

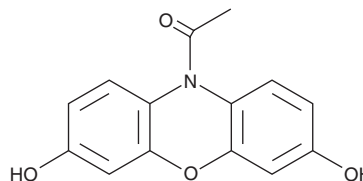
PRODUCT INFORMATION



ADHP

Item No. 10010469

CAS Registry No.: 119171-73-2
Formal Name: 1-(3,7-dihydroxy-10H-phenoxazin-10-yl)-ethanone
Synonyms: A 6550, 10-Acetyl-3,7-dihydroxyphenoxazine, Amplex Red®
MF: C₁₄H₁₁NO₄
FW: 257.2
Purity: ≥95%
UV/Vis.: λ_{max}: 250, 285 nm
Supplied as: A crystalline 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

ADHP is supplied as a crystalline solid. A stock solution may be made by dissolving the ADHP in the solvent of choice, which should be purged with an inert gas. ADHP is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of ADHP in ethanol is approximately 1.5 mg/ml and approximately 25 mg/ml in DMSO and DMF.

ADHP is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, ADHP should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. ADHP has a solubility of approximately 0.15 mg/ml in a 1:5 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

ADHP is a highly sensitive, stable substrate for horseradish peroxidase (HRP) that enables selective detection of H₂O₂.¹ This colorless, non-fluorescent reagent reacts with H₂O₂ to produce the fluorescent compound resorufin, which can be analyzed using an excitation wavelength of 520-550 nm and an emission wavelength of 585-595 nm. In a 96-well plate format, ADHP enables detection of H₂O₂ at a concentration as low as 5 pmol per 100 µl sample.¹

Reference

1. Zhou, M., Diwu, Z., Panchuk-Voloshina, N., *et al.* A stable nonfluorescent derivative of resorufin for the fluorometric determination of trace hydrogen peroxide: Applications in detecting the activity of phagocyte NADPH oxidase and other oxidases. *Anal. Biochem.* **253**(2), 162-168 (1997).

WARNING

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

SAFETY DATA

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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