

## Catalog # 10-2413 Miglustat HCI

CAS# 210110-90-0 N-Butyldeoxynojirimycin HCI NB-DNJ Lot # X101478

Orally active ceramide-specific glycosyltransferase and  $\alpha$ -glucosidase I and II inhibitor.<sup>1</sup> Rescues trafficking-deficient F508del-CFTR in human airway epithelial cells via inhibition of ER  $\alpha$ -glucosidases I and II.<sup>2</sup> Pharmacological chaperone for glucocerebrosidase degradation.<sup>3</sup> Clinically useful agent for Gaucher disease type 1.<sup>4</sup> Stabilizes neurological disorders in Niemann-Pick disease type C.<sup>5</sup>

- 1) Platt et al. (1994), N-butyldeoxynojirimycin is a novel inhibitor if glycolipid biosynthesis; J. Biol. Chem., 269 8362
- Noel et al. (2008), Parallel improvement of sodium and chloride transport defects by miglustat (n-butyldeoxynojyrimicin) in cystic fibrosis; J. Pharmacol. Exp. Ther., 325 1016
- 3) Abian et al. (2011), 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., 8 2390
- 4) Serratrice et al. (2015), Switching from imiglucerase to miglustat for the treatment of French patients with Gaucher disease type 1: a case series: J. Med. Case Rep., 9 146
- Karimzadeh (2013), Effects of miglustat on stabilization of neurological disorder in niemann-pick disease type C: Iranian pediatric case series;
  J. Child Neurol., 28 1599

## **PHYSICAL DATA**

Molecular Weight: 255.74

Molecular Formula:  $C_{10}H_{21}NO_4$  HCl Purity: 98% by TLC NMR: (Conforms)

Solubility: Soluble in DMSO (up to 20 mg/ml) or in water (up to 20 mg/ml)

Physical Description: White solid

Storage and Stability: Store as supplied desiccated at -20°C for up to 1 year from the date of purchase.

Solutions in DMSO or distilled water may be stored at -20°C for up to 1 month.

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