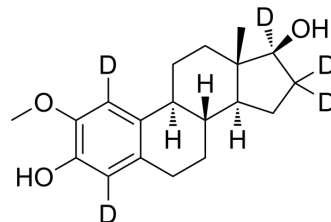


2-Methoxyestradiol-d₅

Cat. No.:	HY-12033S2
CAS No.:	358731-34-7
Molecular Formula:	C ₁₉ H ₂₁ D ₅ O ₃
Molecular Weight:	307.44
Target:	Microtubule/Tubulin; Apoptosis; Autophagy; Endogenous Metabolite; Reactive Oxygen Species; Isotope-Labeled Compounds
Pathway:	Cell Cycle/DNA Damage; Cytoskeleton; Apoptosis; Autophagy; Metabolic Enzyme/Protease; Immunology/Inflammation; NF-κB; Others
Storage:	4°C, stored under nitrogen * In solvent : -80°C, 6 months; -20°C, 1 month (stored under nitrogen)



BIOLOGICAL ACTIVITY

Description	2-Methoxyestradiol-d ₅ is the deuterium labeled 2-Hydroxyestradiol. 2-Methoxyestradiol (2-ME2), an orally active endogenous metabolite of 17β-estradiol (E2), is an apoptosis inducer and an angiogenesis inhibitor with potent antineoplastic activity. 2-Methoxyestradiol also destabilize microtubules. 2-Methoxyestradiol, also a potent superoxide dismutase (SOD) inhibitor and a ROS-generating agent, induces autophagy in the transformed cell line HEK293 and the cancer cell lines U87 and HeLa[1][2][3][4][5][6][7].
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

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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