# RedChemExpress

## Product Data Sheet

# Inhibitors • Screening Libraries • Proteins

H-CI

 $NH_2$ 

## (1S,2R)-Tranylcypromine-d<sub>5</sub> hydrochloride

Cat. No.:	HY-17447AS	
Molecular Formula:	C <sub>9</sub> H <sub>7</sub> D <sub>5</sub> ClN	D
Molecular Weight:	174.68	
Target:	Monoamine Oxidase	
Pathway:	Neuronal Signaling	D D
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.	

Description	(1S,2R)-Tranylcypromine-d <sub>5</sub> (hydrochloride) is the deuterium labeled Tranylcypromine hydrochloride[1]. Tranylcypromine hydrochloride (SKF 385 hydrochloride) is an irreversible inhibitor of lysine-specific demethylase 1 (LSD1/BHC110) and monoamine oxidase (MAQ). Tranylcypromine hydrochloride inhibits LSD1_MAQ A and MAQ B with LC50s of 20.7.2.3 and 0.95	
In Vitro	μM, respectively. Tranylcypromine hydrochloride can be used for the research of depression[2][3][4]. 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 Feb;53(2):211-216.

[2]. Lee MG, et al. Histone H3 lysine 4 demethylation is a target of nonselective antidepressive medications. Chem Biol. 2006 Jun;13(6):563-7.

[3]. Schmidt DM, McCafferty DG. trans-2-Phenylcyclopropylamine is a mechanism-based inactivator of the histone demethylase LSD1. Biochemistry. 2007 Apr 10;46(14):4408-16.

[4]. Park H, et al. The MAO Inhibitor Tranylcypromine Alters LPS- and Aβ-Mediated Neuroinflammatory Responses in Wild-type Mice and a Mouse Model of AD. Cells. 2020 Aug 28;9(9):1982.

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

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