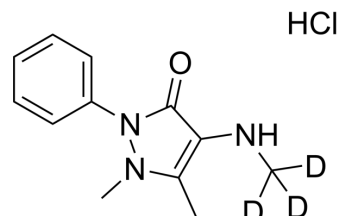


## 4-Methylamino antipyrine-d<sub>3</sub> hydrochloride

<b>Cat. No.:</b>	HY-135731AS
<b>Molecular Formula:</b>	C <sub>12</sub> H <sub>13</sub> D <sub>3</sub> ClN <sub>3</sub> O
<b>Molecular Weight:</b>	256.75
<b>Target:</b>	COX; Drug Metabolite; Isotope-Labeled Compounds
<b>Pathway:</b>	Immunology/Inflammation; Metabolic Enzyme/Protease; Others
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	4-Methylamino antipyrine-d <sub>3</sub> (hydrochloride) is deuterium labeled 4-Methylamino antipyrine (hydrochloride). 4-Methylamino antipyrine hydrochloride is an active metabolite of Metamizole. Metamizole is a pyrazolone non-steroidal anti-inflammatory drug (NSAID) and inhibits COX. Metamizole is a nonopioid analgesic agent and can be used for pain and fever[1][2][3]. 4-Methylamino antipyrine hydrochloride has analgesic, antipyretic, and relatively weak antiinflammatory properties[2].
<b>In Vitro</b>	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]. Ariza A, et al. Pyrazolones metabolites are relevant for identifying selective anaphylaxis to metamizole. *Sci Rep.* 2016 Mar 31;6:23845.
- [3]. Burmańczuk A, et al. Pharmacokinetic investigations of the marker active metabolites 4-methylamino-antipyrine and 4-amino-antipyrine after intramuscular injection of metamizole in healthy piglets. *J Vet Pharmacol Ther.* 2016 Dec;39(6):616-620.
- [4]. Campos C1, et al. Regulation of cyclooxygenase activity by metamizol. *Eur J Pharmacol.* 1999 Aug 13;378(3):339-47.

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

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