



Maleimide-Activated Glucose Oxidase

406-0005 5 mg lyophilized maleimide-activated Glucose Oxidase

Release 001 January 2008

Technical bulletin 4511

Introduction

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

Storage of Maleimide-activated Glucose Oxidase

Maleimide-activated Glucose Oxidase 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 Glucose oxidase 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.

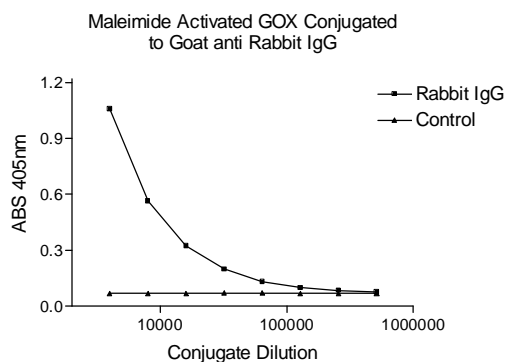
Note: The buffer in which the thiolated molecule is dissolved should be in the pH range 6.5-7.5. Phosphate buffered saline pH 7.2 is commonly employed. EDTA (1-10 mM) may help to prevent metal catalysed oxidation of thiols.

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 GOX. The goat resulting conjugate was analysed by ELISA using a rabbit IgG coated plate.

Related Products

- 401-0005 Maleimide HRP
- 402-0005 Maleimide Alkaline Phosphatase
- 403-0005 Maleimide Phycoerythrin
- 404-0005 Maleimide Allophycocyanin
- 405-0005 Maleimide Streptavidin

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