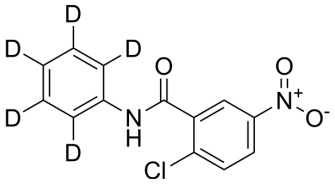
GW9662-d_5

Cat. No.:	HY-16578S
CAS No.:	2117730-84-2
Molecular Formula:	$C_{13}H_4D_5ClN_2O_3$
Molecular Weight:	281.71
Target:	PPAR; Isotope-Labeled Compounds
Pathway:	Cell Cycle/DNA Damage; Vitamin D Related/Nuclear Receptor; Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	GW9662-d_5 is the deuterium labeled GW9662. GW9662 is a potent and selective PPARγ antagonist with an IC50 of 3.3 nM, showing 10 and 1000-fold selectivity over PPARα and PPARδ, respectively[1][2].
In Vitro	Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. Ann Pharmacother. 2019;53(2):211-216.

[2]. Sato K, et al. PPARγ antagonist attenuates mouse immune-mediated bone marrow failure by inhibition of T cell function.Haematologica. 2016 Jan;101(1):57-67.

[3]. Seargent JM, et al. GW9662, a potent antagonist of PPARgamma, inhibits growth of breast tumor cells and promotes the anticancer effects of the PPARgamma agonist BRL 49653, independently of PPARgamma activation. Br J Pharmacol. 2004 Dec;143(8):933-7.

[4]. Collino M, et al. The selective PPARgamma antagonist GW9662 reverses the protection of LPS in a model of renal ischemia-reperfusion. Kidney Int. 2005 Aug;68(2):529-36.

[5]. Leesnitzer LM, et al. Functional consequences of cysteine modification in the ligand binding sites of peroxisome proliferator activated receptors by GW9662. Biochemistry. 2002 May 28;41(21):6640-50.

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