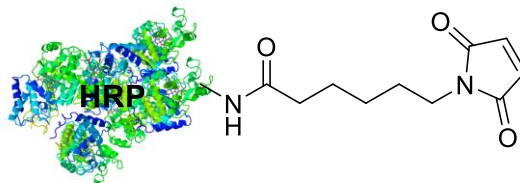


## Maleimide-Activated Horseradish Peroxidase (HRP)

Lyophilized powder, > 350 units/mg protein  
MW: 42,800 Da  
Product Number: **CM53214**



### Product Description

CellMosaic's C6 maleimide-activated horseradish peroxidase (HRP) is designed for direct conjugation of HRP with proteins, peptides, or other ligands containing free sulfhydryl groups (-SH) for use as an enzyme-linked detection reagent. This product consists of HRP that has been modified with EMCS (*N*- $\epsilon$ -maleimidocaproyl oxysuccinimide ester, 9.4 Å spacer length) to attach 1 to 2 maleimide groups per HRP molecule while retaining the peroxidase activity. Upon conjugation, the activated HRP will covalently attach to sulfhydryl-containing compounds to generate primarily single-labeled HRP-conjugate reporter probes.

### Application

- Conjugation of HRP to antibodies and other proteins for Western blotting or ELISA.
- Conjugation of HRP to oligonucleotides for in situ hybridization.

### Key Features of Maleimide-activated HRP

- Lyophilized powder ready for conjugation after reconstitution with water, no need for external buffer.
- Suitable for single labeling with an average number of maleimide groups per HRP of 1 to 2.
- High purity:  $\geq 99\%$ .
- Activity: >350 units/mg protein (One **unit** is the amount of enzyme that will form 1.0 mg purpurogallin from pyrogallol in 20 s at pH 6.0 at 20°C).

### References

- a) Hashida, S., *et al.* (1984). More useful maleimide compounds for the conjugation of Fab' to horseradish peroxidase through thiol groups in the hinge. *J. Appl. Biochem.* 6, 56-63.
- b) Imagawa, M., *et al.* (1982). Characteristics and evaluation of antibody-horseradish peroxidase conjugates prepared by using a maleimide compound, glutaraldehyde, and periodate. *J. Appl. Biochem.* 4, 41-57.
- c) O'Sullivan, M.J., *et al.* (1979). Comparison of two methods of preparing enzyme-antibody conjugates: application of these conjugates for enzyme immunoassay. *Anal. Biochem.* 100, 100-108.