

?-Xylosidase Activity Assay Kit (Fluorometric)

Product Information

Cat

Kit-1015

Common Name

Xylosidase

Cat.No.

Kit-1015

Description

β-Xylosidase (EC 3.2.1.37) is a hydrolytic enzyme responsible for the breakdown of hemicellulose, a primary component of the plant cell wall. Specifically, β-Xylosidases remove the terminal β-xylose residue from the non-reducing terminus of a polysaccharide chain. As xylan is the principal variety of hemicellulose present in the plant cell wall, the xylosidase activity is the final step in the enzymatic generation of the five carbon reducing sugar, xylose. Individual reducing sugars can be converted to ethanol, which serves as a building block for biofuels. Xylose can also be converted into other value-added chemicals such as Xylitol and Xylonic Acid. β-Xylosidase Activity Assay Kit provides a quick, reliable, and sensitive fluorometric method for the determination of β-Xylosidase activity. A fluorogenic substrate is incubated with the sample, and in the presence of β-Xylosidase activity, the substrate is cleaved, releasing a fluorophore (Ex Em 330/450 nm). The increase in fluorescence is a direct measure of the β-Xylosidases activity in the sample. When used according to protocol, activities as low as one μUnit (1 pmol/min) in environmental microbial samples, such as compost, can be detected.

Applications

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

Storage

-20°C

?-Xylosidase Activity Assay Kit (Fluorometric)

Shipping

Gel Pack

Size

100 assays

Kit Components

β-Xylosidase Assay Buffer; β-Xylosidase Substrate (in DMSO); β-Xylosidase Positive Control; 4-Methylumbelliferone Standard (5 mM)

Target Species

Bacterial

Detection method Fluorescence (Ex/Em330/450 nm)

Features & Benefits

Simple, rapid & convenient assay to measure β-Xylosidase activity; Includes Positive Control (β-Xylosidase)