Letrozole-d_4

Cat. No.: HY-14248S

CAS No.: 1133712-96-5

Molecular Formula: $C_{17}H_7D_4N_5$

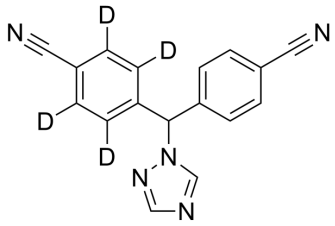
Molecular Weight: 289.33

Target: Autophagy; Isotope-Labeled Compounds; Cytochrome P450

Pathway: Autophagy; Others; Metabolic Enzyme/Protease

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	6 months
	-20°C	1 month



BIOLOGICAL ACTIVITY

Description	Letrozole-d_4 (CGS 20267-d4) is the deuterium labeled Letrozole. Letrozole (CGS 20267) is a potent, selective, reversible and orally active non-steroidal inhibitor of aromatase, with an IC50 of 11.5 nM. Letrozole selective inhibits estrogen biosynthesis, and can be used for the research of breast cancer[1][2][3].
IC_{50} & Target	Aromatase
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]. Bhatnagar AS, et, al. Highly selective inhibition of estrogen biosynthesis by CGS 20267, a new non-steroidal aromatase inhibitor. J Steroid Biochem Mol Biol. 1990 Dec 20;37(6):1021-7.

[3]. Mitropoulou TN, et, al. Letrozole as a potent inhibitor of cell proliferation and expression of metalloproteinases (MMP-2 and MMP-9) by human epithelial breast cancer cells. Int J Cancer. 2003 Mar 20;104(2):155-60.

[4]. Schieweck K, et, al. Anti-tumor and endocrine effects of non-steroidal aromatase inhibitors on estrogen-dependent rat mammary tumors. J Steroid Biochem Mol Biol. 1993 Mar;44(4-6):633-6.

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