PRODUCT INFORMATION

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APF

Item No. 10157

CAS Registry No.: 359010-70-1

2-[6-(4-aminophenoxy)-3-oxo-3H-Formal Name:

xanthen-9-yl]-benzoic acid

MF: C₂₆H₁₇NO₅ FW: 423.4 **Purity:** ≥98%

UV/Vis.: λ_{max} : 223, 278 nm 490/515 nm Ex./Em. Max:

Supplied as: A solution in methyl acetate

Storage: -20°C Stability: ≥2 years

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

Laboratory Procedures

APF is supplied as a solution in methyl acetate. To change the solvent, simply evaporate the methyl acetate under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as ethanol, DMSO, and dimethyl formamide (DMF) purged with an inert gas can be used. The solubility of APF in ethanol and DMSO is approximately 10 mg/ml and 20 mg/ml in DMF.

APF is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, solutions of APF in organic solvents should be diluted with the aqueous buffer of choice. APF has a solubility of approximately 0.5 mg/ml in a 1:3 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

APF is an aromatic amino-fluorescein derivative and fluorescent probe for highly reactive radicals.¹ It has low intrinsic fluorescence, however, upon oxidation by hydroxyl radical, hypochlorite ion, and certain peroxidase intermediates, it is converted to the highly fluorescent molecule fluorescein, facilitating the detection of highly reactive biological radicals. APF is not oxidized by nitric oxide (NO), hydrogen peroxide (H₂O₂), or other oxidants. Fluorescein displays excitation/emission maxima of 490/515 nm, respectively.

Reference

1. Setsukinai, K., Urano, Y., Kakinuma, K., et al. Development of novel fluorescence probes that can reliably detect reactive oxygen species and distinguish specific species. J. Biol. Chem. 278(5), 3170-3175 (2003).

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.

WARRANTY AND LIMITATION OF REMEDY

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