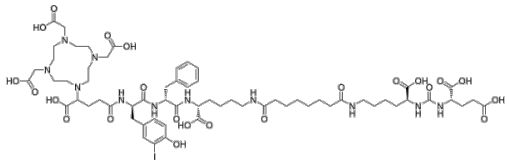
Product Data Sheet

Product Name: PSMA I&T
Cat. No.: GC73198

Chemical Properties

Cas. No.	2192281-54-0		
Formula	$C_{63}H_{92}IN_{11}O_{23}$	M.Wt	1498.37
Solubility	DMSO : 100 mg/mL (66.74 mM; ultrasonic and warming and heat to 60°C); H_2O : < 0.1 mg/mL (insoluble)	Storage	-20°C, sealed storage, away from moisture
General tips	For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20°C for several months.		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		
Structure			



Background

PSMA I&T is an effective inhibitor of prostate-specific membrane antigen (PSMA). PSMA I&T can be used for SPECT/CT imaging and radionuclide studies in triple-negative breast cancer and prostate cancer (PCa).

PSMA I&T has high specificity for PSMA-expressing PCa cells, xenografted PCa, and in vitro kidneys, with equilibrium binding constants Kd of 3.9 nM and 5.6 nM for LNCaP and LS174T-PSMA,

respectively[1].

PSMA I&T (0.1-1 nM, intravenous injection, single dose) shows specific accumulation in mouse xenografts, kidneys, spleens, lungs, salivary glands, and adrenal glands[1].

References:
[1]. Chatalic KL, et al. Towards Personalized Treatment of Prostate Cancer: PSMA I&T, a Promising Prostate-Specific Membrane Antigen-Targeted Theranostic Agent. Theranostics. 2016 Apr 12;6(6):849-61.
[2]. Amelie Heesch, et al. The prostate-specific membrane antigen holds potential as a vascular target for endogenous radiotherapy with [177Lu]Lu-PSMA-I&T for triple-negative breast cancer. Breast Cancer Res. 2024 Feb 20;26(1):30.