

## **beta-Glucosidase Assay Kit**

### **Product Information**

#### **Cat.No.**

Kit-0859

#### **Product Overview**

beta-Glucosidase Assay Kit is a colorimetric kinetic determination of beta-Glucosidase activity.

#### **Description**

$\beta$ -GLUCOSIDASE is a glucosidase enzyme which acts upon  $\beta$ 1-4 bonds linking two glucose or glucose-substituted molecules (i.e., the disaccharide cellobiose).  $\beta$ -Glucosidases are required by organisms (some fungi, bacteria, termites) for consumption of cellulose. Lysozyme is also a  $\beta$ -glucosidase and is present in tears to prevent bacterial infection of the eye. In humans, lower activity of a  $\beta$ -glucosidase isoform (lysosomal gluco-cerebrosidase) has been related to Gaucher's disease and Parkinson's disease. Simple, direct and automation-ready procedures for measuring  $\beta$ -glucosidase activity are becoming popular in Research and Drug Discovery. Beta-Glucosidase Assay Kit is designed to measure  $\beta$ -glucosidase activity directly in biological samples without pretreatment. The improved method utilizes p-nitrophenyl-  $\beta$ -D-glucopyranoside that is hydrolyzed specifically by  $\beta$ -glucosidase into a yellow colored product (maximal absorbance at 405nm). The rate of the reaction is directly proportional to the enzyme activity.

#### **Applications**

Direct Assays:  $\beta$ -glucosidase activity in biological samples. Characterization and Quality Control for  $\beta$ -glucosidase production. Drug Discovery: high-throughput screen for  $\beta$ -glucosidase modulators

#### **Usage**

For research use only (RUO)

#### **Storage**

Store all reagents at -20°C. Shelf life: 6 months after receipt.

## beta-Glucosidase Assay Kit

### Kit Components

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Assay Buffer: (pH 7.0) 24 mL&beta;-NPG Substrate 1 mLCalibrator: (equivalent to 250 U/L) 10 mL

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**Detection method** Colorimetric

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### Features & Benefits

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High sensitivity and wide linear range: Use 20  $\mu$ L sample. The detection limit is 2 U/L, linear up to 250 U/L.Homogeneous and simple procedure: Simple "mix-and-measure" procedure allows reliable quantitation of  $\beta$ -glucosidase activity within 20 minutes.Robust and amenable to HTS: All reagents are compatible with high-throughput liquid handling instruments.

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