DiMNF

Cat. No.: HY-103222

CAS No.: 14756-24-2

Molecular Formula: $C_{21}H_{16}O_4$

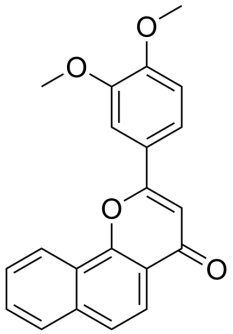
Molecular Weight: 332.35

Target: Aryl Hydrocarbon Receptor

Pathway: Immunology/Inflammation

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 : 12.5 mg/mL (37.61 mM; ultrasonic and warming and heat to 70°C)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	3.0089 mL	15.0444 mL	30.0888 mL
	5 mM	0.6018 mL	3.0089 mL	6.0178 mL
	10 mM	0.3009 mL	1.5044 mL	3.0089 mL

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

BIOLOGICAL ACTIVITY

Description

DiMNF (3',4'-Dimethoxy-αNF) is a selective aryl hydrocarbon receptor (AHR) modulator. DiMNF is a competitive AHR ligand (IC_{50} = 21 nM) with apparent antagonistic activity. DiMNF can be used as an anti-inflammatory agent[1].

In Vitro

DiMNF (3',4'-Dimethoxy-αNF) (10 μM; 4 h) minimally influences AHR gene battery[1].
DiMNF (10 μM; 1 h) effectively suppresses cytokine-mediated inflammatory gene expression[1].
DiMNF adopts a unique orientation within the ligand binding pocket of AHR[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

RT-PCR[1]

Cell Line:	Huh7 cell
Concentration:	10 μM
Incubation Time:	4 h or 1 h
Result:	Decreased CYP1A1 mRNA expression (4 h). Exhibited repressive activity toward cytokine-

	mediated SAA1 induction (1 h). Significantly reduced IL1β-mediated mRNA induction of C4 , C1S, C1R, and C3.

REFERENCES

[1]. Murray IA, et al. Suppression of cytokine-mediated complement factor gene expression through selective activation of the Ah receptor with 3',4'-dimethoxy-α-naphthoflavone. Mol Pharmacol. 2011 Mar;79(3):508-19.

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