Uric acid-¹³C,¹⁵N₃

| Cat. No.: | HY-B2130S | |
|--------------------|--|------------------|
| CAS No.: | 2421217-23-2 | 0 |
| Molecular Formula: | $C_{4}^{13}CH_{4}N_{15}N_{3}O_{3}$ | ∬ H |
| Molecular Weight: | 172.08 | $H^{15}N$ $15N$ |
| Target: | Endogenous Metabolite; Reactive Oxygen Species | |
| Pathway: | Metabolic Enzyme/Protease; Immunology/Inflammation; NF-кВ | $O^{-45}N^{-1}N$ |
| Storage: | 4°C, sealed storage, away from moisture and light | н ч |
| | * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture | |
| | and light) | |

| BIOLOGICAL ACTIVITY | | |
|---------------------|---|--|
| DIOLOGICAL ACTIV | | |
| Description | Uric acid- ¹³ C, ¹⁵ N ₃ is the ¹³ C-labeled and ¹⁵ N-labeled Uric acid. Uric acid, scavenger of oxygen radical, is a very important antioxidant that help maintains the stability of blood pressure and antioxidant stress. Uric acid can remove reactive oxygen species (ROS) such as singlet oxygen and peroxynitrite, inhibiting lipid peroxidation[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]. Wang Q, et al. Recent Progress on Uric Acid Detection: A Review. Crit Rev Anal Chem. 2020;50(4):359-375.

[3]. Yasutake Y, et al. Uric acid ameliorates indomethacin-induced enteropathy in mice through its antioxidant activity. J Gastroenterol Hepatol. 2017 Nov;32(11):1839-1845.

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