

Albumin-to-Creatinine Ratio (ACR) Assay Kit

Product Information

Cat

Kit-1084

Cat.No.

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Description

Albumin-to-Creatinine Ratio (ACR) is one of the two markers used to determine chronic kidney disease (CKD). ACR is recommended to be measured on regular basis on people living with Type I and Type II diabetes. ACR is defined as the ratio between albumin (reported in mg/dl) and creatinine (reported in g/dl). This ratio estimates the amount of albumin excreted in urine during a 24 hr period. Albuminuria is diagnosed when UACR is greater than 30 mg albumin/g creatinine. ACR Assay Kit provides a simple, sensitive, and high-throughput adaptable assay that detects albumin (detection range: 0.02- 2.5 mg/ml), creatinine (detection range: 0.002 -0.5 mg/ml) and urine albumin-to-creatinine ratio. The ACR ratio is determined in two steps: First, albumin is determined by using a probe (AB580) that specifically recognizes albumin (Ex/Em = 600/630 nm). Second, creatinine is converted to sarcosine via enzymatic reactions. Sarcosine is specifically oxidized generating a product that reacts with a probe producing a chromophore that can be detected at 570 nm.

Applications

Estimation of albumin in biological samples
Estimation of creatinine in biological samples
Determination of UACR in mammalian urine samples

Storage

-20°C

Shipping

Gel Pack

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Size

100 assays

Kit Components

Creatinine Assay Buffer; Albumin Assay Buffer; Albumin Diluent; Albumin Probe (AB580); Creatinine Probe; Creatinase; Creatininase; Creatinine Enzyme Mix; BSA Standard (2 mg/ml); Creatinine Standard (10 μ mol)

Detection method Fluorescence (Ex/Em = 600/630 nm) & Absorbance (OD 570 nm)

Features & Benefits

Simple & Sensitive;

High-Throughput adaptable;

Suitable for detecting albumin (detection range: 0.02- 2.5 mg/ml), creatinine (detection range: 0.002 -0.5 mg/ml) and albumin-to-creatinine ratio (ACR)