Product Data Sheet

FATP1-IN-2

Cat. No.:HY-141700CAS No.:2650944-83-3Molecular Formula: $C_{19}H_{20}FN_5O$ Molecular Weight:353.39Target:FATP

Pathway: Membrane Transporter/Ion Channel

Storage: Powder

4°C 2 years

3 years

In solvent -80°C 6 months

-20°C

-20°C 1 month

SOLVENT & SOLUBILITY

In Vitro

DMSO: 100 mg/mL (282.97 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.8297 mL	14.1487 mL	28.2973 mL
	5 mM	0.5659 mL	2.8297 mL	5.6595 mL
	10 mM	0.2830 mL	1.4149 mL	2.8297 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

- 1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: \geq 5 mg/mL (14.15 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE- β -CD in saline) Solubility: \geq 5 mg/mL (14.15 mM); Clear solution
- 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 5 mg/mL (14.15 mM); Clear solution

BIOLOGICAL ACTIVITY

Description	FATP1-IN-2 (compound 12a), an arylpiperazine derivative, is an orally active fatty acid transport protein 1 (FATP1) inhibitor (human IC_{50} =0.43 μ M, mouse IC_{50} =0.39 μ M) ^[1] .
IC ₅₀ & Target	IC50: 0.43 μ M (human FATP1) $^{[1]}$. IC50: 0.39 μ M (mouse FATP1) $^{[1]}$
In Vivo	FATP1-IN-2 (10 mg/kg; p.o.) shows a C_{max} value above the mouse IC_{50} value ^[1] .

 ${\it FATP1-IN-2}~(3,10,30~mg/kg;p.o.;4~weeks)~shows~TG~content~of~each~tissue~does~not~change~at~any~dose {\small [1]}.$

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

Animal Model:	Mice ^[1]	
Dosage:	10 mg/kg	
Administration:	P.o.	
Result:	Showed a C _{max} value above the mouse IC ₅₀ value.	

CUSTOMER VALIDATION

• Research Square Print. 2023 Jan 24.

See more customer validations on $\underline{www.MedChemExpress.com}$

REFERENCES

[1]. Matsufuji T, et al. Arylpiperazines as fatty acid transport protein 1 (FATP1) inhibitors with improved potency and pharmacokinetic properties. Bioorg Med Chem Lett. 2013;23(9):2560-2565.

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