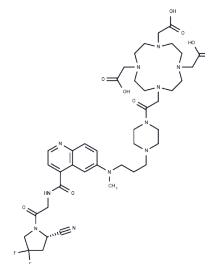


## FAPI-46

## Chemical Properties

CAS No. :	2374782-04-2
Formula:	C41H57F2N11O9
Molecular Weight:	885.96
Storage:	Powder: -20°C for 3 years   In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.



## Biological Description

Description	FAPI-46 is a radiotracer for fibroblast activation protein (FAP), belonging to the class of FAP inhibitors (iFAP), and can be conjugated with labels such as 68Ga or 177Lu to serve as a tracer for FAP tumours in positron emission tomography (PET).
Targets(IC50)	Others, Immunology/Inflammation related
In vitro	FAPI-46 (1-24 h) was shown to strongly bind to human FAP in HT-1080 cells expressing human FAP. [1]
In vivo	FAPI-46 (intravenous injection) can show improved uptake ratios in tumors versus liver, kidneys, and brain, thereby enhancing image contrast in PET imaging [1].

## Solubility Information

Solubility	H2O: 80 mg/mL (90.3 mM), Sonication is recommended. DMSO: 80 mg/mL (90.3 mM), Sonication is recommended. ( $< 1$ mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween-80+45% Saline: 5 mg/mL (5.64 mM), Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

### Preparing Stock Solutions

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	<b>1mg</b>	<b>5mg</b>	<b>10mg</b>
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
50 mM	0.0226 mL	0.1129 mL	0.2257 mL

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Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

### Reference

Loktev A, et, al. Development of Fibroblast Activation Protein-Targeted Radiotracers with Improved Tumor Retention. J Nucl Med. 2019 Oct;60(10):1421-1429.

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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