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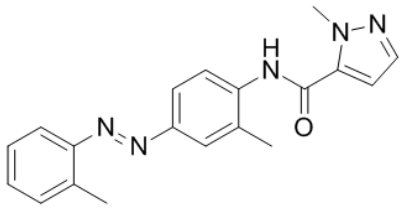
Data Sheet

Global Supplier of Chemical Probes, Inhibitors & Agonists.

Product Name	:	CH-223191
Cat. No.	:	PC-43148
CAS No.	:	301326-22-7
Molecular Formula	:	$C_{19}H_{19}N_5O$
Molecular Weight	:	333.3871
Target	:	Aryl hydrocarbon Receptor (AhR)
Solubility	:	DMSO: ≥ 35 mg/mL



Biological Activity

CH-223191 (CH223191) is a potent, specific antagonist of **AhR** (aryl hydrocarbon receptor), potently inhibits TCDD-induced AhR-dependent transcription with IC50 of 0.03 uM.
CH-223191 shows more inhibitory potency and no agonist-like effect, compared with flavone, resveratrol, and α-naphthoflavone, as well as estrogenic potency.
CH-223191 inhibits TCDD-AhR binding and TCDD-induced nuclear translocation and DNA binding of AhR, prevents the expression of cytochrome P450 enzymes, target genes of the AhR.
CH-223191 potently prevents TCDD-elicited cytochrome P450 induction, liver toxicity, and wasting syndrome in mice

References

Kim SH, et al. ***Mol Pharmacol***. 2006 Jun;69(6):1871-8.

Veldhoen M, et al. ***J Exp Med***. 2009 Jan 16;206(1):43-9.

Gramatzki D, et al. ***Oncogene***. 2009 Jul 16;28(28):2593-605.

Shackleford G, et al. **Proc Natl Acad Sci U S A.** 2018 Feb 6;115(6):E1319-E1328.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

E-mail: tech@probechem.com