Indophagolin

Cat. No.: HY-134807

CAS No.: 1207660-00-1

Molecular Formula: $C_{19}H_{15}BrClF_3N_2O_3S$

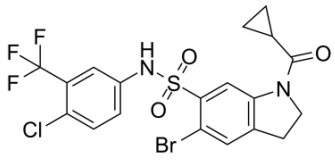
Molecular Weight: 523.75

Target: P2X Receptor; 5-HT Receptor; Autophagy

Pathway: Membrane Transporter/Ion Channel; GPCR/G Protein; Neuronal Signaling; Autophagy

Storage: 4°C, protect from light

* In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 250 mg/mL (477.33 mM; Need ultrasonic and warming)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	1.9093 mL	9.5465 mL	19.0931 mL
	5 mM	0.3819 mL	1.9093 mL	3.8186 mL
	10 mM	0.1909 mL	0.9547 mL	1.9093 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: 2.08 mg/mL (3.97 mM); Suspended solution; Need ultrasonic
2. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.08 mg/mL (3.97 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Indophagolin is a potent, indoline-containing autophagy inhibitor (IC_{50}=140 nM). Indophagolin antagonizes the purinergic receptor $P2X_4$ as well as $P2X_1$ and $P2X_3$ with IC_{50}s of 2.71, 2.40 and 3.49 μM, respectively. Indophagolin also antagonizes the G_q-protein-coupled $P2Y_4$, $P2Y_6$, and $P2Y_{11}$ receptors (IC_{50}s =3.4~15.4 μM). Indophagolin has a strong antagonistic effect on serotonin receptor 5-HT_6 (IC_{50}=1.0 μM) and a moderate effect on receptors 5-HT_{1B}, 5-HT_{2B}, 5-HT_{4e}, and 5-HT_7[1].

IC_{50} & Target

P2X1 2.4 μM (IC_{50})	P2X4 2.71 μM (IC_{50})	P2Y11 3.4 μM (IC_{50})	P2X3 3.49 μM (IC_{50})
P2Y4 4.89 μM (IC_{50})	P2Y6 15.4 μM (IC_{50})	Autophagy 140 nM (IC_{50})	5-HT_6 Receptor 1.0 μM (IC_{50})

In Vitro	Indophagolin (10 μM) inhibits autophagosome formation in MCF7 cells[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Carnero Corrales MA, et al. Thermal proteome profiling identifies the membrane-bound purinergic receptor P2X4 as a target of the autophagy inhibitor indophagolin [published online ahead of print, 2021 Mar 9]. Cell Chem Biol. 2021;S2451-9456(21)00102-1.

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