

Citrate Assay Kit ab83396

[12 References](#) [画像数 3](#)

製品の概要

製品名	Citrate Assay Kit
検出方法	Colorimetric/Fluorometric
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	Quantitative
検出感度	> 0.002 mM
検出範囲	0.002 mM - 10 mM
全工程の試験時間	0h 40m
製品の概要	Citrate Assay Kit ab83396 provides a simple, sensitive and rapid means of quantifying citrate in biological samples.

In the citrate assay protocol, citrate is converted to pyruvate via oxaloacetate. The pyruvate is quantified by converting a nearly colorless probe to an intensely colored (570 nm) and fluorescent (Ex/Em, 535/587 nm) product.

The citrate assay kit can detect 0.1 to 10 nmoles (~2 μ M-10 mM) of citrate.

Citrate assay protocol summary:

- add samples and standards to wells
- add reaction mix and incubate for 30 min at room temp
- analyze with microplate reader

特記事項

This product is manufactured by BioVision, an Abcam company and was previously called K655 Citrate Colorimetric/Fluorometric Assay Kit. K655-100 is the same size as the 100 test size of ab83396.

Citric acid (HOOC-CH₂-C(-OH)(-COOH)-CH₂-COOH) is a key intermediate in the TCA cycle which occurs in mitochondria. It is formed by the addition of oxaloacetate to the acetyl group of acetyl-CoA derived from the glycolytic pathway. Citrate can be transported out of mitochondria and converted back to acetyl CoA for fatty acid synthesis.

試験プラットフォーム

Microplate reader

製品の特性

保存方法

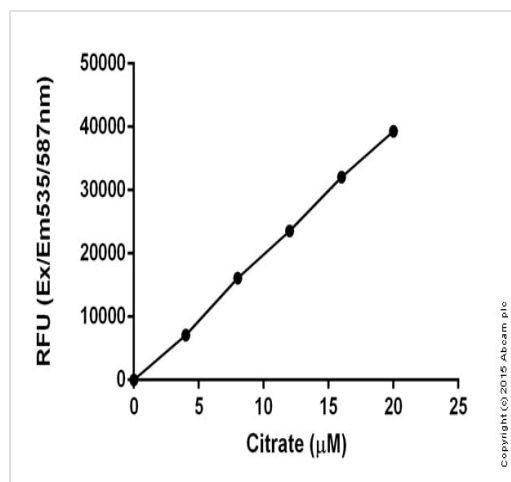
Store at -20°C. Please refer to protocols.

内容	100 tests
Citrate Assay Buffer	1 x 25ml
Citrate Developer	1 vial
Citrate Enzyme Mix	1 vial
Citrate Standard	1 vial
OxiRed Probe	1 x 0.2ml

関連性

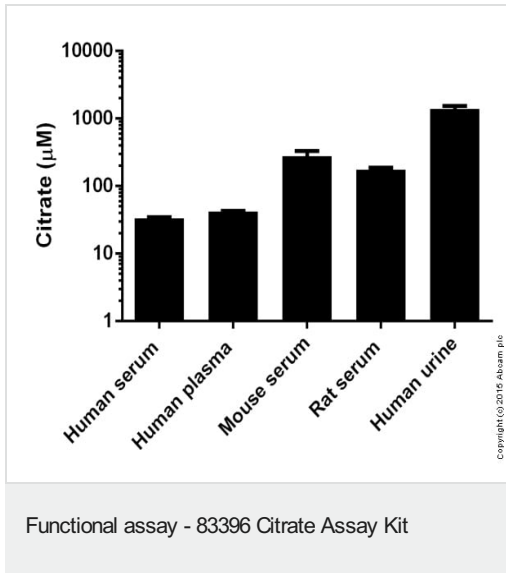
Citric acid ($\text{HOOC-CH}_2\text{-C(-OH)(-COOH)-CH}_2\text{-COOH}$) is a key intermediate in the TCA cycle which occurs in mitochondria. It is formed by the addition of oxaloacetate to the acetyl group of acetyl-CoA derived from the glycolytic pathway. Citrate can be transported out of mitochondria and converted back to acetyl CoA for fatty acid synthesis. Citrate is an allosteric modulator of both fatty acid synthesis (acetyl-CoA carboxylase) and glycolysis (phospho-fructokinase). Citrate is widely used industrially in foods, beverages and pharmaceuticals. Citrate metabolism and disposition can vary widely due to sex, age and a variety of other factors.

画像

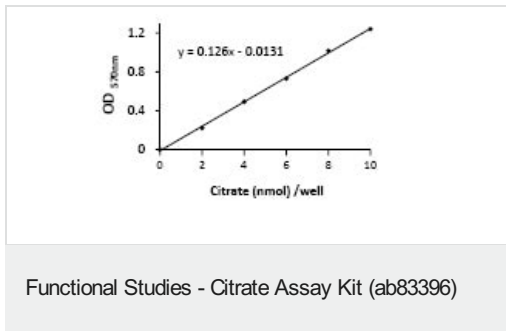


Fluorimetric standard curve: mean of duplicates (+/-SD) with background readings subtracted.

Functional assay - 83396 Citrate Assay Kit



Citrate measured fluorimetrically in various biofluids showing concentration (micromolar).



Citrate standard curve generated using this kit protocol

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.co.jp/abpromise> or contact our technical team.

Terms and conditions

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