

Beta Galactosidase Inhibitor Screening Kit

Product Information

Cat.No.

Kit-2136

Product Overview

Beta-Galactocidase Inhibitor Screening Kit, β -Gal converts β -Gal substrate to give an intensely fluorescent product (Ex/Em = 480/520 nm). In the presence of a β -Gal inhibitor, the reaction is impeded/abolished resulting in decrease or total loss of fluorescence. This assay kit can be used to screen/study/characterize the potential inhibitors of Beta Galactosidase. The assay is simple, high-throughput adaptable and can be performed within 30 min.

Size

100 assays

Description

Introduction: Beta Galactosidase (β -Gal, EC: 3.2.1.23) is an enzyme which hydrolyzes the β -galactosides into monosaccharides. β -Gal is widely used as a reporter gene in the field of molecular biology. Senescence Associated β -Gal (SA- β -Gal) is an isoform of β -Gal which has the optimal activity at pH 6.0, and is mostly used as a biomarker for senescent cells (K802). β -Gal is an essential enzyme in humans and its deficiency results in Morquio's Syndrome, a severe birth defect. β -Gal can also be used as a tool to study protein-protein interaction.

Applications

Screening/characterizing/studying potential inhibitors of Beta-Galactosidase

Storage

Store kit at -20°C, protected from light. Briefly centrifuge small vials prior to opening. Read entire protocol before performing the assay. β -Gal Assay Buffer: Bring to room temperature before use. Store at -20°C or 4°C. β -Gal Substrate: Thaw at room temperature. Aliquot and store at -20°C. β -Galactosidase: Reconstitute with 550 μ l β -Gal Assay Buffer. Aliquot and store at -20°C. Avoid freeze/thaw. Keep on ice while in use. Use within two months. β -Gal Inhibitor

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Control: Reconstitute with 200 μ l dH₂O. Aliquot and store at -20°C. Avoid freeze/thaw. Keep on ice while in use. Use within two months.

Kit Components

β -Gal Assay Buffer: 25 ml
 β -Gal Substrate (in DMSO): 200 μ l
 β -Galactosidase: 1 vial
 β -Gal Inhibitor Control: 1 vial

Detection method Fluorescence (Ex/Em = 480/520 nm)

Compatible Sample Types

Variable: Inhibitors, small molecules, proteins, etc.

Features & Benefits

- Simple and High throughput adaptable
- 30 minutes short protocol
- Detect using a fluorometer or fluorescence microplate reader.