abcam

Product datasheet

Oxaloacetate Assay Kit ab83428

9 References 3 Images

Overview

Product name	Oxaloacetate Assay Kit
Detection method	Colorimetric/Fluorometric
Sample type	Cell culture supernatant, Urine, Serum, Plasma, Other biological fluids, Tissue Extracts
Assay type	Quantitative
Sensitivity	> 2 µM
Range	2 µM - 200 µM
Assay time	0h 40m
Product overview	Abcam's Oxaloacetate Assay Kit provides a simple, sensitive and rapid means of quantifying OAA in a variety of samples. In the assay, OAA is converted to pyruvate which is utilized to convert a nearly colorless probe to an intensely colored (λmax= 570nm) and fluorescent (Ex/Em = 535/587nm) product. The Oxaloacetate Assay Kit can detect 0.1-10nmol (2-200 µM) of OAA. Visit our **FAQs page** for tips and troubleshooting.
Notes	This product is manufactured by BioVision, an Abcam company and was previously called K659 Oxaloacetate Colorimetric/Fluorometric Assay Kit. K659-100 is the same size as the 100 test size of ab83428. Oxaloacetate (OAA, HOOC-CO-CH_2-COOH) is a TCA cycle intermediate. It precedes citrate which is formed by the transfer of an acetyl group to OAA. OAA is formed by the deamidation of aspartate or condensation of CO2 with pyruvate or PEP. Since mammals do not possess the enzymatic machinery to form TCA cycle intermediates from acetyl CoA, OAA is one of the anaplerotic entry points via pyruvate and pyruvate carboxykinase
Platform	Microplate reader

Properties

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

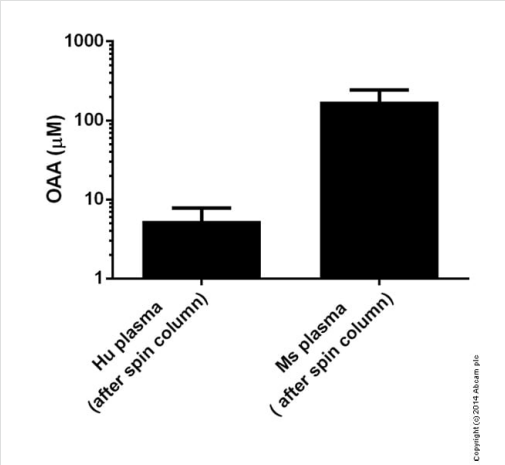
Components	100 tests
Developer	1 vial

Components	100 tests
OAA Assay Buffer	1 x 25ml
OAA Enzyme Mix	1 vial
OAA Probe (in DMSO)	1 x 200µl
OAA Standard (10 µmol)	1 vial

Relevance

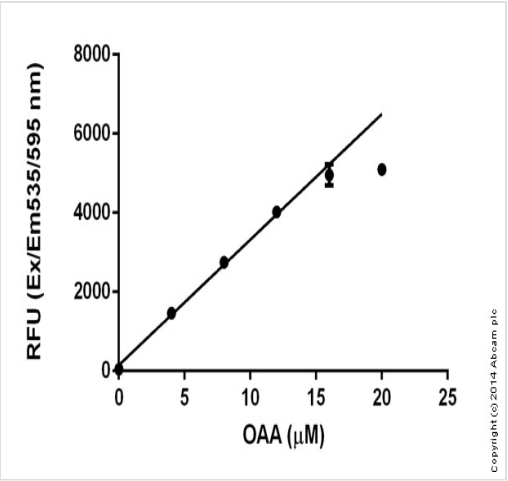
Oxaloacetate (OAA, HOOC-CO-CH_2-COOH) is a TCA cycle intermediate. It precedes citrate which is formed by the transfer of an acetyl group to OAA. OAA is formed by the deamidation of aspartate or condensation of CO_2 with pyruvate or PEP. Since mammals do not possess the enzymatic machinery to form TCA cycle intermediates from acetyl CoA, OAA is one of the anaplerotic entry points via pyruvate and pyruvate carboxykinase.

Images



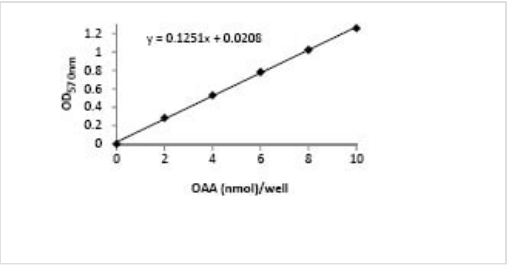
Functional Studies- Oxaloacetate (OAA) Assay Kit (ab83428)

Oxaloacetate fluorimetrically measured in biofluids (after spin column) showing concentration (micromolar)



Functional Studies- Oxaloacetate (OAA) Assay Kit (ab83428)

Standard curve (fluorimetric): mean of duplicates (+/-SD) with background readings subtracted



Functional Studies - Oxaloacetate (OAA) Assay Kit (ab83428)

Oxaloacetate standard curve generated following the 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.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