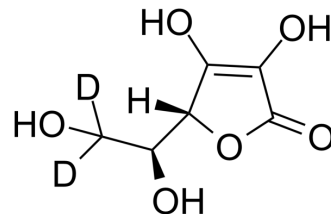


L-Ascorbic acid-d2

Cat. No.:	HY-B0166S6
CAS No.:	82977-10-4
Molecular Formula:	C ₆ H ₆ D ₂ O ₆
Molecular Weight:	178.14
Target:	Apoptosis; Reactive Oxygen Species; Endogenous Metabolite; Calcium Channel
Pathway:	Apoptosis; Immunology/Inflammation; Metabolic Enzyme/Protease; NF-κB; Membrane Transporter/Ion Channel; Neuronal Signaling
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	L-Ascorbic acid-d2 is the deuterium labeled L-Ascorbic acid. L-Ascorbic acid (L-Ascorbate), an electron donor, is an endogenous antioxidant agent. L-Ascorbic acid inhibits selectively Cav3.2 channels with an IC50 of 6.5 μM. L-Ascorbic acid is also a colla
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 Feb;53(2):211-216.
- [2]. Sebastian J Padayatty, et al. Vitamin C as an antioxidant: evaluation of its role in disease prevention. *J Am Coll Nutr*. 2003 Feb;22(1):18-35.; Michael T Nelson, et al. Molecular mechanisms of subtype-specific inhibition of neuronal T-type calcium channels

Caution: Product has not been fully validated for medical applications. For research use only.

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