TEST ID: EZNT8
ZINC TRANSPORTER 8 (ZNT8) ANTIBODY, SERUM

USEFUL FOR

- Clinical distinction of type 1 from type 2 diabetes mellitus
- Identification of individuals at risk of type 1 diabetes (including high-risk relatives of patients with diabetes, and those with gestational diabetes)
- Prediction of future need for insulin treatment in adult-onset diabetic patients

CLINICAL INFORMATION

Islet cell autoantibodies have been known to be associated with type 1 diabetes mellitus since the 1970s. Since 1988, several autoantigens against which islet antibodies are directed have been identified. These include the insulinoma-associated protein 2 (IA-2), glutamic acid decarboxylase 65 (GAD65), insulin, and, most recently, the zinc transporter ZnT8. Only 4% to 7% of patients with type 1 diabetes are autoantibody negative, fewer than 10% have only 1 marker, and around 70% have 3 or 4 markers. These findings have been confirmed in multiple specialty laboratories internationally.

One or more of these autoantibodies are detected in 93% to 96% of patients with type 1 diabetes, both adults and children. These antibodies are also detectable in relatives of type 1 diabetic patients at risk for developing diabetes, before clinical onset. Because of symptom-onset in adulthood, societal obesity, and initial insulin-independence, some patients with type 1 diabetes are initially diagnosed as having type 2 diabetes. These patients with either “latent autoimmune diabetes in adulthood” or type 1 diabetes mellitus, may be distinguished from those patients with type 2 diabetes by detection of 1 or more islet autoantibodies, including ZnT8 antibody. Patients with gestational diabetes can also be stratified for future diabetes risk by detection of 1 or more islet autoantibodies (including ZnT8 antibody).

INTERPRETATION

Seropositivity for ZnT8 autoantibody (≥15 IU/mL) is supportive of:

- A diagnosis of type 1 diabetes
- A high risk for future development of diabetes
- A current or future need for insulin therapy in patients with diabetes

REFERENCE VALUES

<15.0 U/mL

ANALYTIC TIME

3 days

CONTENT AND VALUES SUBJECT TO CHANGE. SEE THE MAYO MEDICAL LABORATORIES TEST CATALOG FOR CURRENT INFORMATION.
CLINICAL REFERENCE


