abcam

Product datasheet

Citrate Assay Kit ab83396

12 References 3 图像

概述

产品名称 Citrate Assay试剂盒

检测方法 Colorimetric/Fluorometric

样**品**类型 Cell culture supernatant, Urine, Serum, Plasma, Other biological fluids, Tissue Extracts

检测类型 Quantitative **灵敏度** > 0.002 mM

范围 0.002 mM - 10 mM

检测时间 0h 40m

产品概述 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 (\sim 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

说明 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.

平台 Microplate reader

性能

1

存放说明

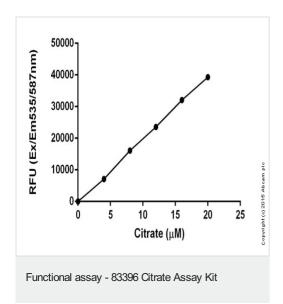
Store at -20°C. Please refer to protocols.

组 件	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

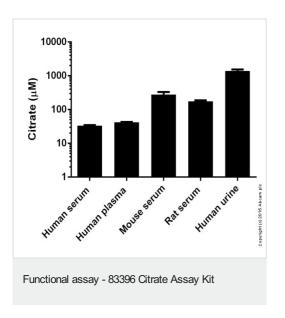
相关性

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. 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.

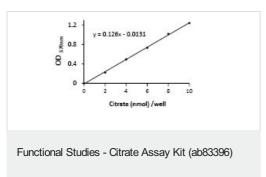
图片



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



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



Citrate standard curve generated using this kit protocol

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