

# Microglobulin

The following tests are available:

- **Alpha-1-microglobulin in urine**

General:

Alpha-1-microglobulin is filtered in glomeruli and reabsorbed in tubuli. The quantitative investigation of alpha-1-microglobulin in urine gives an estimation of tubular reabsorptive capacity.

Indication: Diseases with suspicion of dysfunction of tubular reabsorption.

Preanalytics: 24 h collection period, please indicate collected urine quantity!

Material: 10 ml urine

TAT: 5-7 days\*

Method: nephelometry

Units: mg/l

Ref.- range: adult : < 8.0 up to 12.0

- **Alpha-1-microglobulin in serum**

General:

Alpha-1-microglobulin is filtered in glomeruli and reabsorbed in tubuli. The quantitative investigation of alpha-1-microglobulin in urine gives an estimation of tubular reabsorptive capacity.

Indication: Suspicion of restricted kidney function (independent of creatinine level), transplant control

Material: 1 ml serum

TAT: 5-7 days\*

Method: nephelometry

Units: mg/l

Ref.- range: 20.0 - 45.0

- **Beta-2-microglobulin in serum**

Indication: tumor monitoring, dialysis control

Material: 1 ml serum

TAT: 7-10 days\*

Method: nephelometry

Units: mg/l

Ref.- range: see report

Note: When interpreting the  $\beta$ -2-microglobulin concentration in serum, kidney function must be considered.

- **Beta-2-microglobulin in CSF**

Material: 0.5 ml CSF

TAT: 7-10 days\*

Method: nephelometry

Unit: mg/l

- **Beta-2-microglobulin in urine**

General:

Beta-2-microglobulin forms the light chain of the histocompatibility antigens (HLA) and therefore appears on the cell surface of almost all nuclear cells. It can be found on the surface of lymphocytes in high concentrations.  $\beta$ -2-microglobulin is detected in almost all body fluids. Biological half-life: 20 min. up to 2 hours. The elimination is mainly renal by glomerular filtration followed by tubular reabsorption. Therefore an increase of the  $\beta$ -2-microglobulin concentration is observed in urine in tubular malfunction and thus the parameter is used as a dialysis parameter. A further clinical significance is the prognostic value among patients with malignant disorders of the lymphatic system (e.g. multiple myeloma, CML) and immune system perturbations (AIDS).

Preanalytics: Please alkalize the urine by adding some drops of 2N NaOH. Beta-2-microglobulin in urine samples with pH < 6 will be destroyed. Please indicate volume

Material: 10 ml, 24 h urine

TAT: 7-10 days\*

Method: nephelometry

Units:  $\mu$ g/l

Ref.- range: up to 300.0

For complete list of laboratory test offered at Freiburg Medical Laboratory, please visit

<http://www.fml-dubai.com/parameter-listings/>