QuantiChrom™ HRP Detection Reagent (DTMB-200)

Quantitative Colorimetric Peroxidase Determination at 450nm

DESCRIPTION

HORSERADISH PEROXIDASE (HRP) is an enzyme commonly used when conjugated to analytes of interest. When combined with hydrogen peroxide and a dye, HRP can be used to colorimetrically quantify the analyte.

KIT CONTENTS (200 TESTS IN 96-WELL PLATES)

- 500 µL Reagent A

- 20 mL Reagent B

- 25 mL Stop Reagent

Storage conditions. The kit is shipped at room temperature. Store kit at 2-8°C upon receiving. Shelf life: 6 months after receipt.

Precautions: Reagents are for research use only. Normal precautions for laboratory reagents should be exercised while using the reagents. Please refer to Material Safety Data Sheet for detailed information. Vortex and bring all reagents to room temperature prior to assay.

APPLICATIONS

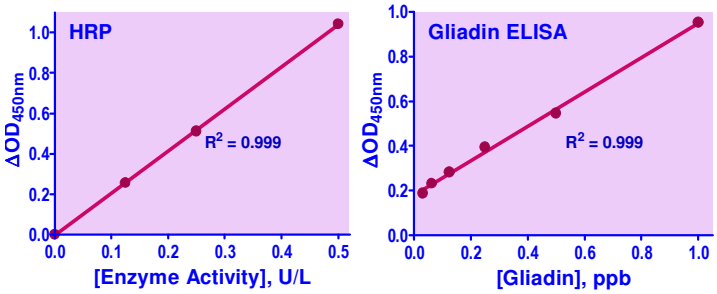
Direct Assays of peroxidases, ELISA, immunochromogenic chemistry, Western blot

PROCEDURES

Instructions for use: Prior to assay, let reagents come to room temperature. Vortex reagents prior to test. For each well to be tested you will need 90 µL Working Reagent, prepared by mixing 2.5 µL reagent A and 100 µL reagent B.

1. For ELISA, after washing off free HRP detection antibody, remove any remaining wash buffer. Add 90 µL Working Reagent to each well.

   For a liquid sample, add 10 µL sample to well. Add 90 µL Working Reagent to each well.
2. Immediately tap plate to mix. Incubate 30 minutes at room temperature in the dark.
3. Add 120 µL stop reagent to each well and read OD_{450nm}.



Free HRP assay and Gliadin ELISA in 96-Well Plate using DTMB-200

DETECTION LIMIT

HRP: $7.6x10^{-8}$ U/well, or 7.7 pg/well;
ELISA: 0.1 ppb Gliadin.

RELATED PRODUCTS

- QuantiFluo™ HRP Reagent (QFHRP-25mL), single-reagent, OD570nm, FL530/585nm.
- SuperLight™ HRP Reagent (SLHRP-100), single-reagent highly sensitive chemiluminescent reagent (to be released soon).
- QuantiFluo™ ALP Reagent (QFALP-6mL), single reagent for Alkaline Phosphatase detection, FL360/450nm.

LITERATURE

1. Li Y. et al (2018). NAD+ Cofactor Regeneration by TMB - Mediated Horseradish - Peroxidase - Catalyzed Reactions. ChemistrySelect, 3(39), 10900-10904.

2. Busa L. S. A. et al (2016). 3, 3′, 5, 5′-Tetramethylbenzidine oxidation on paper devices for horseradish peroxidase-based assays. Analytical Sciences, 32(8), 815-818.