AHR antagonist 5 free base

Cat. No.: HY-141609

CAS No.: 2247950-42-9

Molecular Formula: $C_{25}H_{24}FN_7$

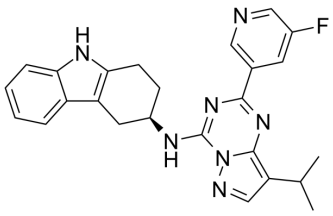
Molecular Weight: 441.5

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 : 100 mg/mL (226.50 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.2650 mL	11.3250 mL	22.6501 mL
	5 mM	0.4530 mL	2.2650 mL	4.5300 mL
	10 mM	0.2265 mL	1.1325 mL	2.2650 mL

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

In Vivo

1. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (5.66 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

AHR antagonist 5 free base is a selective and orally active aryl hydrocarbon receptor (AHR) inhibitor. AHR antagonist 5 free base effectively blocks AHR from translocating from the cytoplasm to the nucleus. AHR antagonist 5 free base is highly selective for AHR over other receptors, transporters, and kinases[1].

In Vitro

AHR antagonist 5 free base (Compound A) potently inhibits AHR activity in human and rodent cell lines (IC_{50} of ~35-150 nM). In human T cell assays, AHR antagonist 5 free base induces an activated T cell state. AHR antagonist 5 free base inhibits CYP1A1 and interleukin (IL)-22 gene expression and leads to an increase in pro-inflammatory cytokines, such as IL-2 and IL-9 [1].

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

In Vivo

AHR antagonist 5 free base (Compound A) has been evaluated in a series of pharmacological, single-dose and repeated-dose toxicological studies in rodent and non-rodent species including 28-day Good Laboratory Practice (GLP) studies in rat and

monkeys. All changes are resolved or resolving after 2 weeks of dosing cessation, except for the testicular changes in rats[1].

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

REFERENCES

[1]. Marta Sanchez-Martin, et al. Ahr inhibitors and uses thereof. WO2021142180A1.

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