

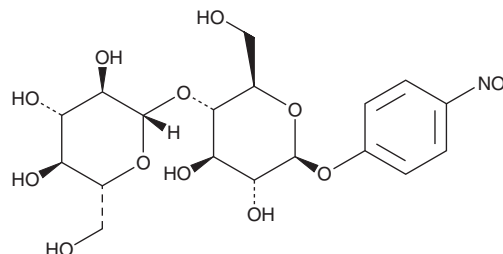
PRODUCT INFORMATION



4-Nitrophenyl β -D-Cellobioside

Item No. 23378

CAS Registry No.: 3482-57-3
Formal Name: 4-nitrophenyl 4-O- β -D-glucopyranosyl- β -D-glucopyranoside
Synonyms: *p*-Nitrophenyl β -D-Cellobioside, *para*-Nitrophenyl β -D-Cellobioside
MF: C₁₈H₂₅NO₁₃
FW: 463.4
Purity: $\geq 98\%$
UV/Vis.: λ_{max} : 220, 302 nm
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

4-Nitrophenyl β -D-cellobioside is supplied as a crystalline solid. Aqueous solutions of 4-nitrophenyl β -D-cellobioside can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of 4-nitrophenyl β -D-cellobioside in PBS, pH 7.2, is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

4-Nitrophenyl β -D-cellobioside is a disaccharide and an enzyme substrate.¹ It has been used to characterize the function of endoglucanase 1 from *T. harzianum*, β -glucosidase from *T. xylanolyticum*, and glycoside hydrolase family 3 (GH3) aryl β -glucosidases from *A. oryzae*.¹⁻³

References

1. Charoenwattanasatien, R., Penthaisong, S., Breen, I., *et al.* Bacterial β -glucosidase reveals the structural and functional basis of genetic defects in human glucocerebrosidase 2 (GBA2). *ACS Chem. Biol.* **11**(7), 1891-1900 (2016).
2. Kudo, K., Watanabe, A., Ujiie, S., *et al.* Purification and enzymatic characterization of secretory glycoside hydrolase family 3 (GH3) aryl β -glucosidases screened from *Aspergillus oryzae* genom. *J. Biosci. Bioeng.* **120**(6), 614-623 (2015).
3. Pellegrini, V.O., Serpa, V.I., Godoy, A.S., *et al.* Recombinant *Trichoderma harzianum* endoglucanase I (Cel7B) is a highly acidic and promiscuous carbohydrate-active enzyme. *Appl. Microbiol. Biotechnol.* **99**(22), 9591-9604 (2015).

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

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 09/30/2022

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM