

## Horseradish Peroxidase, High Purity

<b>Catalog No.</b>	CSI14982	<b>Quantity:</b>	20 mg
	CSI14983		60 mg
	CSI14984		1 g

**Alternate Names:** Peroxidase, HRP, EC 1.11.1.7

**Description:** The enzyme horseradish peroxidase, found in horseradish, is used extensively in molecular biology and in antibody amplification and detection, among other things. In recent years the technique of marking neurons with the enzyme horseradish peroxidase (HRP) has become a major tool. In its brief history, this method has probably been used by more neurobiologists than have used the Golgi stain since its discovery in 1870. Horseradish peroxidase is also highly used in techniques such as Western blotting and ELISA an enzymatic label, coupled to antibodies, lectins or haptens. Coupling may be performed through the carbohydrate side chains of the HRP. HRP consists of the basic isoenzyme having a molecular weight of 44 kDa. This Horseradish Peroxidase product is purified by affinity chromatography, which results in an enzyme of high specific activity and purity.

**Physical Appearance:** Red-brown powder

**EC Number:** 1.11.1.7

**Source:** Root extracts of horseradish.

**Molecular Weight:** 44 kDa

**Purity:** RZ (E403/E275) > 3.0, lot specific  
> 90% isoenzyme C, pI >8.0

**Purification:** The Horseradish Peroxidase is purified by affinity chromatography, which results in an enzyme of high specific activity and purity.

**Specific Activity:** > 250 U/mg, lot specific

**Unit Definition:** 1 unit = amount of enzyme which catalyzes the production of 1 mg of purpurogallin from pyrogallol in 20 seconds at 20°C and pH 6.0

**Reconstitution:** It is recommended to reconstitute lyophilized HRP in sterile water or 0.1 M potassium phosphate buffer, pH 6.0 at 0.1- 5.0 mg/ml.

**Storage & Stability:** Lyophilized HRP although stable at room temperature for up to 2 weeks, is stable for at least 1 year desiccated (vacuum and silica gel) below -20°C. Upon reconstitution HRP may be stored at 2-8°C for 1 week, or in working aliquots at -20°C to -80°C.  
**Avoid repeated freeze/thaw cycles.**

NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

