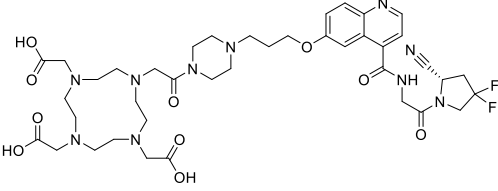


Product data sheet



MedKoo Cat#: 408013 Name: FAPI-4 CAS#: 2374782-02-0 Chemical Formula: C ₄₀ H ₅₄ F ₂ N ₁₀ O ₁₀ Exact Mass: 872.3992 Molecular Weight: 872.93	
Product supplied as:	Powder
Purity (by HPLC):	≥ 98%
Shipping conditions	Ambient temperature
Storage conditions:	Powder: -20°C 3 years; 4°C 2 years. In solvent: -80°C 3 months; -20°C 2 weeks.

1. Product description:

FAPI-4 is a quinoline-based theranostic ligands for the targeting of Fibroblast Activation Protein. FAPI-4 was identified as the most promising tracer for clinical application. Compared with the previously published ligand, FAPI-4 showed excellent stability in human serum, higher affinity for FAP as opposed to CD26, and slower excretion in vitro. FAPI-4 represents a promising tracer for both diagnostic imaging and, possibly, targeted therapy of malignant tumors with a high content of activated fibroblasts, such as breast cancer.

2. CoA, QC data, SDS, and handling instruction

SDS and handling instruction, CoA with copies of QC data (NMR, HPLC and MS analytical spectra) can be downloaded from the product web page under “QC And Documents” section. Note: copies of analytical spectra may not be available if the product is being supplied by MedKoo partners. Whether the product was made by MedKoo or provided by its partners, the quality is 100% guaranteed.

3. Solubility data

Solvent	Max Conc. mg/mL	Max Conc. mM
DMSO	100	114.56

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	1.15 mL	5.73 mL	11.46 mL
5 mM	0.23 mL	1.15 mL	2.29 mL
10 mM	0.11 mL	0.57 mL	1.15 mL
50 mM	0.02 mL	0.11 mL	0.23 mL

5. Molarity Calculator, Reconstitution Calculator, Dilution Calculator

Please refer the product web page under section of “Calculator”

6. Recommended literature which reported protocols for in vitro and in vivo study

In vitro study

To be determined

In vivo study

- Civan C, Kuyumcu S, Has Simsek D, Sanli O, Isik EG, Ozkan ZG, Hurdogan O, Sanli Y. The role of [68 Ga]Ga-FAPI-04 PET/CT in renal cell carcinoma: a preliminary study. *Eur J Nucl Med Mol Imaging*. 2023 Oct 7. doi: 10.1007/s00259-023-06461-4. Epub ahead of print. PMID: 37803246.
- Qiao K, Qin X, Fu S, Ren J, Jia J, Hu X, Tao Y, Yuan S, Wei Y. Value of [18F]AlF-NOTA-FAPI-04 PET/CT for differential diagnosis of malignant and various inflammatory lung lesions: comparison with [18F]FDG PET/CT. *Eur Radiol*. 2023 Sep 5. doi: 10.1007/s00330-023-10208-y. Epub ahead of print. PMID: 37670186.

7. Bioactivity

Biological target:

seMpaI is an AkaLumine analog, acting as an NIR emission luciferin.

Product data sheet



In vitro activity

To be determined

In vivo activity

This study demonstrated the ability of FAPI-04 to detect primary and metastatic renal cell carcinoma (RCC) lesions in patients, presenting higher median values of SUVmax and tumor-to-background ratio compared to the standard FDG-PET/CT. FAPI-04 PET/CT displayed higher SUVmax values in the lungs and revealed potential staging insights for primary lesions based on TNM stages. FAPI-04 PET/CT has potential as a complementary imaging modality.

Reference: Eur J Nucl Med Mol Imaging. 2023 Oct 7. <https://pubmed.ncbi.nlm.nih.gov/37803246/>

Note: The information listed here was extracted from literature. MedKoo has not independently retested and confirmed the accuracy of these methods. Customer should use it just for a reference only.