

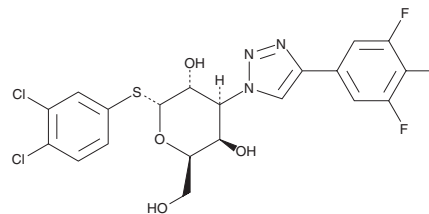
PRODUCT INFORMATION



GB1107

Item No. 34584

CAS Registry No.: 1978336-61-6
Formal Name: 3,4-dichlorophenyl 3-deoxy-1-thio-3-[4-(3,4,5-trifluorophenyl)-1H-1,2,3-triazol-1-yl]- α -D-galactopyranoside
MF: C₂₀H₁₆Cl₂F₃N₃O₄S
FW: 522.3
Purity: \geq 98%
Supplied as: A 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

GB1107 is supplied as a solid. A stock solution may be made by dissolving the GB1107 in the solvent of choice, which should be purged with an inert gas. GB1107 is slightly soluble (0.1-1 mg/ml) in acetonitrile and DMSO.

Description

GB1107 is an inhibitor of galectin-3 (Gal-3; IC₅₀ = 8 μ M).¹ It prevents increases in Gal-3 levels induced by glycyl-L-phenylalanine 2-naphthylamide (GPN) in JIMT-1 breast cancer cells (IC₅₀ = 36 nM). GB1107 (25 μ M) induces apoptosis, induces cell cycle arrest at the G₁ phase, and decreases the levels of aggrecan, chemokine (C-C motif) ligand 3 (Ccl3), and matrix metalloproteinase-3 (Mmp-3) in primary rat cartilage end plate cells.² *In vivo*, GB1107 (0.1 mg/kg per day) increases survival and decreases pulmonary fibrosis but also decreases body weight in a mouse model of pulmonary fibrosis induced by bleomycin (Item No. 13877).³

References

1. Stegmayr, J., Zetterberg, F., Carlsson, M.C., *et al.* Extracellular and intracellular small-molecule galectin-3 inhibitors. *Sci. Rep.* **9(1)**, 2186 (2019).
2. Li, J., Han, N., Liu, Z., *et al.* Role of Galectin-3 in intervertebral disc degeneration: An experimental study. *BMC Musculoskelet. Disord.* **25(1)**, 249 (2024).
3. Jia, W., Wang, Z., Gao, C., *et al.* Trajectory modeling of endothelial-to-mesenchymal transition reveals galectin-3 as a mediator in pulmonary fibrosis. *Cell Death Dis.* **12(4)**, 327 (2021).

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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