Creative Enzymes®

Native Horseradish Peroxidase

Cat. No. PHAM-231

Lot. No. (See product label)

Introduction

Description

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.

Applications

Horseradish peroxidase (HRP) is isolated from horseradish roots (Amoracia rusticana). 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.

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

Product Information

Source

Horseradish

Form

essentially salt-free, lyophilized powder

EC Number

EC 1.11.1.7

CAS No.

9003-99-0

Unit Definition

One pyrogallol unit will form 1.0 mg purpurogallin from pyrogallol in 20 sec at pH 6.0 at 20 °C.

Storage and Shipping Information

Storage

2-8°C