TASK-1-IN-1

Cat. No.: HY-151891

CAS No.: 600125-11-9

Molecular Formula: $C_{22}H_{20}N_2O_2$

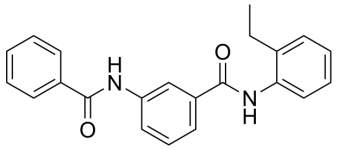
Molecular Weight: 344.41

Target: Potassium Channel

Pathway: Membrane Transporter/Ion Channel

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 : 66.67 mg/mL (193.58 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.9035 mL	14.5176 mL	29.0352 mL
	5 mM	0.5807 mL	2.9035 mL	5.8070 mL
	10 mM	0.2904 mL	1.4518 mL	2.9035 mL

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

BIOLOGICAL ACTIVITY

Description

TASK-1-IN-1 is a potent and selective TASK-1 (Potassium Channel) inhibitor with an IC50 of 148 nM. TASK-1-IN-1 shows a reduced inhibition of TASK-3 channels (IC50 of 1750 nM) and not a significant effect on other K+ channels. TASK-1-IN-1 has anticancer effects.

IC_{50} & Target

IC50: 148 nM (TASK-1) and 1750 nM (TASK-3)[1]

In Vitro

TASK-1-IN-1 (compound F3) blocks cell proliferation and viability in the MCF-7 cancer cell line but not in TASK-1 knockdown MCF-7 cells, indicating that it is acting in TASK-1 channels[1].

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

Cell Proliferation Assay[1]

Cell Line:	MCF-7 cells
Concentration:	10 μM

Incubation Time:	96 hours
Result:	Showed an antiproliferative activity of ⊠45% on the cell line MCF-7.

REFERENCES

[1]. Bárbara Arévalo, et al. Selective TASK-1 Inhibitor with a Defined Structure-Activity Relationship Reduces Cancer Cell Proliferation and Viability. J Med Chem. 2022 Nov 24;65(22):15014-15027.

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