Creative Enzymes®

4-Methylumbelliferyl-α-L-Idopyranosiduronic Acid 2-sulfate

Cat. No. NATZ-098

Lot. No. (See product label)

Introduction

Description 4-Methylumbelliferyl-α-L-iduronide 2-sulfate (4-MU-α-IdoA 2-sulfate) is a fluorogenic substrate of α-L-iduronidase that has been used in an assay to detect Hurler syndrome. It is also used as a substrate for iduronate-2-sulfatase in tests for Hunter disease. For these latter tests, the initial enzymatic product, 4-MU-α-IdoA can be measured by mass spectrometry, or it can be hydrolyzed with α-L-iduronidase to liberate the fluorophore 4-MU, which has an emission maximum at 445-454 nm. The excitation maximum for 4-MU is pH-dependent: 330, 370, and 385 nm at pH 4.6, 7.4, and 10.4, respectively.

Synonyms 4-Methylumbelliferyl-α-L-Idopyranosiduronic Acid 2-sulfate 4-MU-α-IdoA 2-sulfate

Product Information

Form A crystalline solid

Molecular Formula C16H14O12S • 2Na

Molecular Weight 476.3

Purity 98%

Storage and Shipping Information

Storage -20°C