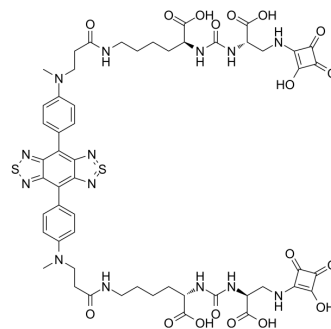


PSMA-IN-2

Cat. No.:	HY-149298
CAS No.:	2946600-14-0
Molecular Formula:	C ₅₄ H ₆₀ N ₁₄ O ₁₈ S ₂
Molecular Weight:	1257.27
Target:	PSMA
Pathway:	Immunology/Inflammation
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	PSMA-IN-2 is an inhibitor of PSMA with a K _i value of 1.07 nM. PSMA-IN-2 displays favorable in vivo NIR imaging ($\lambda_{EM} = 1088$ nm, $\lambda_{ex} = 808$ nm), and can be used for NIRII image-guided tumor resection surgery in PSMA-positive tumor-bearing mice ^[1] .								
IC₅₀ & Target	PSMA 1.07 nM (K _i)								
In Vivo	<p>PSMA-IN-2 (compound 24) (0.85 mg/kg, i.v., 24 h) is confirmed by NIR-II imaging to bind specifically to PSMA in vivo^[1]. Animal assay : 22Rv1 xenograft models^[1]</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <table border="1"> <tr> <td>Animal Model:</td> <td>22Rv1 xenograft models^[1]</td> </tr> <tr> <td>Dosage:</td> <td>0.85 mg/kg</td> </tr> <tr> <td>Administration:</td> <td>Intravenous injection (i.v.)</td> </tr> <tr> <td>Result:</td> <td>Excreted from the blood pool, increasing signal intensity was observed in 22Rv1 xenograft over time as, the background signal became gradually weak, under 808 nm laser irradiation (1100 nm long-pass filter, 400 ms). Inhibition ranged from 38% to 52%, based on semi-quantitative data DCFPyL in tumors.</td> </tr> </table>	Animal Model:	22Rv1 xenograft models ^[1]	Dosage:	0.85 mg/kg	Administration:	Intravenous injection (i.v.)	Result:	Excreted from the blood pool, increasing signal intensity was observed in 22Rv1 xenograft over time as, the background signal became gradually weak, under 808 nm laser irradiation (1100 nm long-pass filter, 400 ms). Inhibition ranged from 38% to 52%, based on semi-quantitative data DCFPyL in tumors.
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REFERENCES

[1]. Wang X, et al. Design and Characterization of Squaramic Acid-Based Prostate-Specific Membrane Antigen Inhibitors for Prostate Cancer. J Med Chem. 2023 May 25;66(10):6889-6904.

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

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