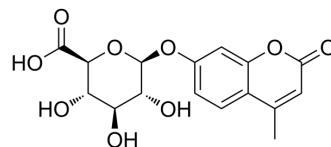


4-Methylumbelliferyl-β-D-glucuronide

Cat. No.:	HY-D0935
CAS No.:	6160-80-1
Molecular Formula:	C ₁₆ H ₁₆ O ₉
Molecular Weight:	352.29
Target:	Fluorescent Dye
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	4-Methylumbelliferyl-β-D-glucuronide is a fluorogenic substrat ($\lambda_{\text{ex}}=362$ nm, $\lambda_{\text{em}}=445$ nm). 4-Methylumbelliferyl-β-D-glucuronide has potential applications in detecting the activity of β-glucuronidase and the number of Escherichia coli ^{[1][2][3]} .
In Vitro	4-Methylumbelliferyl-β-D-glucuronide (156 μM-5 mM; 30 min) releases 4-methylumbelliferone at 37°C for enzymatic reactions ^[2] . 4-Methylumbelliferyl-β-D-glucuronide (50 μg/mL; 24 h) is used to detect the number of Escherichia coli in TSA medium ^[3] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

- [1]. George I, et al. Use of beta-D-galactosidase and beta-D-glucuronidase activities for quantitative detection of total and fecal coliforms in wastewater. *Can J Microbiol.* 2001 Jul;47(7):670-5.
- [2]. Sperker B, et al. High-performance liquid chromatographic quantification of 4-methylumbelliferyl-beta-D-glucuronide as a probe for human beta-glucuronidase activity in tissue homogenates. *J Chromatogr B Biomed Appl.* 1996 Oct 11;685(1):181-4.
- [3]. Villari P, et al. An evaluation of the use of 4-methylumbelliferyl-beta-D-glucuronide (MUG) in different solid media for the detection and enumeration of Escherichia coli in foods. *Lett Appl Microbiol.* 1997 Apr;24(4):286-90.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA