

TECHNICAL BROCHURE Cystatin C (CYC-037B)

Clinical significance

Cystatin C is a basic proteinase inhibitor which is produced at a constant rate in all nucleated cells. The plasma concentration of Cystatin C is almost exclusively determined by the glomerular filtration rate (GFR), making Cystatin C an excellent indicator of GFR. Cystatin C is more accurate than plasma creatinine and the Cockcroft-Gault estimation of creatinine clearance and is more reliable than the 24-h creatinine clearance. Cystatin C can be used to detect kidney disease at earlier stages than serum creatinine.

Principle of the method

The assay is based on the reactions between Cystatin C and latex covalently bound antibodies against human Cystatin C. Cystatin C values are determined turbidimetrically using fixed- time measurement with sample blank correction. The relationship between absorbance and concentration permits a multipoint calibration with a measuring range of between 0 to 10 mg/L. The measuring temperature is 37°C. The assay can be performed on all instruments allowing turbidimetric measurements at 500 to 600nm.

General features

- ✓ Turbilatex reagent
- ✓ Linearity:
- ✓ Sensitivity: 0.7 µmol/L
- ✓ No prozone effect up to 16 mg/L
- ✓ Low interferences with Bilirubin and Haemoglobin

up to 8 mg/L

Reference values

Adult

0.59 - 1.03 mg/L

Commercial info

Reference CYC-037B Package Liquid-stable reagent

