

Chromium Cr

General:

Chromium is an essential trace element in physiological concentrations which is necessary in carbohydrate and fat metabolism. Intoxication with chromium occurs through contact with or by intake of chrome trioxide (=chromic acid), potassium chromate and potassium dichromate, which is found e.g. in chromium-containing colors. Oral intake of chromate or dichromate solutions in toxic concentrations leads to mouth affection, green-colored mucous membranes and gastroenteritis.

Shock, exsiccosis, anuria and uremia as well as toxic liver damage with severe jaundice can lead to death. Chrome dust inhalation could result in ulcers up to nose septum perforations. Injuries of the skin surface degenerate ulcerously with low curative tendency. Furthermore it also provokes skin allergies and contact dermatitis.

The following tests are available:

- **Chromium in Blood**

Indication: Intoxication

Material: 1 ml serum

TAT: 5-7 days*

Method: AAS

Units: $\mu\text{g/l}$

Ref.- range: <1.0

- **Chromium in Heparin Blood**

Indication: Intoxication

Material: 3 ml Li-Heparin blood (in special tubes and using special needles, please inquire directly with FML)

TAT: 7-10 days*

Method: IPMS

Units: $\mu\text{g/l}$

Ref.- range: <3.0

• **Chromium in urine**

Indication: Intoxication

Material: 10 ml urine

TAT: 5-7 days*

Method: IPMS

Units: µg/l

Ref.- range: see report

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