

## Native Horseradish Peroxidase

### Product Information

<b>Cat#</b>	PHAM-231
<b>Abbr</b>	HRP (Horseradish)
<b>Alias</b>	HRP
<b>Similar</b>	Peroxidase
<b>Source</b>	Horseradish
<b>Description</b>	The enzyme horseradish peroxidase (HRP), found in horseradish, is used extensively in molecular biology applications primarily for its ability to amplify a weak signal and increase detectability of a target molecule. HRP is often used in conjugates (molecules that have been joined genetically or chemically) to determine the presence of a molecular target. For example, an antibody conjugated to HRP may be used to detect a small amount of a specific protein in a western blot. Here, the antibody provides the specificity to locate the protein of interest and the HRP enzyme, in the presence of a substrate, produces a detectable signal. Horseradish peroxidase is also commonly used in techniques such as ELISA and Immunohistochemistry.
<b>Applications</b>	Horseradish peroxidase (HRP) is isolated from horseradish roots ( <i>Amoracia rusticana</i> ). It is used in biochemistry applications such as western blots, ELISA and Immunohistochemistry. Horseradish peroxidase is used to amplify a weak signal and increase detectability of a target molecule, such as a protein. Horseradish peroxidase, product P8250, has been used to study nonoral antigens in inflamed gingiva <sup>1</sup> and Ebola virus glycoprotein toxicity.
<b>Form</b>	Freeze dried powder
<b>Enzyme Commission Number</b>	EC 1.11.1.7
<b>Activity</b>	> 150 units/mg
<b>CAS No.</b>	9003-99-0

## Native Horseradish Peroxidase

<b>Unit Definition</b>	One pyrogallol unit will form 1.0 mg purpurogallin from pyrogallol in 20 sec at pH 6.0 at 20 °C.
<b>Storage</b>	2-8°C
<b>Synonyms</b>	EC 1.11.1.7; HRP; peroxidase; Horseradish Peroxidase; lactoperoxidase; guaiacol peroxidase; plant peroxidase; Japanese radish peroxidase; horseradish peroxidase (HRP); soybean peroxidase (SBP); extensin peroxidase; heme peroxidase; oxyperoxidase; protoheme peroxidase; pyrocatechol peroxidase; scopoletin peroxidase; Coprinus cinereus peroxidase; Arthromyces ramosus peroxidase