

4-Methylumbelliferyl- α -L-Idopyranosiduronic Acid

Cat. No. NATZ-099

Lot. No. (See product label)

Introduction

Description

4-Methylumbelliferyl- α -L-iduronide (free acid) is a fluorogenic substrate for α -L-iduronidase, an enzyme found in cell lysosomes that is involved in the degradation of glycosaminoglycans such as dermatan sulfate and heparin sulfate. 4-Methylumbelliferyl- α -L-iduronide is cleaved by α -L-iduronidase 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. This substrate is used in assays that measure the activity of α -L-iduronidase, which is commonly deficient in a type of lysosomal storage disease called mucopolysaccharidosis.

Synonyms

4-Methylumbelliferyl- α -L-Idopyranosiduronic Acid 4-MU- α -IdoA MU- α -IdoA

Product Information

Form A crystalline solid

CAS No. 66966-09-4

Molecular Formula C₁₆H₁₆O₉

Molecular Weight 352.3

Purity 90%

Storage and Shipping Information

Storage -20°C