

Product Data Sheet

Miglustat-d₉ hydrochloride

 Cat. No.:
 HY-110363

 CAS No.:
 1883545-57-0

 Molecular Formula:
 C₁₀H₁₃D₉ClNO₄

Molecular Weight: 264.79

Target: Glucosylceramide Synthase (GCS); Isotope-Labeled Compounds

Pathway: Neuronal Signaling; Others

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

BIOLOGICAL ACTIVITY

Description	Miglustat-d ₉ (hydrochloride) is the deuterium labeled Miglustat (hydrochloride). Miglustat hydrochloride is an inhibitor of glucosylceramide synthase, primarily to treat Type I Gaucher disease (GD1)[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 ^[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]. Abian, O., et al., Therapeutic strategies for Gaucher disease: miglustat (NB-DNJ) as a pharmacological chaperone for glucocerebrosidase and the different thermostability of velaglucerase alfa and imiglucerase. Mol Pharm, 2011. 8(6): p. 2390-7.;van Giersbergen, P.L. and J. Dingemanse, Influence of food intake on the pharmacokinetics of miglustat, an inhibitor of glucosylceramide synthase. J Clin Pharmacol, 2007. 47(10): p. 1277-82.

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

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