

## Amplex Red

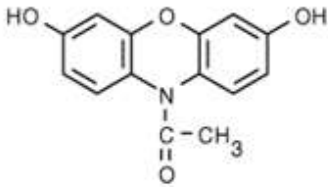
Catalog Number	Packaging Size
C291	10 mg

**Storage upon receipt:** -20°C, protected from light

### Introduction

**10-Acetyl-3,7-dihydroxyphenoxazine** (Known as **Amplex Red™** reagent, Trade Mark of Molecular Probes) is regarded as the best fluorogenic substrate for peroxidase, because it is highly specific and stable. The substrate itself is nearly colorless and nonfluorescent until it is oxidized by H<sub>2</sub>O<sub>2</sub> in the presence of horseradish peroxidase (HRP) to become the highly red fluorescent resorufin. Because H<sub>2</sub>O<sub>2</sub> is produced in many different enzymatic reactions, the Amplex Red reagent can be used to detect the activity of many different enzymes.

### Specifications

<b>Label:</b>	Resorufin	
<b>Ex/Em:</b>	571/585 nm	
<b>Detection Method:</b>	Fluorescent	
<b>Molecular Formula:</b>	C <sub>14</sub> H <sub>11</sub> NO <sub>4</sub>	
<b>Molecular Weight:</b>	257.25	
<b>CAS Number:</b>	119171-73-2	
<b>Storage Conditions:</b>	-20°C, protected from light	
<b>Shipping Condition:</b>	Room Temperature	

### Applications

HRP (Horseradish Peroxidase) Substrate

### References:

1. Design and testing of a fluorescence glucose sensor which incorporates a bioinductive material.  
Chen HC, Ahmed J  
Biomed Sci Instrum (2004) 40:149-154
2. Inhibition of skeletal muscle S1-myosin ATPase by peroxyntirite.  
Tiago T, Simão S, Aureliano M, Martín-Romero FJ, Gutiérrez-Merino C  
Biochemistry (2006) 45:3794-3804
3. The production of reactive oxygen species in intact isolated nerve terminals is independent of the mitochondrial membrane potential.  
Sipos I, Tretter L, Adam-Vizi V  
Neurochem Res (2003) 28:1575-1581