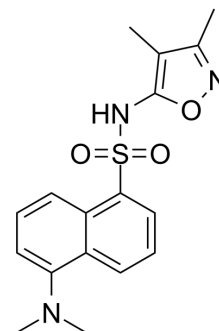


BMS 182874

Cat. No.:	HY-118497
CAS No.:	153042-42-3
Molecular Formula:	C ₁₇ H ₁₉ N ₃ O ₃ S
Molecular Weight:	345.42
Target:	Endothelin Receptor
Pathway:	GPCR/G Protein
Storage:	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 125 mg/mL (361.88 mM; Need ultrasonic)

Concentration	Solvent	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	2.8950 mL	14.4751 mL	28.9503 mL
	5 mM	0.5790 mL	2.8950 mL	5.7901 mL
	10 mM	0.2895 mL	1.4475 mL	2.8950 mL

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

BIOLOGICAL ACTIVITY

Description

BMS 182874 is an orallyactive, highly selective endothelin receptor (ET_A receptor) antagonist, with IC₅₀ value of 0.150 μM, K_i of 0.055 μM. BMS 182874 reduces the arterial pressure of Deoxycorticosterone acetate (HY-B1472) induced hypertension model in rats, and can be used for cardiovascular disease research^[1].

IC₅₀ & Target

ET _A	ET _A
0.15 μM (IC ₅₀)	0.055 μM (K _i)

In Vitro

BMS-182874 (dimethyla minoanalogue 11) is an antagonist of the ET_A, with IC₅₀ value of 0.150 μM and K_i of 0.055 μM in vsm-A10 cells, and with a KB value of 0.520 μM in rabbit carotid artery rings^[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

BMS 182874 (100 μM/kg, p.o.; a single oral) makes arterial pressure slowly fell by 25% from a control level. After dosing for 12 and 24 h makes arterial pressure is still 12% below the control level^[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Kidney Deoxycorticosterone acetate -salt hypertensive rats ^[1]
Dosage:	100 µM/kg
Administration:	Oral gavage (p.o.); Intravenous injection (i.v.)
Result:	Made arterial pressure slowly fell by 25% from a control level. After dosing for 12 and 24 h, makes arterial pressure is still 12% below the control level.

REFERENCES

[1]. Abdullaha M, et.al. Methoxy-naphthyl-Linked N-Benzyl Pyridinium Styryls as Dual Cholinesterase Inhibitors: Design, Synthesis, Biological Evaluation, and Structure-Activity Relationship. ACS Omega. 2023 May 9;8(20):17591-17608.

Caution: Product has not been fully validated for medical applications. For research use only.

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