

Native Horseradish Peroxidase

Product Information

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| Cat# | PHAM-231 |
| Abbr | HRP (Horseradish) |
| Alias | HRP |
| Similar | Peroxidase |
| Source | Horseradish |
| Description | <p>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.</p> |
| Applications | <p>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 gingiva¹ and Ebola virus glycoprotein toxicity.</p> |
| Form | Freeze dried powder |
| Enzyme Commission Number | EC 1.11.1.7 |
| Activity | > 150 units/mg |
| CAS No. | 9003-99-0 |



Creative Enzymes

Diagnostic Enzymes

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| Unit Definition | One pyrogallol unit will form 1.0 mg purpurogallin from pyrogallol in 20 sec at pH 6.0 at 20 °C. |
| Storage | 2-8°C |
| Synonyms | 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 |