



Maleimide-Activated HRP

401-0005 5 mg lyophilized maleimide-activated HRP

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Introduction

Maleimide-activated horseradish peroxidase (HRP) is designed to facilitate the conjugation of the HRP to proteins, peptides and ligands that contain sulfhydryl (-SH) groups. The reactive maleimide group that has been added to HRP allows conjugation reactions to be performed very efficiently at physiological pH.

Storage of Maleimide-activated HRP

Maleimide-activated HRP is shipped at ambient temperature as a lyophilized powder plus special stabilizers and should be stored upon receipt at -20°C. Shelf life is >1 year.

Protocol

1. Allow the vial of maleimide-activated HRP to warm to room temperature.
2. Remove the crimp seal and reconstitute the lyophilized powder by adding a buffered solution of the thiol-containing molecule. Gently agitate the vial to ensure thorough dissolution.

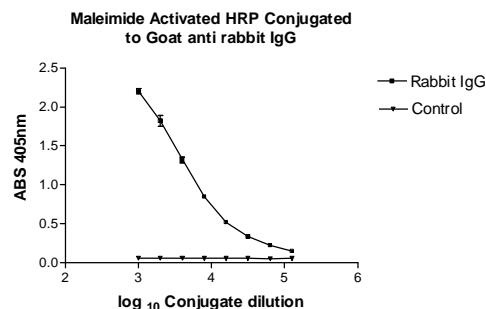
Note: The buffer in which the thiolated molecule is dissolved should be in the pH range 6.5-7.5. Phosphate buffered saline pH 7.2 is commonly employed. EDTA (1-10 mM) may help to prevent metal catalysed oxidation of thiols.

3. Incubate for 3-4 hours (or overnight) at room temperature and then store at 4°C.

Tech Note:

Molecules that do not contain-SH groups can be chemically modified to introduce the required thiol functionality. In the case of antibodies, disulfide (S-S) bridges may also be cleaved to release free thiols. Further technical information about chemical modification strategies is available on our website.

Example Data



Thiolated goat anti-rabbit IgG was incubated with maleimide-activated HRP. The goat resulting conjugate was analysed by ELISA using a rabbit IgG coated plate and 2-2-Azino-bis (3-ethylbenzo-thiazoline-6-sulfonic acid; ABTS) as the HRP enzyme substrate.

Related Products

- 402-0005 Maleimide Alkaline Phosphatase
- 403-0005 Maleimide Phycoerythrin
- 404-0005 Maleimide Allophycocyanin
- 405-0005 Maleimide Streptavidin
- 406-0005 Maleimide Glucose Oxidase
- 701-0000 Lightning-Link HRP conjugation kit

For further information and related detection reagents see www.innovabiosciences.com