

alpha-Ketoglutarate Assay Kit

Product Information

Cat.No.

Kit-0855

Product Overview

alpha-Ketoglutarate Assay Kit is used for quantifying alpha-KG.

Description

α -Ketoglutarate (α -KG) is a key intermediate in the Krebs cycle, coming after isocitrate and before succinyl CoA. Anaplerotic reactions replenish the cycle by synthesizing α -KG from transamination of glutamate, or through the action of glutamate dehydrogenase. α -KG is an important nitrogen transporter. Being a key intermediate, it is one of the organic acids measured in newborns as an indicator of inborn errors of metabolism. The α -Ketoglutarate Assay Kit provides a simple, sensitive and rapid means for quantifying α -KG in a variety of samples. In the assay, α -ketoglutarate is transaminated with the generation of pyruvate which is utilized to convert a nearly colorless probe to both color ($\lambda_{max} = 570$ nm) and fluorescence (Ex/Em = 535/587 nm). The α -Ketoglutarate Assay Kit is useful for detecting α -ketoglutarate in the range of 0.01 to 10 nmoles.

Target Species

Mammals

Usage

For research use only (RUO)

Storage

Store kit at -20°C , protect from light. Warm α -KG Assay Buffer to room temperature before use. Briefly centrifuge all small vials prior to opening.

Kit Components

α -KG Assay Buffer 25 ml- α -KG OxiRed Probe (in DMSO) 0.2 ml- α -KG Converting Enzyme (lyophilized) 1 vial- α -KG Development Enzyme Mix (lyophilized) 1 vial- α -KG Standard (10 μmol , lyophilized) 1 vial

Detection method Colorimetric, Fluorometric



CREATIVE **BIOMART**[®]
Assay Kit

alpha-Ketoglutarate Assay Kit

Compatible Sample Types

Biological Fluid, Cell Culture Supernatant, Plasma, Serum, Tissue Culture Supernatant, Urine

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