



CITRATE

DETERMINATION OF CITRATE IN SERUM, PLASMA, URINE, SEMINAL FLUID AND FOODSTUFFS

Enzymatic method

Suitable for all analyzers – 100 tests

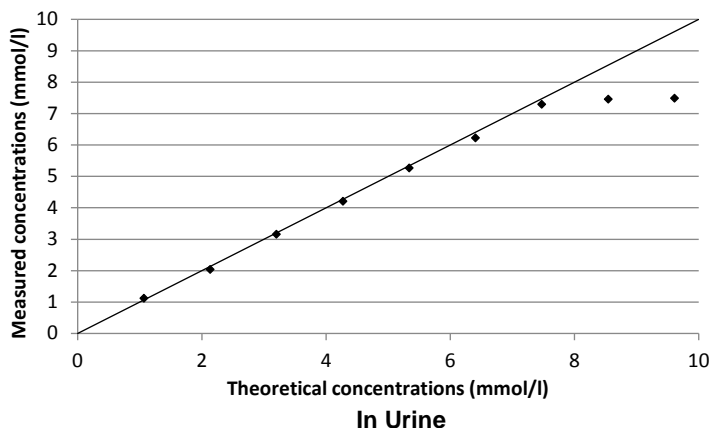
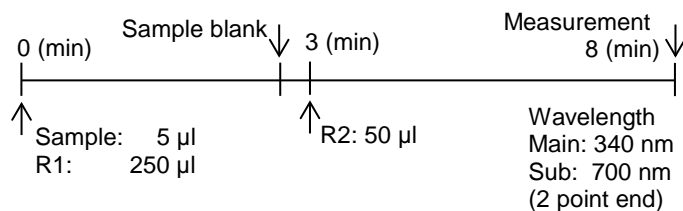
Product insert with instructions for automated and manual procedures

Stability > 6 years after production

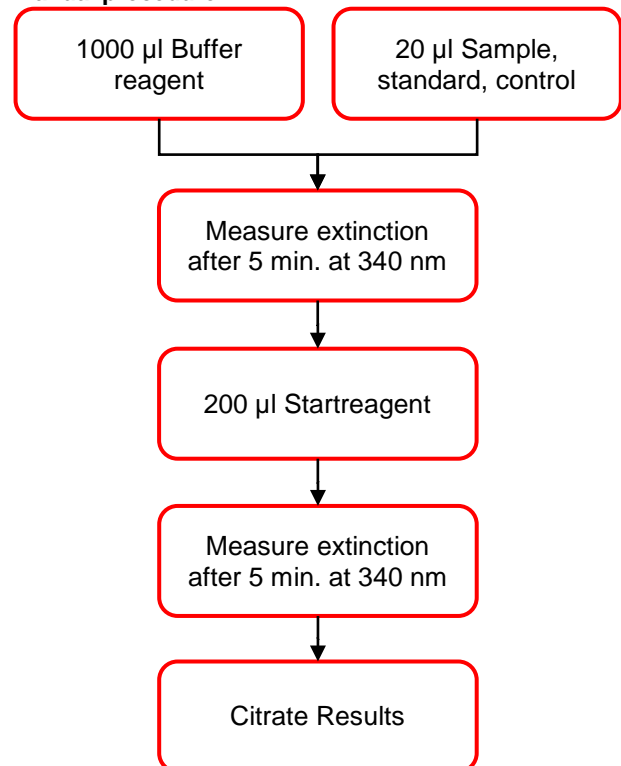
Also available: Oxalate Reagent Set

Now Citrate/Oxalate controls available

Settings for automatic analyzers



Manual procedure



Product name	Product no.	Quantity
Citrate Reagent Set	2881	25 -100 tests
Citrate / Oxalate Control Normal Level	3084	10 x 2 ml
Citrate / Oxalate Control High Level	3085	10 x 2 ml





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- Enzymatic Method
- Suitable for all analyzers – 100 tests
- Product insert with instructions for automated and manual procedures
- Stability > 6 years after production
- Citrate / Oxalate Controls available
- Wavelength 340, 334, 365 nm



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SUMMARY

PRINCIPLE

Citrate $\xrightarrow{\text{Citrate lyase}}$ Oxaloacetate + Pyruvate + CO₂ + Acetate

Oxaloacetate + NADH + H⁺ $\xrightarrow{\text{Malate dehydrogenase}}$ Malate + NAD⁺

Pyruvate + NADH + H⁺ $\xrightarrow{\text{Lactate dehydrogenase}}$ Lactate + NAD⁺

The amount of NADH oxidized to NAD⁺ in those reactions is stoichiometric with the concentration of citrate.

SAMPLE MATERIAL

Urine, serum or heparinised plasma, seminal fluid (dilute 1+19) and foodstuffs

LINEARITY

Urine: Up to 8 mmol/l (1537 mg/l)
Serum/plasma: Up to 250 µmol/l (48 mg/l)
Seminal fluid: Up to 80 mmol/l (15.4 g/l)

EXPECTED VALUES

Urine:
Urine: 1.5 – 4.7 mmol/24 hours (288 – 903 mg/24 hours)
Serum/plasma: 45 - 130 µmol/l (8.6 – 25.0 mg/l)
Seminal fluid: 21 - 36 mmol/l (4.0 – 6.9 g/l)

QUALITY CONTROL

Products	Product no.	Quantity
Citrate / Oxalate Control Normal Level	3084	10 x 2 ml
Citrate / Oxalate Control High Level	3085	10 x 2 ml

QUANTITY OF DETERMINATIONS

- Manual : 25 tests
- Automated : 100 tests

NOTES

1. For in vitro diagnostic use only.
2. For professional use only.
3. Always contact INstruChemie for the complete product insert and latest edition.

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