

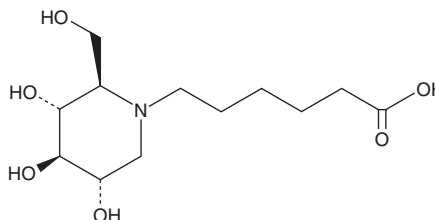
# PRODUCT INFORMATION



## N-5-Carboxypentyl-1-deoxynojirimycin

Item No. 17878

**CAS Registry No.:** 79206-51-2  
**Formal Name:** 3R,4R,5S-trihydroxy-2R-(hydroxymethyl)-1-piperidinehexanoic acid  
**Synonyms:** N-5-Carboxypentyl-1-DNJ, N-5-Carboxypentyl-1-dNM  
**MF:** C<sub>12</sub>H<sub>23</sub>NO<sub>6</sub>  
**FW:** 277.3  
**Purity:** ≥95%  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

N-5-Carboxypentyl-1-deoxynojirimycin is supplied as a crystalline solid. A stock solution may be made by dissolving the N-5-carboxypentyl-1-deoxynojirimycin in the solvent of choice, which should be purged with an inert gas. N-5-Carboxypentyl-1-deoxynojirimycin is soluble in the organic solvent methanol. It is also soluble in water. We do not recommend storing the aqueous solution for more than one day.

### Description

N-5-Carboxypentyl-1-deoxynojirimycin is a ligand used for the purification of glucosidase I and II.<sup>1,2</sup> The carboxypentyl groups allows linkage of the inhibitor with resins for affinity chromatography.<sup>1,3</sup> N-5-Carboxypentyl-1-deoxynojirimycin is at least as potent an inhibitor of glucosidase as 1-deoxynojirimycin ( $K_i$ s = 0.45 and 2.1  $\mu$ M, respectively, for pig liver glucosidase I).<sup>4</sup>

### References

1. Bause, E., Gross, A. and Schweden, J. N-Methyl-N-(5-carboxypentyl)-1-deoxynojirimycin, a new affinity ligand for the purification of trimming glucosidase I. *FEBS Letters* **278(2)**, 167-170 (1991).
2. Hentges, A. and Bause, E. Affinity purification and characterization of glucosidase II from pig liver. *Biol. Chem.* **378(9)**, 1031-1038 (1997).
3. Bernotas, R.C. and Ganem, B. Easy assembly of ligands for glycosidase affinity chromatography. *Biochem. J.* **270(2)**, 539-540 (1990).
4. Bause, E., Schweden, J., Gross, A., et al. Purification and characterization of trimming glucosidase I from pig liver. *Eur. J. Biochem.* **183(3)**, 661-669 (1989).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

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