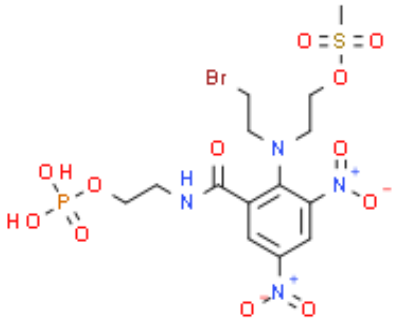
Product Data Sheet

Cas No.:	851627-62-8	Cat. No:	PL04617
Product Name:	PR-104		
Product synonym:	2-[(2-溴乙基)(2,4-二硝基-6-{[2-(膦氧基)乙基]氨基甲酰}苯基)氨基]乙基甲烷磺酸盐		
Chemical name:	PR-104		
MF:	C14H20N4O12PSBR	FW:	579.271
Purity:	≥97%	Batch No.:	-
Storage:			
Structural formula:			
λmax:	-	Formulation:	-
Solubility :			
SMILES :	CS(=O)(OCCN(C1=C(C(NCCOP(O)(O)=O)=O)C=C([N+]([O-])=O)C=C1[N+]([O-])=O)CCBr)=O		
InChI Code:	-		
InChI Key:			
WARNING This product is not for human or veterinary use.			

Product Description

PR-104 是一种选择性缺氧激活的 DNA 交联剂，可用于多种异种肿瘤模型的研究。PR-104 作为氮芥的前体药物，可有效地转化为亲脂性较强的二硝基苯甲酰胺芥菜醇 PR-104A。

生物活性	PR-104 is a selective hypoxia-activated DNA cross-linking agent and can be used for the research of multiple tumor xenograft models. PR-104, as a nitrogen mustard pre-prodrug, is converted efficiently to the more lipophilic dinitrobenzamide mustards alcohol PR-104A.
体外研究(In Vitro)	PR-104 (80 μM; 1 hour; SiHa cells) shows greater suppression of radiation-induced DNA single-strand breaks under hypoxic than aerobic conditions. PR-104 (100 μM; 1 hour; SiHa cells) results in phosphorylation of Ser139 of histone H2AX (gH2AX). PR-104 (0.266 mmol/kg; 18 h; SiHa cells) shows activity against hypoxic cells after irradiation. PR-104 varies in potency between cell lines, with the lowest IC50 (0.51 μmol/L) in H460 cells and highest (7.3 μmol/L) in PC3 prostate cells. has not independently confirmed the accuracy of these methods. They are for reference only.
体内研究(In Vivo)	PR-104 (0.56 mmol/kg; i.v. or i.p.; 0~2 hours) makes the plasma area under the curve. PR-104 (0.23 mmol/kg; i.p.; 100 days) shows antitumor activity. has not independently confirmed the accuracy of these methods. They are for reference only. Animal Model:

包装储存	-80°C, protect from light, stored under nitrogen
溶解度数据	In Vitro: DMSO : 100 mg/mL (172.63 mM; Need ultrasonic)H_2O : 31.25 mg/mL (53.95 mM; ultrasonic and warming and heat to 60°C)配制储备液