# abcam

# Product datasheet

# Isocitrate Dehydrogenase Assay Kit (Colorimetric) ab102528

★★★★★ 1 Abreviews 17 References 画像数 2

#### 製品の概要

製品名 Isocitrate Dehydrogenase Assay Kit (Colorimetric)

検出方法 Colorimetric

サンプルの種類 Cell culture supernatant, Urine, Serum, Plasma, Other biological fluids, Tissue Extracts

アッセイタイプ Enzyme activity 検出感度 > 0.01 mU/well

**全工程の試験時間** 0h 45m

製品の概要 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 ( $\lambda$  = 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

特記事項 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.

試験プラットフォーム Microplate reader

## 製品の特性

保存方法 Store at -20°C. Please refer to protocols.

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

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

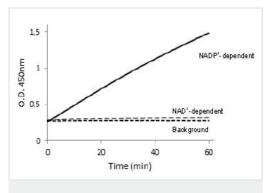
#### 関連性

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+.

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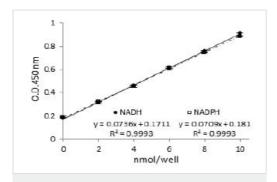
Cytoplasm. Peroxisome

#### 画像



Isocitrate Dehydrogenase detection in Bovine Liver Extraction Sample using ab102528

Functional Studies - Isocitrate Dehydrogenase Detection Kit (ab102528)



ab102528

Example of NADH and NADPH Standard Curve obtained using

Functional Studies - Isocitrate Dehydrogenase Detection Kit (ab102528)

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