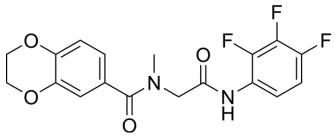
IMB-808

Cat. No.:	HY-123148
CAS No.:	870768-70-0
Molecular Formula:	$C_{18}H_{15}F_3N_2O_4$
Molecular Weight:	380.32
Target:	LXR
Pathway:	Metabolic Enzyme/Protease; Vitamin D Related/Nuclear Receptor
Storage:	Powder -20°C 3 years In solvent -80°C 6 months -20°C 1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 250 mg/mL (657.34 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.6294 mL	13.1468 mL	26.2936 mL
	5 mM	0.5259 mL	2.6294 mL	5.2587 mL
	10 mM	0.2629 mL	1.3147 mL	2.6294 mL

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

BIOLOGICAL ACTIVITY

Description

IMB-808 is a potent LXRα/β dual agonist with EC_{50} values of 0.53 μM and 0.15 μM (0.15 μM, using GAL4-pGL4-luc reporter plasmid) for LXRβ and LXRα, respectively. IMB-808 promotes expression of genes related to reverse cholesterol transport (ABCA1 and ABCG1). IMB-808 can be used as a promising agent for the prospective treatment of atherosclerosis research[1].

In Vitro

IMB-808 (0.001 μM-30 μM) significantly dose-dependently induces LXRβ activation under the concentrations ranged from 0.001 μM to 30 μM, with an EC_{50} of 0.53 μM. In a luciferase reporter assay IMB-808 using GAL4-pGL4-luc reporter plasmid, IMB-808 also could dose-dependently active LXRα with a lower EC_{50} of 0.15 μM[1].

IMB-808 (0 μM-10 μM; 18 hours) significantly increases protein and mRNA levels of ABCG1 as well as ABCA1 in RAW264.7 macrophages[1].

IMB-808 (0.1 μM, 0.3 μM, 1 μM, 3 μM, or 10 μM; 24 hours) promotes cholesterol efflux towards ApoA-I and HDL dose-dependently and reduces the cellular cholesterol concentration in these two cell lines[1].

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

REFERENCES

[1]. Duo Lu, et al. Identification of a Novel Liver X Receptor Agonist that Regulates the Expression of Key Cholesterol Homeostasis Genes with Distinct Pharmacological Characteristics. Mol Pharmacol. 2017 Apr;91(4):264-276.

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