

## 4-Methylumbelliferyl-β-D-Glucuronide (hydrate)

Cat. No. NATZ-101

Lot. No. (See product label)

## Introduction

**Description** 4-Methylumbelliferyl-β-D-glucuronide is a fluorogenic substrate of β-glucuronidase.

4-Methylumbelliferyl- $\beta$ -D-glucuronide is cleaved by  $\beta$ -glucuronidase to release the

fluorescent moiety 4-methylumbelliferyl (4-MU). 4-MU fluorescence is pH-

dependent with excitation maxima of 320 and 360 nm at low (1.97-6.72) and high (7.12-10.3) pH, respectively, and an emission maximum ranging from 445 to 455 nm, increasing as pH decreases. 4-Methylumbelliferyl- $\beta$ -D-glucuronide has been used in the  $\beta$ -glucuronidase reporter system, also known as the GUS reporter system, for fluorescent detection of  $\beta$ -glucuronidase gene expression in E. coli and

transformed plants.

**Synonyms** 4-Methylumbelliferyl-β-D-Glucopyranosiduronic Acid MUG

## **Product Information**

**Form** A crystalline solid

Molecular Formula C16H16O9 • 2H2O

Molecular Weight 388.3

**Purity** 95%

## Storage and Shipping Information

*Storage* -20°C

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