

MUP [4-Methylumbelliferyl phosphate, free acid]

Cat. No. DYE-141 Lot. No. (See product label)

SPECIFICATION

Product Overview

Description

4-Methylumbelliferyl phosphate (MUP) is a sensitive fluorogenic substrate for fluorometric and UV-spectrophotometric assays of phosphatase. It has been used as a fluorogenic substrate for calmodulin-dependent protein phosphatase and in kinetic studies of alkaline phosphatase. This is a sensitive substrate for alkaline phosphatase in ELISA procedures. A fluorogenic substrate for phosphatases. It is widely used for detecting phosphatases in solution. Phosphatase activity has long been studied due to its importance in cellular function. Upon dephosphorylation, MUP yields fluorescent 4-methylumbelliferone (4-MU). This reaction has been used to spot PCR amplified products in ELISA and to classify bacteria. More specifically, MUP can act as an indicator of *C. perfringens* because of its ability to detect phosphatase which is a highly specific indicator of *C. perfringens*.

CAS number 3368-04-5

Molecular Mass 256.15

Formula C₁₀H₉O₆P

Ex(nm) 360

Em(nm) 449

Solvent Water

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Storage

Store at -20°C in the dark. Dessicated.

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