## **Product** Data Sheet

## Lomefloxacin-d<sub>5</sub> hydrochloride

Cat. No.: HY-B0455S

Molecular Formula:  $C_{17}H_{15}D_5ClF_2N_3O_3$ 

Molecular Weight: 392.84

Target: Isotope-Labeled Compounds

Pathway: Others

**Storage:** 4°C, sealed storage, away from moisture

\* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)

## **BIOLOGICAL ACTIVITY**

Description	Lomefloxacin- $d_5$ (hydrochloride) is the deuterium labeled Lomefloxacin hydrochloride. Lomefloxacin (SC47111A) hydrochloride is a broad-spectrum quinolone antibiotic, with antimicrobial activity. Lomefloxacin hydrochloride is used for the research of respiratory tract infections, genitourinary infections, gastrointestinal infections, ENT infections, etc.[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 <sup>[3]</sup> .  MCE has not independently confirmed the accuracy of these methods. They are for reference only.

## **REFERENCES**

- [1]. Hoogkamp-Korstanje JA. In-vitro activities of ciprofloxacin, levofloxacin, lomefloxacin, ofloxacin, pefloxacin, sparfloxacin and trovafloxacin against gram-positive and gram-negative pathogens from respiratory tract infections. J Antimicrob Chemother. 1997 Sep;40(3):427-31.
- [2]. Reem I Al-Wabli. Lomefloxacin. Profiles Drug Subst Excip Relat Methodol. 2017;42:193-240.
- [3]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. Ann Pharmacother. 2019;53(2):211-223.

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

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