



α -2-macroglobulin

Immunturbidimetry

Quantitative determination

Cat. No. 101-0484

Size 1x80 ml/1x2 ml

PRINCIPLE:

The determination of human α -2-Macroglobulin is based on the reaction between α -2-Macroglobulin as antigen and the specific antiserum as antibody.

This reaction forms an insoluble complex producing a turbidity which is measured spectrophotometrically at 340 nm.

REAGENTS:

1. Reagent 1 (1x80 ml)

TRIS/PEG buffer pH 7.5

2. Reagent 2 (1x2 ml)

Antiserum Anti- α -2-MAC

Optional: 101-0485 General proteins calibrator

PREPARATION AND STABILITY:

R.1: Ready to use. Stable at 2-8°C up to the date of expiration.

R.2: Must be diluted with buffer solution. The dilution depends on the analyser (Inquire).

Stable, at 2-8°C, up to the expiration date.

Calibrator; Ready to use.

Calibration curve: Prepare dilutions of the General Proteins calibrator using 9 g/L as diluent:

Std N°	1	2	3	4	5
Dilution	1/12	1/24	1/48	1/96	0
NaCl (μ L)	550	300	300	300	300
Calibrator (μ L)	50	--	--	--	--
Factor	1.75	0.88	0.44	0.22	0

Multiply the α -2-MAC calibrator concentration by the corresponding dilution factor indicated in the table to obtain the α -2-MAC concentration of the different calibrators.

SAMPLES:

Fresh serum.

α -2-Macroglobulin in serum is stable 4 days at 2-8°C.

Do not use haemolized or lipemic samples.

The controls and samples will dilute manually or automatically with saline solution. (NaCl 0,9%).

PROCEDURE:

Wavelength: 340 nm
 Cuvette: 1 cm light path
 Temperature: 37 °C
 Zero: distilled water

- Dilute Antiserum Anti- α -2-MAC (R.2) 1:41 with buffer solution R.1. The working reagent is stable 2 weeks at 2-8°C.
- Dilute samples and controls 1:21 with saline solution. (NaCl 0.9%)
- Pipette into a cuvette:

	Blank	Calibrator	Sample
NaCl 9 g/L (μ L)	100	--	--
Calibrator (μ L)	--	100	--
Dil. Sample (μ L)	--	--	100
Work. Reag. (mL)	1.0	1.0	1.0

- Mix and read the absorbance (A) against blank after 10 minutes of the working reagent addition.

CALCULATION:

Calculate the absorbance for each calibrator and plot the values found against the concentration in a calibration curve. α -2-MAC concentration in the sample is calculated by interpolation its A value on the calibration curve.

Chronolab has instructions sheets available for several automatic analyzers.

REFERENCE VALUES:

Men : 150 – 350 mg/dL

Women : 175 – 420 mg/dL

Each laboratory should establish its own reference range.

PERFORMANCE CHARACTERISTICS:

- Measurement interval:* 10-700 mg/dL, under the described assay conditions.