

Product Data Sheet

Product Name: 1-Deoxynojirimycin (hydrochloride)

Cat. No.: GC41992

Chemical Properties

Cas. No. 73285-50-4

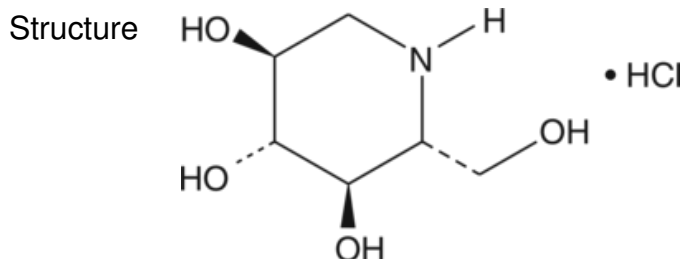
SMILES O[C@H]1[C@H](O)[C@@H](O)CN[C@@H]1CO.Cl

Formula C6H13NO4.HCl M.Wt 199.6

Solubility DMSO: 10 mg/ml, PBS (pH 7.2): 1 mg/ml Storage Store at -20°C, protect from light

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution: ship with blue ice All other available size: ship with RT, or blue ice upon request.



Background

1-Deoxynojirimycin (1-dNM) (hydrochloride), produced by *Bacillus* species, is a glucose analog that potently inhibits α -glucosidase I and II. It prevents the formation of complex N-linked oligosaccharides in yeast and intact mammalian cells by inhibiting both α -glucosidase I and II with IC₅₀ values of ~2 μ M. The FDA has granted orphan drug designation to dNM (hydrochloride) for the treatment of Pompe disease, an inherited lysosomal storage disorder caused by a mutation that alters the structure and stability of α -glucosidase. 1-dNM, at a concentration of 0.4 mM, also inhibits virus spread in HIV-infected lymphocyte cultures by interfering with α -glucosidase activity.

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA