Creative Enzymes®

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-β-D-glucuronide is cleaved by β-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-β-D-glucuronide has been used in the β-glucuronidase reporter system, also known as the GUS reporter system, for fluorescent detection of β-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 $C_{16}H_{16}O_9 \cdot 2H_2O$

Molecular Weight 388.3

Purity 95%

Storage and Shipping Information

Storage -20°C