TrkA-IN-3

Cat. No.: HY-151948

Molecular Formula: $C_{24}H_{17}F_3N_4O_3$

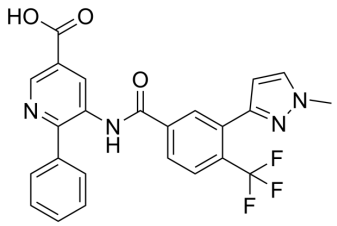
Molecular Weight: 466.41

Target: Trk Receptor

Pathway: Neuronal Signaling; Protein Tyrosine Kinase/RTK

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	6 months
	-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 50 mg/mL (107.20 mM; Need ultrasonic)

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	1 mM	2.1440 mL	10.7202 mL	21.4404 mL
	5 mM	0.4288 mL	2.1440 mL	4.2881 mL
	10 mM	0.2144 mL	1.0720 mL	2.1440 mL

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

In Vivo

1. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (5.36 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

TrkA-IN-3 is a potent, subselective and allosteric TrkA inhibitor, with an IC_{50} of 22.4 nM. TrkA-IN-3 shows more than 8000-fold selectivity for TrkA over TrkB and TrkC. TrkA-IN-3 can be used for the research of pain[1].

IC_{50} & Target

TrkA
22.4 nM (IC_{50})

In Vitro

TrkA-IN-3 (compound 5) demonstrates 73.9% and 64.8% of kinase inhibition towards TrkA at concentrations of 1 μM and 0.1 μM , respectively[1].

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

REFERENCES

[1]. Tang S, et, al. Design, development and evaluation of a prodrug-type TrkA-selective inhibitor with antinociceptive effects in vivo. Eur J Med Chem. 2023 Jan 5;245(Pt 2):114901.

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