

Cryoglobulins

General:

Cryoglobulins are immunoglobulins (IgM, IgM kappa, IgG, IgA), which are reversibly bound together at lower temperatures (< 37 degrees) in blood (specificity: autoantibody-like). In addition they can bind to erythrocytes. Homogeneous precipitates point to IgM or IgG. The precipitate detected in vitro at 4°C can be flaked, gelatinous or crystalline. The precipitation process can last up to three days. Cryoglobulin can additionally show characteristics of rheumatoid factors and cold agglutinins. The clinical symptoms present in cold environment/exposure (cyanosis, purpura, arthralgia, Raynaud's phenomenon, glomerulonephritis, vasculitis, polyneuropathy, hearing and visual disturbances).

see also **Cold agglutinins**.

Indication: Suspicion of cryoglobulin disorder

Material: 3 ml serum (37°C)

Preanalytics: coagulate and spin the blood at 37°C, then separate serum, bring serum at 37°C to the laboratory. Optional: send patient to the laboratory.

TAT: 3 days, FML

Method: precipitation at 4°C

Ref.- range: negative (no precipitation)

Note: additional findings: normochromic anemia with leukocytosis, thrombopenia, increased CRP, increased rheumatoid factors, decreased C4-complement

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