PRODUCT INFORMATION



B-D-Glucosamine Pentaacetate

Item No. 17867

CAS Registry No.: 7772-79-4

Formal Name: 2-(acetylamino)-2-deoxy-β-D-

glucopyranose, 1,3,4,6-tetraacetate

Synonyms: N-Acetyl-β-D-Glucosamine

tetraacetate, NSC 224432

MF: $C_{16}H_{23}NO_{10}$ FW: 389.4 **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

β-D-Glucosamine pentaacetate is supplied as a crystalline solid. A stock solution may be made by dissolving the β-D-glucosamine pentaacetate in the solvent of choice. β-D-Glucosamine pentaacetate is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. The solubility of β-D-glucosamine pentaacetate in these solvents is approximately 20 and 30 mg/ml, respectively.

β-D-Glucosamine pentaacetate is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, β-D-glucosamine pentaacetate should first be dissolved in DMF and then diluted with the aqueous buffer of choice. β-D-Glucosamine pentaacetate has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

β-D-Glucosamine pentaacetate is an N-acetylglucosamine derivative that has been shown to promote hyaluronic acid production.^{1,2}

References

- 1. Bastida, A., Sabuquillo, P., Armisen, P., et al. A single step purification, immobilization, and hyperactivation of lipases via interfacial adsorption on strongly hydrophobic supports. Biotechnol. Bioeng. 58(5), 486-493
- 2. Schulz, T., Schumacher, U., and Prehm, P. Hyaluronan export by the ABC transporter MRP5 and its modulation by intracellular cGMP. J. Biol. Chem. 282(29), 20999-21004 (2007).

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

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.

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