Product Data Sheet

CB7993113

Cat. No.: HY-111450 CAS No.: 819827-50-4 Molecular Formula: $C_{15}H_{10}BrNO_{5}$ Molecular Weight: 364.15

Target: Aryl Hydrocarbon Receptor
Pathway: Immunology/Inflammation

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

BIOLOGICAL ACTIVITY

Description	CB7993113 is a potent AHR antagonist, with an IC $_{50}$ of 0.33 μ M. CB7993113 directly binds AHR protein and blocks AHR nuclear translocation. CB7993113 inhibits polycyclic aromatic hydrocarbon (PAH)- and TCDD-induced reporter activity by 75% and 90% respectively ^[1] .
In Vitro	CB7993113 exhibits no toxicity when added at concentrations at least up to 20 μ M to several human cells including HepG2 hepatoma cells, BP1, D3, Hs578T, or MDA-MB-231 breast cancer cells, and primary human-induced pluripotent stem cells ^[1] . CB7993113 significantly reduces the invasive phenotype of ER-/PR-/HER2- breast cancer cells in vitro ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	CB7993113 effectively blocks acute, $50 \text{ mg/kg DMBA-induced hepatic CYP1A1 induction and bone marrow toxicity in vivo}^{[1]}$. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Parks AJ, et al. In silico identification of an aryl hydrocarbon receptor antagonist with biological activity in vitro and in vivo. Mol Pharmacol. 2014 Nov;86(5):593-608.

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

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