Urinary Protein

Determination of Urinary Protein in the urine.

REF		
SPE10		

PRINCIPLE OF THE TEST

The red of Pyrogallol, in the presence of sodium molybdate, and in an acid environment, with proteins form a colored complex, whose maximum absorption peak is at 600 nm.

SAMPLES

TYPE: Urine
STABILITY: The total protein in the urine are stable 2 days. at 2-8 ° C.

REAGENTS

R1:

Succininate buffer	pH	2.5	60mmol / l
Pyrogallol of Sodium			0.06 mmol / L
Molybdate Red			0.04 mmol / L
Detergents			<2%

PRECAUTIONS

For precautionary purposes, contact with skin and ingestion should be avoided.
Use the normal precautions for behavior in the laboratory.

PREPARATION OF REAGENTS

For in vitro diagnostic use only.
The reagents, stored at 2-8 ° C, are stable until the expiration date indicated on the package.

METHOD

Wavelength: 578 nm
Reaction: End Point
Optical path: 1 cm
Temperature: 37 ° C

SPECTRA PROCEDURE 8P
LEAVE THE REACTIONS AT ROOM TEMPERATURE AT LEAST 30 min BEFORE USE

1) Pipette 800 µl of R1 into the cuvette.
2) Preheat the cuvette containing reagent R1
3) Add 16 µl of sample and stir gently for a few seconds.
4) Insert the cuvette into the reading cell and wait for the end of the incubation period for the result.

CALCULATION:

The Spectra 8P automatically carries out the calculation of the results in mg / L at the end of 'incubation.
For the final result in mg / 24h multiply the result obtained in mg / L for the total volume of the 24h urine expressed in L (liters).

VALUES

Urine 24 h: 28-150 mg / 24h
Urine Random: <10 mg / dl

It is advisable that each laboratory determine its own reference values.
NOTE

- As with any diagnostic procedure, if the results are incompatible with the clinical presentation, the physician should evaluate the data obtained using this test in the light of other clinical information.
- For in vitro diagnostic use only.

TEST PERFORMANCE

Precision

Intra-assay precision n= 15	MEDIA [mg/L]	SD [mg/L]	CV [%]
Sample 1	178	5.23	2.94
Sample 2	450	5.10	1.14
Sample 3	1564	27.6	1.77

Inter-assay precision n = 15	AVERAGE [Mg / L]	SD [Mg / L]	CV [%]
Sample 1	170	3.94	2:32
Sample 2	449	9.68	2:16
Sample 3	1484	42.5	2.86

METHOD COMPARISON:

The kit Urinary protein was tested in correlation with a method analogous commercially available giving the following correlation coefficient:
y = x + 1:02 2:20 mg / L r = 0.990

WASTE DISPOSAL

The product is intended for internal use in professional analysis laboratories. For proper disposal of waste, refer to the current legislation. Use appropriate containers to avoid environmental pollution. Do not disperse in the environment. Refer to the instructions on the safety data sheets.

Limitations:

Linearity of the method

For protein concentrations higher than this value, repeat the determination on a sample diluted with saline solution and multiply the result by the dilution.

Interference

Bilirubin <5 mg / dL does not interfere.

BIBLIOGRAPHY

1. EU-Dir 1999/11 Commission Directive of 8 March 1999 adapting to technological progress the principles of good laboratory practice as specified in Council Directive 87/18 / EEC.
2. Wantenable,N, et altri- CLIN.CHEM. 32,8,1551-1554 (1986)
3. Mc.Elderry, et altri- CLIN.CHEM. 28,2, 356-360 (1982)

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