

ZINC TRANSPORTER 8 (ZnT8) AUTOANTIBODY ELISA KIT**ElisaRSR™ ZnT8 Ab™**

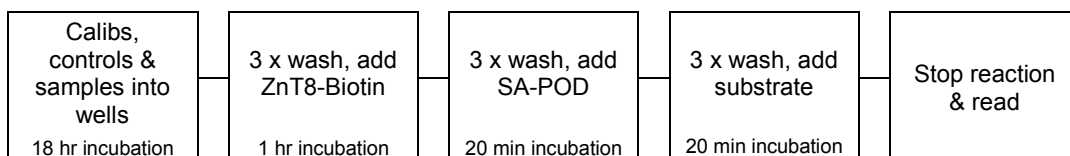
Description: Enzyme linked immunosorbent assay (ELISA) kit for the quantitative determination of autoantibodies to the zinc transporter 8 (ZnT8) in serum

Disease application: Type 1 Diabetes Mellitus (DM)

Test samples: Sera, citrate plasma and heparin plasma may be used. Do not use lipaemic or haemolysed serum samples. Some EDTA plasma samples may show lower results than those obtained with corresponding serum samples. No interference is observed with bilirubin at 20 mg/dL, haemoglobin at 500 mg/dL or intralipid up to 3,000 mg/dL.

Sample volume: 25 µL per well

Total assay time: Approx. 20 hours

Assay method:

Sensitivity: 72% n = 50 for type 1 DM patients (IASP 2016)
70% n = 50 for type 1 DM patients (IASP 2018)
74% n = 50 for type 1 DM patients (IASP 2020)

Specificity: 99% n = 90 for healthy blood donors (IASP 2016)
99% n = 90 for healthy blood donors (IASP 2018)
99% n = 90 for healthy blood donors (IASP 2020)

Calibrator range: 10 – 2000 u/mL (arbitrary RSR units)

Cut-off: Negative: <15 u/mL; Positive: ≥15 u/mL

Lower detection limit: 1.2 u/mL (mean + 2 standard deviations in assay of negative control; n = 20)

Advantages: An easy to use non-isotopic assay suitable for use in routine clinical laboratories in automated or manual formats

Features: Reliable and convenient method to measure specific ZnT8 antibodies which are a major component of ICA in type 1 DM and which are useful for diagnosis and prediction of type 1 DM.

Note: Sensitivity and specificity were assessed in Islet Antibody Standardization Program (IASP) 2016, 2018 and 2020.

Kit size: 96 wells

Order code: ZnT8/96

Literature: J M Wenzlau et al, PNAS 2007 **104**: 17040-17045 The cation efflux transporter ZnT8 (Slc30A8) is a major autoantigen in human type I diabetes

P Achenbach et al, Diabetologia 2009 **52**: 1881-1888 Autoantibodies to zinc transporter 8 and SLC30A8 genotype stratify type 1 diabetes risk

J M Wenzlau et al, J Clin Endocrinol Metab 2010 **95**: 4712-4719 Kinetics of the post-onset decline in zinc transporter 8 autoantibodies in type 1 diabetic human subjects

L Petruzelkova et al, Diabet Med 2014 **31**:165-71 The dynamic changes of zinc transporter 8 autoantibodies in Czech children from the onset of type 1 diabetes mellitus.

G Dunseath et al, Clinica Chimica Acta 2015 **447**:90-95 Bridging-type enzyme-linked immunoassay for zinc transporter 8 autoantibody measurements in adult patients with diabetes mellitus.

This kit is intended for in-vitro use by professional persons only. The data quoted is for guidance only. Each laboratory should establish its own normal and pathological reference ranges for the assay and should include its own panel of control samples in the assay along with the controls provided as part of the kit.