

1,5-Anhydroglucitol Assay Kit (Colorimetric) ab284531

2 Images

Overview

Product name	1,5-Anhydroglucitol Assay Kit (Colorimetric)
Detection method	Colorimetric
Sample type	Saliva, Serum, Plasma
Assay type	Enzyme activity (quantitative)
Assay duration	Multiple steps standard assay
Product overview	<p>1,5-Anhydroglucitol Assay Kit (Colorimetric) (ab284531) (K2029) is a high-throughput adaptable microplate-based assay that enables rapid quantification of 1,5-AG levels in biological fluids. The assay consists of two steps: in the first step, the sample is pretreated to remove endogenous glucose that may interfere with the 1,5-AG detection and 1,5-AG is converted to 1,5-AG-6-phosphate. In the second step, 1,5-AG-6-phosphate is enzymatically metabolized, generating NADPH, which subsequently reacts with a colorless probe to form a strongly colored product measured by absorbance at OD = 460 nm. The absorbance is proportional to the concentration of 1,5-AG present in the samples.</p> <p>The assay is not affected by galactose, fructose or other physiologically common sugars and has a limit of detection of 0.11 nmoles of 1,5- AG per well, with a reliable linear range from 0.2 – 5 nmole per well (corresponding to a 20-500 µM concentration in a 10 µl sample volume).</p>
Notes	<p>This product is manufactured by BioVision, an Abcam company and was previously called K2029 1,5-Anhydroglucitol Assay Kit (Colorimetric). K2029-100 is the same size as the 100 test size of ab284531.</p>
Tested applications	Suitable for: Enzyme activity assay
Platform	Microplate (12 x 8 well strips)

Properties

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

Components	100 tests
1,5-AG Standard	1 vial
96-Well Half Area Plate	1 unit

Components	100 tests
Detection Buffer	1 x 10ml
Detection Enzyme Mix	1 vial
NADP Detection Probe	1 vial
Pretreatment Cofactor Mix	1 vial
Pretreatment Enzyme Mix	1 vial
Sample Pretreatment Buffer	1 x 10ml

Applications

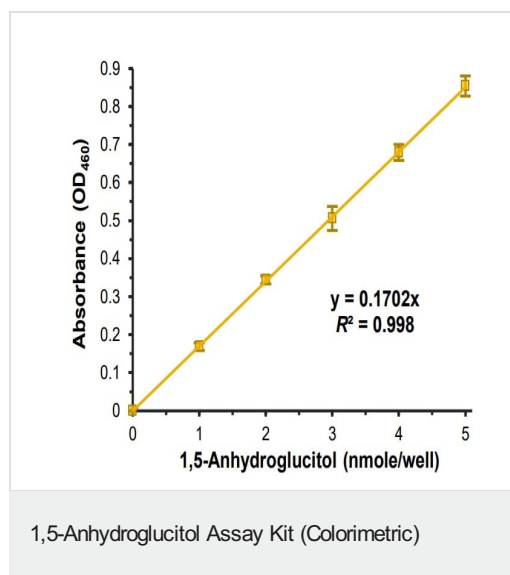
The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab284531 in the following tested applications.

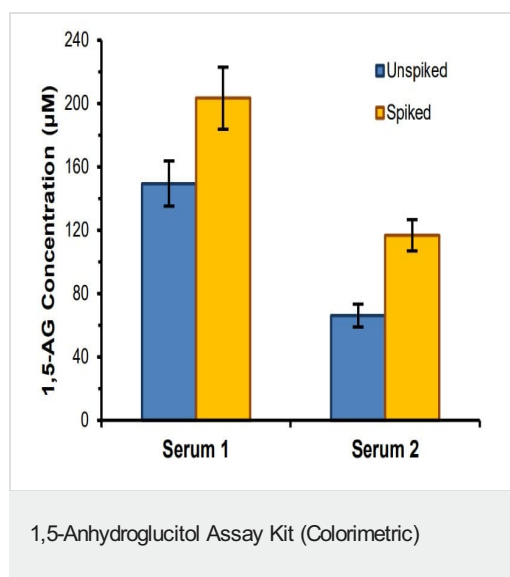
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Enzyme activity assay		Use at an assay dependent concentration.

Images



1,5-Anhydroglucitol (1,5-AG) Standard Curve. 1,5-AG concentration is directly proportional to the absorbance measured at 460 nm. For demonstrative purposes only.



Estimation of 1,5-AG in two different single-donor “off-the-clot” human serum samples (10 µl), each spiked with 50 µM 1,5- AG. Mean 1,5-AG concentrations detected in the samples were 149.4 ± 14.2 µM and 66.1 ± 7.2 µM, respectively (mean spike recovery rates for the two samples were 107.9% and 101.6%, respectively). Data are mean ± SD of 4-5 replicates, assayed according to the kit protocol. For demonstrative purposes only.

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