

# Magnesium Mg

## General:

Magnesium represents an essential cofactor for numerous enzymes (e.g. adenylate cyclase, ATPase). It is involved in the regulation of cell permeability and in the release of transmitters to synapses of the central nervous system and vegetative ganglia. The muscle excitability is reduced by Mg. The regulation of magnesium levels is mainly controlled by the renal secretion under influence of parathormone, and a small part by resorption in the small intestine.

The following tests are available:

- **Magnesium in serum**

Indication: Neuromuscular overexcitability, gastrointestinal and cardiac symptoms, muscle cramps

Material: 1 ml serum

Stability: 7 days at 2 to 8°C

TAT: same day, FML

Method: photometric

Units: mg/dl

Ref.- range: see report

Note: Hypermagnesemia reduces digitalis effect.

- **Magnesium in urine**

Material: 10 ml urine

Preanalytics: 24 hour urine, please indicate quantity

Stability: 3 days at 2 to 8°C

TAT: same day, FML

Method: photometric

Units: mg/24 h

Ref.- range: see report

- **Magnesium in erythrocytes (RBC)**

Material: 1 ml EDTA blood

TAT: 7-10 days\*

Method: AAS

Units: mmol/l

Ref.- range: 1.85 – 2.63

### **Magnesium in whole blood**

Material: 3 ml EDTA +1 ml serum

TAT: 5-7 days \*

Method: AAS

Units: mmol/l

Ref.- range: 1.15 – 1.72

For complete list of laboratory test offered at Freiburg Medical Laboratory, please visit  
<http://www.fml-dubai.com/parameter-listings/>