



Protein Creatinine Ratio Assay Kit

Product Information

Cat.No.

Kit-2082

Product Overview

PROTEIN/CREATININE RATIO (PCR) remains the simplest and most convenient test for proteinuria. Other methods such as 24 hour urine test or timed urine test require strict adherence to sample collection protocol. Since the protein concentration is normalized to creatinine secretion, the urine sample can be taken at anytime and no diet or liquid restrictions are necessary for sample collection.

Size

100 tests

Description

PROTEIN is filtered out of urine by the glomeruli of the kidneys. Albumin is the most common serum protein, thus the majority of the protein in urine is albumin. A damaged kidney will allow some protein through into the urine, the less protein in urine the better. Elevated protein levels in urine is called microalbuminuria or proteinuria, which typically arises due to type 1 diabetes, type 2 diabetes, or high blood pressure. CREATININE is synthesized in the body at a fairly constant rate from creatine. In healthy individuals, creatinine secretion is independent of diet and is fairly constant. The creatinine clearance test has become one of the most sensitive tests for measuring glomerular filtration rate.

Applications

Direct Assays: Protein creatinine ratio determination in urine samples (rat, mouse, human, not species specific). Drug Discovery/Pharmacology: effects of drugs on protein and creatinine concentration, metabolism, and excretion.

Storage

The kit is shipped at room temperature. Store all reagents at 2-8°C. Shelf life: 12 months after receipt.



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Kit Components

PR Reagent: 24 mL CR Reagent A: 6 mL CR Reagent B: 6 mL Standard: 1 mL

Detection method OD600 and OD530nm

Compatible Sample Types

Urine samples

Features & Benefits

- Sensitive and accurate. Use 20 μ L samples. Linear detection range in 96-well plate: 1 - 20 mg/dL Protein and 1 – 150 mg/dL Creatinine.
- Fast and convenient. No sample pre-treatment is needed. Simple 10- minute "add-incubate-read" procedure.
- High-throughput adaptable. The procedure can be readily automated for processing thousands of samples per day.

Assay time

10 min

Sensitivity

Detection Limit: 1 mg/dL Protein and 1 mg/dL Creatinine