

# Creatinine PAP

The enzymatic way



- Liquid-stable, ready-to-use reagent
- Determination in serum, plasma and urine
- Traceable to GC-IDMS reference method
- Good on-board and calibration stability

**DiaSys**

Diagnostic Systems

CHOOSING QUALITY.

## Summary

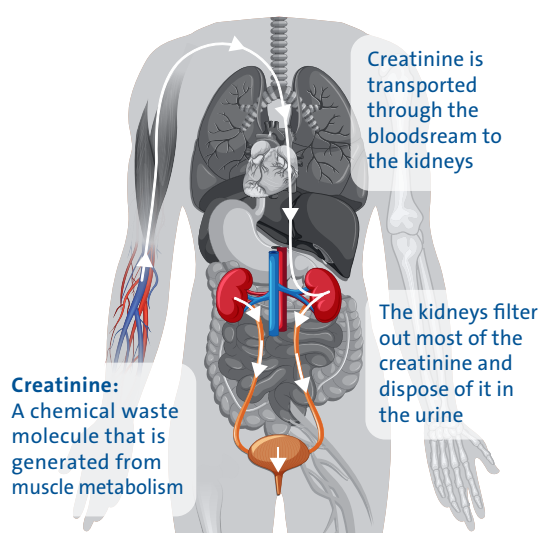
Creatinine is a waste product excreted by the kidneys mainly by glomerular filtration. The concentration of creatinine in plasma of a healthy individual is fairly constant, independent from water intake, exercise and rate of urine production. Therefore increased plasma creatinine values always indicate decreased excretion, i.e. impaired kidney function. The creatinine clearance enables a quite good estimation of the glomerular filtration rate (GFR) which allows better detection of kidney diseases and monitoring of renal function. For this purpose creatinine is measured simultaneously in serum and urine collected over a defined time period.

## Clinical Significance of Creatinine

Creatinine is the waste product of creatine metabolism. Creatinine is of clinical importance because of its very constant renal clearance.

It is an excellent marker of the renal function. A high serum creatinine rate (associated to a high urea rate) corresponds to a decrease in renal glomerular filtration (GFR). The serum creatinine test is more reliable than the urea test. Indeed, the urea serum rate is affected by factors such as diet, dehydration degree and protein metabolism (the serum creatinine rate is not influenced by these factors). The test of creatinine clearance can also be used to measure the GFR.

An increase of creatinine in serum and urine can be the sign of muscular necrosis. Creatinine occurs in the muscle cells of vertebrates as the only intermediate product of creatine metabolism. It is formed from creatine by the formation of a cyclic amide and the removal of water.



## Precision

The results are as follows:

### A) Precision (N=20)

	Mean (mg/dL)	CV (%)
Level 1	1.38	1.05
Level 2	4.08	0.49

### B) Intraday precision (N=5)

	Mean (U/L)	CV (%)
Level 1	1.47	0.9
Level 2	4.41	1.1

## Sensitivity

The lower limit of detection is 0.17 mg/dL.

## Linearity

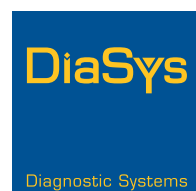
The test has been developed to determine creatinine concentrations within a measuring range from 0.17- 135 mg/dL.

## Order Information

Item Code	Parameter	Pack-size
750119934841	Creatinine PAP	R1: 2 x 45 mL; R2 : 2 x 15 mL
591009910064	TruCal U (universal)	6 x 3 mL
590009910061	TruLab N	6 x 5 mL
590509910061	TruLab P	6 x 5 mL

## Features and Benefits

- No interference by pseudo-creatinines
- Suitable for pediatric and geriatric samples
- Economical and fast analysis.



**DiaSys**  
**Diagnostics India Private Limited**  
Plot No. A-821, TTC Industrial Area,  
MIDC, Mahape, Navi-Mumbai, 400710,  
Maharashtra, India.

Toll free: 1800 120 1447  
E-Mail : info@diasys.in  
www.diasys.in



PT/22/001  
Jun 2022