# PRODUCT INFORMATION



## 6,8-Difluoro-7-hydroxy-4-methylcoumarin

Item No. 36017

CAS Registry No.: 215868-23-8

Formal Name: 6,8-difluoro-7-hydroxy-4-methyl-

2H-1-benzopyran-2-one

MF:  $C_{10}H_{6}F_{2}O_{3}$ FW: 212.2 **Purity:** ≥98% Abs./Em. Max: 358/455 nm  $\lambda_{max}$ : 320 nm UV/Vis.: Supplied as: A solid Storage: -20°C Stability: ≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

#### **Laboratory Procedures**

6,8-Difluoro-7-hydroxy-4-methylcoumarin is supplied as a solid. A stock solution may be made by dissolving the 6,8-difluoro-7-hydroxy-4-methylcoumarin in the solvent of choice, which should be purged with an inert gas. 6,8-Difluoro-7-hydroxy-4-methylcoumarin is soluble in methanol, DMSO, and dimethyl formamide.

#### Description

6,8-Difluoro-7-hydroxy-4-methylcoumarin is a fluorophore. It has been conjugated to streptavidin or secondary antibodies for flow cytometry and used to label bacteria for multi-color fluorescence in situ hybridization (FISH).<sup>1,2</sup> 6,8-Difluoro-7-hydroxy-4-methylcoumarin has also been coupled to peptides to improve electrospray ionization and MS sensitivity in MALDI-TOF MS.3 It displays absorption/emission maxima of 358/455 nm, respectively.4

### References

- 1. Takada, T., Matsumoto, K., and Nomoto, K. Development of multi-color FISH method for analysis of seven Bifidobacterium species in human feces. J. Microbiol. Methods 58(3), 413-421 (2004).
- 2. Telford, W.G. Analysis of UV-excited fluorochromes by flow cytometry using near-ultraviolet laser diodes. Cytometry A. 61(1), 9-17 (2004).
- 3. Pashkova, A., Moskovets, E., and Karger, B.L. Coumarin tags for improved analysis of peptides by MALDI-TOF MS and MS/MS. 1. Enhancement in MALDI MS signal intensities. Anal. Chem. 76(15), 4550-4557 (2004).
- 4. Sun, W.C., Gee, K.R., and Haugland, R.P. Synthesis of novel fluorinated coumarins: Excellent UV-light excitable fluorescent dyes. Bioorg. Med. Chem. Lett. 8(22), 3107-3110 (1998).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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