

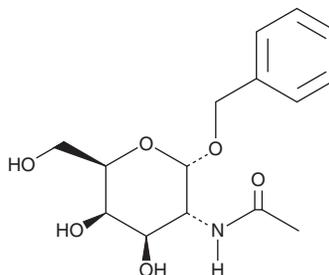
PRODUCT INFORMATION



Benzyl-2-acetamido-2-deoxy- α -D-galactopyranoside

Item No. 31747

CAS Registry No.: 3554-93-6
Formal Name: phenylmethyl 2-(acetylamino)-2-deoxy- α -D-galactopyranoside
Synonyms: Benzyl N-acetyl- α -D-galactosaminide, Benzyl- α -GalNAc
MF: C₁₅H₂₁NO₆
FW: 311.3
Purity: \geq 95%
Supplied as: A crystalline solid
Storage: -20°C
Stability: \geq 4 years



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

Laboratory Procedures

Benzyl-2-acetamido-2-deoxy- α -D-galactopyranoside is supplied as a crystalline solid. A stock solution may be made by dissolving the benzyl-2-acetamido-2-deoxy- α -D-galactopyranoside in the solvent of choice, which should be purged with an inert gas. Benzyl-2-acetamido-2-deoxy- α -D-galactopyranoside is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of benzyl-2-acetamido-2-deoxy- α -D-galactopyranoside in these solvents is approximately 1 and 10 mg/ml, respectively.

Description

Benzyl-2-acetamido-2-deoxy- α -D-galactopyranoside (benzyl- α -GalNAc) is an inhibitor of mucin synthesis.¹⁻³ It inhibits glucosamine labeling, a marker of mucin synthesis, in Caco-2, HT-29, and T84 colon cancer cells when used at a concentration of 2 mM.¹ Benzyl- α -GalNAc (0.4, 0.6, and 0.8 mg/ml) enhances cell death induced by 5-fluorouracil (Item No. 14416) in Capan-1 and HPAF-II cells.² LS 174T colon cancer cells grown in the presence of benzyl- α -GalNAc exhibit reduced liver metastasis in a mouse xenograft model compared with control LS 174T cells.³

References

1. Niv, Y., Byrd, J.C., Ho, S.B., *et al.* Mucin synthesis and secretion in relation to spontaneous differentiation of colon cancer cells *in vitro*. *Int. J. Cancer* **50(1)**, 147-152 (1992).
2. Kalra, A.V. and Campbell, R.B. Mucin impedes cytotoxic effect of 5-FU against growth of human pancreatic cancer cells: Overcoming cellular barriers for therapeutic gain. *Br. J. Cancer* **97(7)**, 910-918 (2007).
3. Bresalier, R.S., Niv, Y., Byrd, J.C., *et al.* Mucin production by human colonic carcinoma cells correlates with their metastatic potential in animal models of colon cancer metastasis. *J. Clin. Invest.* **87(3)**, 1037-1045 (1991).

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.

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