



# **Certificate of Analysis**

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**Product Name: DIFMUP** Catalog No.: 6882 Batch No.: 3

CAS Number: 214491-43-7

**IUPAC Name:** 6,8-Difluoro-4-methyl-7-(phosphonooxy)-2H-1-benzopyran-2-one

## 1. PHYSICAL AND CHEMICAL PROPERTIES

 $C_{10}H_{7}F_{2}O_{6}P$ **Batch Molecular Formula: Batch Molecular Weight:** 292.13

Store at -20°C Storage:

**Batch Molecular Structure:** 

#### 2. ANALYTICAL DATA

HPLC: Shows 99.0% purity **UV Spectrum:** Consistent with structure 316 nm (Buffer pH 10)  $\lambda_{max}$ :

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# **Product Information**

Print Date: Sep 16th 2025

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### **Description:**

DiFMUP is a fluorescent phophatase substrate widely used for the detection of phosphatase activity. The reaction product of DiFMUP has excitation/emission maxima of 358/455 nm. Note: This product is typically prepared in DMSO.

#### **Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>10</sub>H<sub>7</sub>F<sub>2</sub>O<sub>6</sub>P Batch Molecular Weight: 292.13

Minimum Purity: ≥95%

#### **Batch Molecular Structure:**

Storage: Store at -20°C

CAUTION - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

#### Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. \*Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

#### References:

**Welte** *et al* (2005) 6,8-Difluoro-4-methylumbiliferyl phosphate: a fluorogenic substrate for protein tyrosine phosphatases. Anal.Biochem. **338** 32. PMID: 15707933.

**Gee** et al (1999) Fluorogenic substrates based on fluorinated umbelliferones for continuous assays of phosphatases and beta-galactosidases. Anal.Biochem. **273** 41. PMID: 10452797.