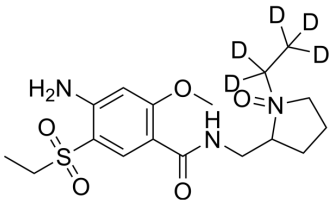
# Amisulpride-$d_5$ N-Oxide

| | |
|---|---|
| **Cat. No.:** | HY-14545S1 |
| **CAS No.:** | 1794756-15-2 |
| **Molecular Formula:** | $C_{17}H_{22}D_5N_3O_5S$ |
| **Molecular Weight:** | 390.51 |
| **Target:** | Dopamine Receptor; Isotope-Labeled Compounds |
| **Pathway:** | GPCR/G Protein; Neuronal Signaling; Others |
| **Storage:** | Please store the product under the recommended conditions in the Certificate of Analysis. |



## BIOLOGICAL ACTIVITY

| | |
|---|---|
| **Description** | Amisulpride-$d_5$ N-Oxide is the deuterium labeled Amisulpride. Amisulpride is a dopamine D2/D3 receptor antagonist with Kis of 2.8 and 3.2 nM for human dopamine D2 and D3, respectively[1][2]. |
| **$IC_{50}$ & Target** | $D_3$ Receptor |
| **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].<br>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]. Schoemaker H, et al. Neurochemical characteristics of amisulpride, an atypical dopamine D2/D3 receptor antagonist with both presynaptic and limbic selectivity. J Pharmacol Exp Ther. 1997 Jan;280(1):83-97.

[3]. Pawar GR, et al. Evaluation of antidepressant like property of amisulpride per se and its comparison with fluoxetine and olanzapine using forced swimming test in albino mice. Acta Pol Pharm. 2009 May-Jun;66(3):327-31.



Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA