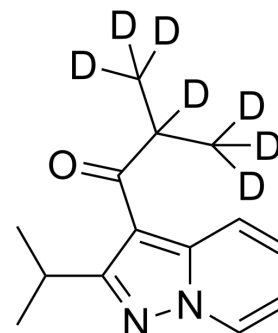


Ibudilast-d7

Cat. No.:	HY-B0763S1
CAS No.:	2713301-45-0
Molecular Formula:	C ₁₄ H ₁₁ D ₇ N ₂ O
Molecular Weight:	237.35
Target:	Phosphodiesterase (PDE); Isotope-Labeled Compounds
Pathway:	Metabolic Enzyme/Protease; Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Ibudilast-d ₇ is the deuterium labeled Ibudilast. Ibudilast (KC-404; AV-411; MN-166) is a cyclic AMP phosphodiesterase (PDE) inhibitor. Ibudilast has platelet anti-aggregatory effects. Ibudilast can be used for the research of asthma for its inhibitory effects on tracheal smooth muscle contractility. Ibudilast may be a useful neuroprotective and anti-dementia agent counteracting neurotoxicity in activated microglia[1].
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]. Mizuno T, et al. Neuroprotective role of phosphodiesterase inhibitor ibudilast on neuronal cell death induced by activated microglia. *Neuropharmacology.* 2004 Mar;46(3):404-11.

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

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