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## Product Data Sheet

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Product Name: Fluphenazine-d8 dihydrochloride

Cat. No.: GC68307

### Chemical Properties

Cas. No.

Formula  $C_{22}H_{20}D_8Cl_2F_3N_3OS$

M.Wt 518.49

Solubility  $H_2O$  : 100 mg/mL (192.87 mM; Need ultrasonic)

Storage Store at  $-20^{\circ}C$

General tips For obtaining a higher solubility , please warm the tube at  $37^{\circ}C$  and shake it in the ultrasonic bath for a while. Stock solution can be stored below  $-20^{\circ}C$  for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure

### Background

Fluphenazine-d8 dihydrochloride is the deuterium labeled Fluphenazine dihydrochloride. Fluphenazine dihydrochloride is a phenothiazine-class D1DR and D2DR inhibitor; used to deliver Fluphenazine to biological systems in studies probing the effects and metabolic fates of this commonly used dopamine antagonist.

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>.

[1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother.* 2019;53(2):211-216.

[2]. Trzeciak HI, et al. Behavioral effects of withdrawal of fluphenazine after long-term treatment. *Arzneimittelforschung.* 1976;26(9):1697-700.

[3]. Whelpton R, Curry SH. Effect of 20, 6 Methods for study of fluphenazine kinetics in man. *J Pharm Pharmacol.* 1976 Dec;28(12):869-73.

[4]. Javaid JI, et al. Fluphenazine determination in human plasma by a sensitive gas chromatographic method using nitrogen detector. *J Chromatogr Sci.* 1981

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

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Sep;19(9):439-43.

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