-I-Ph)-OMe

Cat. No.:	HY-158118
CAS No.:	2088426-96-2
Molecular Formula:	$C_{17}H_{25}IN_2O_3$
Molecular Weight:	432.3
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 : 50 mg/mL (115.66 mM; Need ultrasonic)

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	1 mM	2.3132 mL	11.5660 mL	23.1321 mL
	5 mM	0.4626 mL	2.3132 mL	4.6264 mL
	10 mM	0.2313 mL	1.1566 mL	2.3132 mL

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

BIOLOGICAL ACTIVITY

Description

Lys(CO-C3-p-I-Ph)-OMe is a pharmacokinetic modifier (PK modifier) that can improve the PK properties of PSMA ligand molecules (such as Ac-PSMA-trillium). Lys(CO-C3-p-I-Ph)-OMe can increase the residence time of Ac-PSMA-trillium in plasma by increasing its binding capacity to albumin. Lys(CO-C3-p-I-Ph)-OMe also reduces salivary gland absorption of Ac-PSMA-trillium, potentially extending its half-life. Ac-PSMA-trillium is a suitable PSMA-targeting compound that has different biological applications after modification with different radioactive isotopes. If labeled with ^{111}In, it can be used as DOTA chelating agent and imaging agent. Or labeled with ^{225}Ac 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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