

?-Glucuronidase Activity Assay Kit (Fluorometric)

Product Information

Cat

Kit-1017

Common Name

Glucuronidase

Cat.No.

Kit-1017

Description

β-Glucuronidases are hydrolytic enzymes responsible for the breakdown of carbohydrates. Specifically, β-Glucuronidases cleave the terminal β-D-glucuronic acid residue from the non-reducing terminus of a mucopolysaccharide chain. In humans, these enzymes are found in the lysosome of many tissue types. Loss of β-Glucuronidase activity results in a metabolic disease known as Sly syndrome. One pharmaceutical application for these enzymes is the metabolism of glucuronidated prodrugs into active pharmacological compounds. As expression and activities of β-Glucuronidases vary substantially between tissue types and disease states, these enzymes have been used to achieve targeted activation of oncotherapeutic compounds, some of which may be toxic to healthy cells not associated with malignancy or disease. It is thus important to have knowledge of the β-Glucuronidase activity in the tested sample to determine whether the prodrug or active form will predominate. β-Glucuronidase Activity Assay Kit provides a quick, reliable fluorometric method for measurements of β-Glucuronidase activities of samples and tissue lysates. The provided substrate, which is specific to β-Glucuronidases, is cleaved into a fluorescent product in the presence of β-Glucuronidase. This kit, when used according to the protocol, is sensitive enough to detect as little as one μU (1 pmole/min) of activity.

Applications

Measurement of β-Glucuronidase activity in various biological samples and purified/crude enzyme preparations

Storage

?-Glucuronidase Activity Assay Kit (Fluorometric)

-20°C

Shipping

Gel Pack

Size

100 assays

Kit Components

AMCase Assay Buffer; AMCase Lysis Buffer; AMCase Substrate (in DMSO); Acidic Mammalian Chitinase (lyophilized); 4-Methylumbelliferone Standard (5 mM)

Target Species

Mammalian

Detection method Fluorescence (Ex/Em330/450 nm)

Features & Benefits

Simple, rapid & convenient assay to measure β-Glucuronidase; Includes Positive Control (Acidic Mammalian Chitinase)