

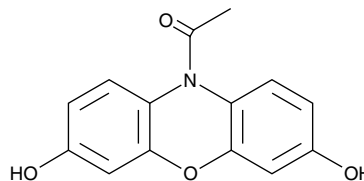
# Product Information



## 10-Acetyl-3,7-dihydroxyphenoxazine

Item No. 10010469

**CAS Registry No.:** 119171-73-2  
**Formal Name:** 1-(3,7-dihydroxy-10H-phenoxazin-10-yl)-ethanone  
**Synonyms:** A 6550, ADHP, Amplex Red®  
**MF:** C<sub>14</sub>H<sub>11</sub>NO<sub>4</sub>  
**FW:** 257.2  
**Purity:** ≥98%  
**Stability:** ≥2 years at -20°C  
**Supplied as:** A crystalline solid  
**UV/Vis.:** λ<sub>max</sub>: 250, 285 nm



### Laboratory Procedures

For long term storage, we suggest that 10-acetyl-3,7-dihydroxyphenoxazine (ADHP) be stored as supplied at -20°C. It should be stable for at least two years.

ADHP is supplied as a crystalline solid. A stock solution may be made by dissolving the ADHP in an organic solvent 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.

ADHP is a highly sensitive, stable substrate for horseradish peroxidase (HRP) that enables selective detection of H<sub>2</sub>O<sub>2</sub>.<sup>1</sup> This colorless, non-fluorescent reagent reacts with H<sub>2</sub>O<sub>2</sub> 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 H<sub>2</sub>O<sub>2</sub> at a concentration as low as 5 pmol per 100 µl sample.<sup>1</sup>

### 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**, 162-168 (1997).

### Related Products

For a list of related products please visit: [www.caymanchem.com/catalog/10010469](http://www.caymanchem.com/catalog/10010469)

**WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY. NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.**

#### SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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