

**Amplite™ ADHP**  
**[10-Acetyl-3,7-dihydroxyphenoxazine]**  
**\*CAS#: 119171-73-2\***

Catalog number: 11000  
Unit size: 25 mg

### Product Details

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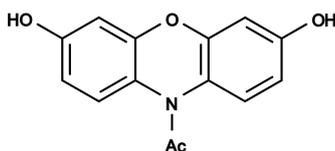
Storage Conditions	Freeze (<-15 °C), Minimize light exposure
Expiration Date	12 months upon receiving

### Chemical Properties

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Appearance	Off-white solid
Molecular Weight	257.24
Soluble In	DMSO

Chemical Structure



### Spectral Properties

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Excitation Wavelength	571 nm
Emission Wavelength	584 nm

### Applications

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Our Amplite™ ADHP is chemically same to Amplex® Red (Amplex® Red is the trademark of Invitrogen). It is a sensitive fluorogenic peroxidase substrate that has much lower background than the material from other commercial vendors. ADHP generates highly fluorescent resorufin that has maximum absorption of 571 nm and maximum emission of 585 nm. Unlike other HRP substrates such as dihydrofluoresceins and dihydrorhodamines, the air-oxidation of ADHP is minimal. So far ADHP has been known as the most sensitive and stable fluorogenic probe for detecting HRP and H<sub>2</sub>O<sub>2</sub>. ADHP has been widely used to detect HRP in many immunoassays. On the other hand, ADHP can also be used to detect trace amount of H<sub>2</sub>O<sub>2</sub>. The ADHP-based H<sub>2</sub>O<sub>2</sub> detection is at least one order of magnitude more sensitive than the commonly used scopoletin assay for H<sub>2</sub>O<sub>2</sub>. Because H<sub>2</sub>O<sub>2</sub> is produced in many enzymatic redox reactions, ADHP can be used in coupled enzymatic reactions to detect the activity of many oxidases and/or related enzymes/substrates or cofactors such as glucose, acetylcholine and cholesterol, L-glutamate, amino acids, etc.