

For Research Use Only

# Horseradish Peroxidase (HRP)

Catalog Number: PR30015



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## Description

HRP, Horseradish Peroxidase (CAS NO.: 9003-99-0, enzyme EC NO.: 1.11.1.7) is a 44 kDa haem-containing glycoprotein. It can oxidize a wide range of substrates in the presence of an oxidizing agent such as hydrogen peroxide. HRP is widely used in biomedical and biological applications as well as wastewater treatment. Proteintech PR30015 is isolated from Horseradish root. It's an idea reagent for preparing HRP conjugates, e.g. antibodies, streptavidin for its superior activity.

**Note: HRP activity could be increased in the presence of imidazole while some inhibitors can decrease the activity, e.g. dichromate, vanadate,  $Pb^{2+}$ ,  $Co^{2+}$ ,  $Cd^{2+}$ ,  $Mn^{2+}$ ,  $Cu^{2+}$ ,  $Ni^{2+}$ , cyanide, fluoride, ethylenethiourea, hydroxylamine, sulphide, L- cystine, p-aminobenzoic acid, carbon monoxide and widely used sodium azide, etc..**

## Product Information

Format: Lyophilized powder.

RZ:  $\geq 3.1$

Activity:  $>250U/mg$

## Package

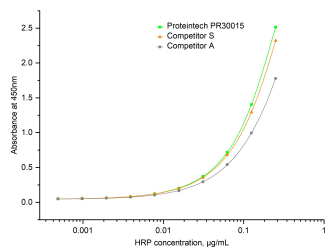
10mg/50mg/100mg

## Storage

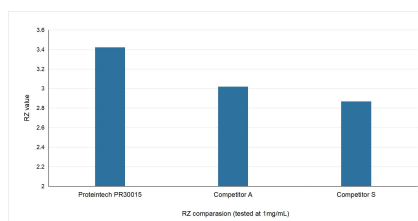
Storage:  $-20^{\circ}C$

Shelf-life: 3 years

## Validation Data



Reaction of TMB substrate with hydrogen peroxide catalyzed by Proteintech HRP (PR30015) and competitors' HRP respectively. The reaction was stopped by H<sub>2</sub>SO<sub>4</sub> followed by absorbance measurement at 405 nm. Signal from Proteintech PR30015 is higher than competitor's, thus the enzyme activity is higher.



RZ comparison for Proteintech HRP (PR30015) and competitors'. Higher RZ is often correlated with higher activity. Jiang, Na, et al. "The formation of a new horseradish peroxidase binding rare earth." Environmental Chemistry Letters 9 (2011): 191-196. )

For technical support and original validation data for this product please contact

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