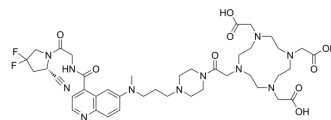


## FAP1-46

Cat. No.:	HY-137331
CAS No.:	2374782-04-2
Molecular Formula:	C <sub>41</sub> H <sub>57</sub> F <sub>2</sub> N <sub>11</sub> O <sub>9</sub>
Molecular Weight:	885.96
Target:	FAP
Pathway:	Immunology/Inflammation
Storage:	4°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



### SOLVENT & SOLUBILITY

In Vitro	H <sub>2</sub> O : 100 mg/mL (112.87 mM; Need ultrasonic)				
	DMSO : 100 mg/mL (112.87 mM; Need ultrasonic)				
	Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
		1 mM	1.1287 mL	5.6436 mL	11.2872 mL
		5 mM	0.2257 mL	1.1287 mL	2.2574 mL
10 mM		0.1129 mL	0.5644 mL	1.1287 mL	
Please refer to the solubility information to select the appropriate solvent.					
In Vivo	1. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 5.75 mg/mL (6.49 mM); Clear solution  2. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 5 mg/mL (5.64 mM); Clear solution				

### BIOLOGICAL ACTIVITY

Description	FAP1-46 is a quinoline-based fibroblast activation protein (FAP)-targeted radiotracer. FAP1-46 has higher tumor uptake and prolonged tumor accumulation. FAP1-46 can be used for tumor imaging of a multitude of different cancers <sup>[1][2]</sup> .
IC <sub>50</sub> & Target	fibroblast activation protein (FAP) <sup>[1]</sup>
In Vitro	FAP1-46 (1-24 h) robustly binds to human FAP in human FAP-expressing HT-1080 cells <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	FAP1-46 (i.v.) shows improved ratios of tumor to liver, kidney, and brain uptake, resulting in an enhanced image contrast for PET imaging <sup>[1]</sup> .

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MCE has not independently confirmed the accuracy of these methods. They are for reference only.

## REFERENCES

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- [1]. Loktev A, et, al. Development of Fibroblast Activation Protein-Targeted Radiotracers with Improved Tumor Retention. J Nucl Med. 2019 Oct;60(10):1421-1429.
- [2]. Moon ES, et, al. Targeting fibroblast activation protein (FAP): next generation PET radiotracers using squaramide coupled bifunctional DOTA and DATA 5m chelators. EJNMMI Radiopharm Chem. 2020 Jul 29;5(1):19.
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**Caution: Product has not been fully validated for medical applications. For research use only.**

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