R(+)-Methylindazone

Cat. No.: HY-12693 CAS No.: 54197-31-8 Molecular Formula: C₁₇H₁₈Cl₂O₄ Molecular Weight: 357.23

Chloride Channel Target:

Pathway: Membrane Transporter/Ion Channel

-20°C Storage: Powder 3 years

2 years

-80°C In solvent 2 years

> -20°C 1 year

Product Data Sheet

SOLVENT & SOLUBILITY

In Vitro

DMSO : ≥ 100 mg/mL (279.93 mM)

H₂O: < 0.1 mg/mL (insoluble)

* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.7993 mL	13.9966 mL	27.9932 mL
	5 mM	0.5599 mL	2.7993 mL	5.5986 mL
	10 mM	0.2799 mL	1.3997 mL	2.7993 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: ≥ 2.5 mg/mL (7.00 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (7.00 mM); Clear solution
- 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (7.00 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

R(+)-Methylindazone (R(+)-IAA-94) is a potent indanyloxyacetic acid blocker of epithelial chloride channels. R(+)- $Methyl indazone in hibits Nef-sdAb19 \ (single-domain antibody) interaction and binds to negative factor \ (Nef)^{[1][2][3]}.$

In Vitro

IAA-94 has been employed in modulating chloride channel function to probe the dynamics and function of the channels. The high affinity of IAA-94 for the chloride channel has been exploited for isolation and reconstitution of these proteins^{[1][2]}.

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

CUSTOMER VALIDATION

- Mol Metab. 2023 Aug 19;101794.
- Oxid Med Cell Longev. 2022 Apr 19;2022:4608914.

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REFERENCES

[1]. Landry DW, et al. Epithelial chloride channel. Development of inhibitory ligands. J Gen Physiol. 1987 Dec;90(6):779-98.

[2]. Landry DW, et al. Purification and reconstitution of chloride channels from kidney and trachea. Science. 1989 Jun 23;244(4911):1469-72.

[3]. Xiaoqin Fan, et al. A homogeneous time-resolved fluorescence-based high-throughput screening for discovery of inhibitors of Nef-sdAb19 interaction. Int J Oncol. 2015 Oct;47(4):1485-93.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$

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