

Product datasheet

β-Glucuronidase Activity Assay Kit (Fluorometric)
ab234625

3 Images

Overview

Product name	β-Glucuronidase Activity Assay Kit (Fluorometric)
Detection method	Fluorescent
Sample type	Tissue, Cell Lysate
Assay type	Enzyme activity (quantitative)
Sensitivity	1 μU
Species reactivity	Reacts with: Other species, Mammals

Product overview β-Glucuronidase Activity Assay Kit (Fluorometric) (ab234625) 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 pmol/min) of activity.

Notes 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.

Platform Microplate reader

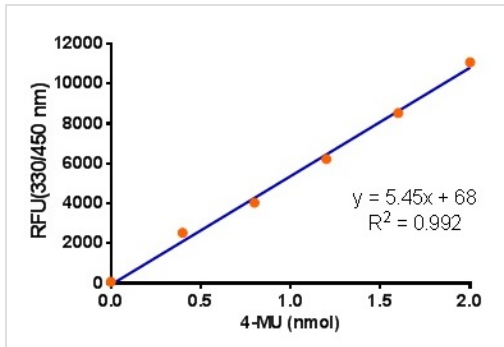
Properties

Storage instructions Store at -20°C. Please refer to protocols.

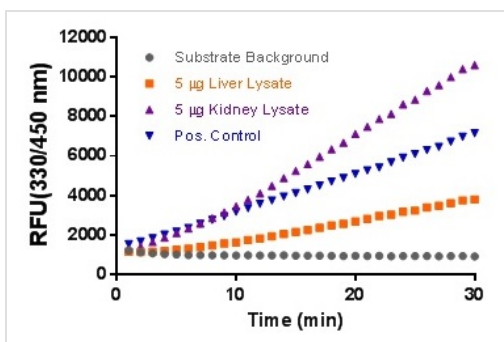
Components	100 tests
β-Glucuronidase Positive Control	1 vial

Components	100 tests
β -Glucuronidase Substrate	1 x 100 μ l
β -Glucuronidase Assay Buffer	1 x 25ml
4-Methylumbelliferone Standard (5 mM)	1 x 35 μ l

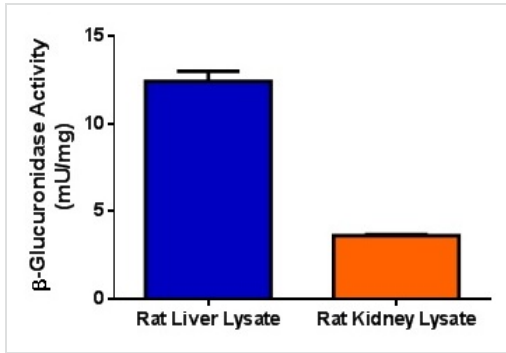
Images



4-MU standard curve.



Time course using 5 μ l positive control β -Glucuronidase and lysate samples.



Assays were performed following the kit protocol.

The β -Glucuronidase activities for Rat Kidney and Liver lysates (5 μ g each), in mU/mg, were determined to be 3.61 and 12.44 mU per mg protein in sample, respectively.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors