

# Cold agglutinins

## General:

Cold agglutinins are erythrocyte-autoantibodies, usually of the complete IgM type with anti-I specificity, which can be reversibly bound to erythrocytes at temperatures from 0°C up to body temperature. They can cause intravascular hemolysis, which can be triggered in severe cases up to hemolytic crisis via complement activation. Similarly, they can be found physiologically up to a titer of 1:16 in serum. An increased titer occurs among approx. 15% of patients with autoimmune hemolytic anemia (AIHA, idiopathically as rare “cold agglutinin disease”; or secondary as “cold agglutinin syndrome”). Cold agglutinins (high titers) may also react at room temperature or 37°C.

Indication: Anemia clarification, Raynaud’s phenomenon.

Preanalytics: Collect blood at 37°C; spin at 37°C, so that cold agglutinins remain in serum and can not be bound to erythrocytes, then separate immediately blood clot from serum. Sampling in the laboratory is required if the above-mentioned conditions are not fulfilled.

Material: 3 ml + 1 ml EDTA+ serum (37°C)

TAT: same day, FML

Method: AGGL

Ref. -range: Negative

Note: Direct Coombs is mostly positive if cold agglutinins are present

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