Product Data Sheet

Itopride-d₆ hydrochloride

 Cat. No.:
 HY-B0732S

 CAS No.:
 1346601-02-2

 Molecular Formula:
 $C_{20}H_{21}D_6ClN_2O_4$

Molecular Weight: 400.93

Target: Dopamine Receptor; Cholinesterase (ChE); 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	Itopride-d ₆ (hydrochloride) is deuterium labeled Itopride (hydrochloride). Itopride hydrochloride (HSR803), a gastroprokinetic Benzamide (HY-Z0283) derivative, is an inhibitor of acetylcholinesterase (AChE) and dopamine D2 receptor[1][2].
IC ₅₀ & Target	D ₂ 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] . 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]. Hyun Chul Lim, et al. Effect of Itopride Hydrochloride on the Ileal and Colonic Motility in Guinea Pig In Vitro. Effect of Itopride Hydrochloride on the Ileal and Colonic Motility in Guinea Pig In Vitro. Yonsei Med J. 2008 Jun 30;49(3):472-8.

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

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