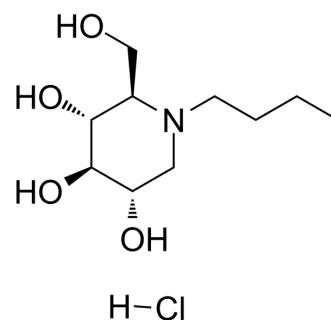


Miglustat hydrochloride

Cat. No.:	HY-17020A
CAS No.:	210110-90-0
Molecular Formula:	C ₁₀ H ₂₂ ClNO ₄
Molecular Weight:	255.74
Target:	Glucosylceramide Synthase (GCS)
Pathway:	Neuronal Signaling
Storage:	-20°C, stored under nitrogen
	* In solvent : -80°C, 6 months; -20°C, 1 month (stored under nitrogen)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 65 mg/mL (254.16 mM; Need ultrasonic)
 H₂O : ≥ 34 mg/mL (132.95 mM)
 * "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	3.9102 mL	19.5511 mL	39.1022 mL
	5 mM	0.7820 mL	3.9102 mL	7.8204 mL
	10 mM	0.3910 mL	1.9551 mL	3.9102 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

- Add each solvent one by one: PBS
Solubility: 100 mg/mL (391.02 mM); Clear solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
Solubility: ≥ 3.25 mg/mL (12.71 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: ≥ 3.25 mg/mL (12.71 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: ≥ 3.25 mg/mL (12.71 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Miglustat (N-Butyldeoxynojirimycin) hydrochloride is an orally active ceramide glucosyltransferase inhibitor. Miglustat hydrochloride can be used for the research of type I gaucher disease^{[1][2]}.

CUSTOMER VALIDATION

- Cell. 2019 Dec 12;179(7):1483-1498.e22.
- Cell Rep. 2022 Jul 5;40(1):111049.

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REFERENCES

- [1]. Miglustat. Mother To Baby | Fact Sheet, Organization of Teratology Information Specialists (OTIS), 1 April 2021.
- [2]. Neal J Weinreb, et al. Guidance on the use of miglustat for treating patients with type 1 Gaucher disease. Am J Hematol. 2005 Nov;80(3):223-9.
- [3]. 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.
- [4]. 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.

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