abcam

Product datasheet

Isocitrate Dehydrogenase Assay Kit (Colorimetric) ab102528

1 Abreviews 17 References 2 图像

概述

产品名称	Isocitrate Dehydrogenase Assay试剂盒(Colorimetric)
检测方法	Colorimetric
样品类型	Cell culture supernatant, Urine, Serum, Plasma, Other biological fluids, Tissue Extracts
检测类型	Enzyme activity
灵敏度	> 0.01 mU/well
检测时间	0h 45m
产品概述	Abcam's Isocitrate Dehydrogenase Assay Kit (Colorimetric) provides a convenient tool for sensitive detection of NAD(+) / NADP(+)-dependent or both IDHs in a variety of samples. The IDHs utilize isocitrate as a specific substrate leading to a proportional color development and can be easily quantified colorimetrically (λ = 450 nm) with detection sensitivity as low as 0.01 mU. Visit our **FAQs page** for tips and troubleshooting. Isocitrate dehydrogenase assay protocol summary: - add samples and standards to wells - incubate for 3 min and analyze with microplate reader - incubate for 30 min - 2 hr and analyze again
说明	This product is manufactured by BioVision, an Abcam company and was previously called K756 Isocitrate Dehydrogenase Activity Colorimetric Assay Kit. K756-100 is the same size as the 100 test size of ab102528.
平台	Microplate reader

性能

存放说明	Store at -20°C. Please refer to protocols.

组件	100 tests
β-NADP Stock	1 vial
Developer Solution II	1 vial
IDH Positive Control	1 x 20µl

组件	100 tests
IDH Substrate Mix	1 vial
Isocitrate Assay Buffer	1 x 25ml
NAD+	1 vial
NADH Standard I	1 vial

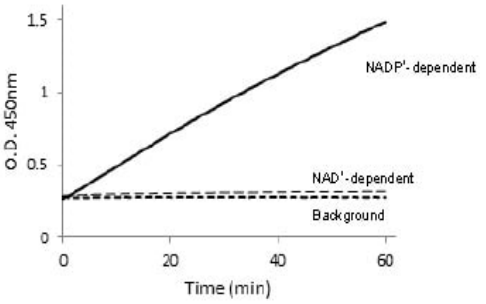
相关性

Isocitrate dehydrogenase (IDH; EC 1.1.1.41, NAD+) is an enzyme that participates in the citric acid cycle. These IDH3 isoforms catalyze the oxidative decarboxylation of isocitrate, producing alpha-ketoglutarate and CO_2 while converting NAD+ to NADH. This is a two-step process, which involves oxidation of isocitrate to oxalosuccinate, followed by the decarboxylation of the beta-carboxyl group to form the ketone, alpha-ketoglutarate. Other isoforms (EC 1.1.1.42, NADP+) catalyze the same reaction, but unrelated to the citric acid cycle. It is carried out in the mitochondrion (IDH2) as well as in the cytosol and peroxisome (IDH1) and use NADP+ as a cofactor instead of NAD+.

细胞定位

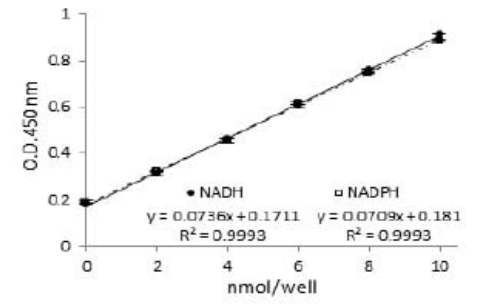
Cytoplasm. Peroxisome

图片



Isocitrate Dehydrogenase detection in Bovine Liver Extraction Sample using ab102528

Functional Studies - Isocitrate Dehydrogenase Detection Kit (ab102528)



Example of NADH and NADPH Standard Curve obtained using ab102528

Functional Studies - Isocitrate Dehydrogenase Detection Kit (ab102528)

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.cn/abpromise** or contact our technical team.

Terms and conditions

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