

# Insulin antibodies human

## General:

Insulin autoantibodies (IAA) usually belong to the immunoglobulin class IgG1 and are considered an autoimmune marker of  $\beta$ -cell damage. They play an important role in the risk-assessment of possible diabetes development in children. Usually IAA are the first autoantibodies, which are detected years before the clinical manifestation of prediabetes or diabetes. Sometimes, they also occur together with GAD- and IA2-autoantibodies. Insulin antibodies are also found in 30% of non-diabetic patients with other autoimmune disorders (autoimmune thyroiditis) and in 13% of  $\alpha$ -interferon treated patients with hepatitis C. In healthy persons, they are detected in 1- 8%.

Insulin IgG Abs detects IgG antibodies which are produced against the injected insulin during diabetes treatment. The body recognizes the injected insulin as foreign to the body and renders it inert by producing antibodies which can bind to the insulin. In these complexes the insulin can no longer reduce the blood sugar level. This is referred to as an antibody-mediated human insulin resistance.

The following tests are available:

- **Insulin autoantibodies (human) - autoantibodies against insulin (endogenic and exogenic)**

Indication: Risk assessment of diabetes mellitus especially in early childhood, autoimmune insulin syndrome with postprandial hypoglycemia and abnormal insulin kinetics after glucose stimulation test.

Material: 1 ml serum

TAT: 7-10 days\*

Method: RIA

Units: U/ml

Ref.- range: <0.4

- **Insulin IgG abs (human) - antibodies against therapeutic insulin**

Indication: Suspicion of therapeutic relapse with exogenic insulin, severe insulin resistance, unresponsive to high-dose insulin treatment, evaluation of possible insulin allergy, possible factitious hypoglycemia

Material 1 ml serum

TAT: 7 - 10 days\*

Method: RIA

Units: U/ml

Ref.- range: <0.4

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