CREATIVE BIOMART®
Assay Kit

Aldo-keto Reductase Activity Assay Kit (Colorimetric)

Product Information

Cat

Kit-1069

Cat.No. Kit-1069

Description

Aldo-keto Reductases (AKRs) are a superfamily of NAD(P)H linked oxidoreductases which contains more than 190 members. A complete listing of AKR superfamily can be found at: https:/www.med.upenn.edu/akr/. The common function of AKR superfamily is to oxidize/reduce aldehydes or ketones to their corresponding primary or secondary alcohols. Due to their broad substrate specificity, AKRs play roles in intermediary metabolism, biosynthesis and detoxification. In humans, the AKRs are not only involved in carbonyl metabolism, but they also regulate signaling through nuclear receptors which leads to chemical carcinogenesis. Many studies demonstrate increasing expression of AKRs in cancers such as lung, liver and colon cancers. Aldo-keto Reductase Activity Assay Kit provides a convenient tool for sensitive detection of AKR activity in a variety of samples. In this assay, AKR acts on a general substrate and converts NADP+ to NADPH. This NADPH reacts with the AKR probe and generates color. This color is proportional to the activity of AKR in the sample. This kit can detect AKR activity as low as 0.001 mU in samples and has been validated with AKR1B10, AKR1C1 and AKR1C3. Further tests are in progress for other members of the AKR family.

Applications

Measurement of aldo-keto reductase activity in various tissues/cells.
Screening of aldo-keto reductase inhibitors.

Storage

-20°C

Shipping

Gel Pack

Size

Tel: 1-631-559-9269 1-516-512-3133
Email:info@creative-biomart.org
Fax:1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

CREATIVE BIOMART®
Assay Kit

Aldo-keto Reductase Activity Assay Kit (Colorimetric)

100 assays

Kit Components

AKR Assay Buffer; AKR Substrate; AKR Probe; AKR Positive Control; NADPH Standard

Target Species

Mammalian

Detection method Absorbance (450 nm)

Features & Benefits

Simple, ultra-sensitive assay.
Colorimetric detection

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