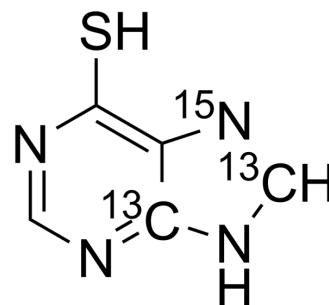


6-Mercaptopurine-¹³C₂,¹⁵N

Cat. No.:	HY-13677S1
CAS No.:	1190008-04-8
Molecular Formula:	C ₃ ¹³ C ₂ H ₄ N ₃ ¹⁵ NS
Molecular Weight:	155.16
Target:	Nucleoside Antimetabolite/Analog; Autophagy; Endogenous Metabolite
Pathway:	Cell Cycle/DNA Damage; Autophagy; Metabolic Enzyme/Protease
Storage:	-20°C, stored under nitrogen * In solvent : -80°C, 6 months; -20°C, 1 month (stored under nitrogen)



BIOLOGICAL ACTIVITY

Description	6-Mercaptopurine- ¹³ C ₂ , ¹⁵ N is the ¹³ C- and ¹⁵ N-labeled 6-Mercaptopurine. 6-Mercaptopurine is a purine analogue which acts as an antagonist of the endogenous purines and has been widely used as antileukemic agent and immunosuppressive agent.
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]. Sahasranaman S, et al. Clinical pharmacology and pharmacogenetics of thiopurines. *Eur J Clin Pharmacol.* 2008 Aug;64(8):753-67.
- [3]. Liu Q, et al. 6-Mercaptopurine augments glucose transport activity in skeletal muscle cells in part via a mechanism dependent upon orphan nuclear receptor NR4A3. *Am J Physiol Endocrinol Metab.* 2013 Nov 1;305(9):E1081-92.
- [4]. Kanemitsu H, et al. 6-Mercaptopurine (6-MP) induces cell cycle arrest and apoptosis of neural progenitor cells in the developing fetal rat brain. *Neurotoxicol Teratol.* 2009 Mar-Apr;31(2):104-9.

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