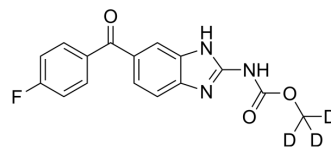


## Flubendazole-d<sub>3</sub>

<b>Cat. No.:</b>	HY-B0294S		
<b>CAS No.:</b>	1173021-08-3		
<b>Molecular Formula:</b>	C <sub>16</sub> H <sub>9</sub> D <sub>3</sub> FN <sub>3</sub> O <sub>3</sub>		
<b>Molecular Weight:</b>	316.3		
<b>Target:</b>	Microtubule/Tubulin; Apoptosis; Parasite		
<b>Pathway:</b>	Cell Cycle/DNA Damage; Cytoskeleton; Apoptosis; Anti-infection		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### BIOLOGICAL ACTIVITY

#### Description

Flubendazole-d<sub>3</sub> is the deuterium labeled Flubendazole. Flubendazole is a safe and efficacious anthelmintic agent, which is widely used for anthelmintic to human, rodents and ruminants. Flubendazole exerts anticancer activities by mechanisms including inhibition of microtubule function. Flubendazole induces p53-mediated apoptosis and arrests G2/M cell cycle[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<sup>[1]</sup>.  
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]. Michaelis M, et al. Identification of flubendazole as potential anti-neuroblastoma compound in a large cell line screen. *Sci Rep.* 2015 Feb 3;5:8202.
- [3]. Zhou X, et al. Flubendazole inhibits glioma proliferation by G2/M cell cycle arrest and pro-apoptosis. *Cell Death Discov.* 2018 Feb 14;4:18.

**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