

IA-2 Autoantibody (IA-2Ab)

ELISA

ISLET CELL AUTOIMMUNITY

ASSAY CHARACTERISTICS

Quantitative

Calibration: 5 Calibrators, 0.75 – 350 U/mL
NIBSC 97/550

Controls (Included): 1 Positive, 1 Negative

TOTAL RUNNING TIME

17 Hours and 40 Minutes

SPECIMEN MATRIX

Human Serum

REFERENCE RANGE

< 7.5 U/mL: Negative

≥ 7.5 U/mL: Positive

PRECISION

Intra-Assay		Inter-Assay	
Dose (U/mL)	% CV	Dose (U/mL)	% CV
7.3	6.69	7.3	9.69
28.1	5.05	28.1	6.46
82.9	2.89	82.9	4.92

PATIENT GROUP	NUMBER OF PATIENTS POSITIVE FOR IA-2 AB	%
Type 1 Diabetes	139/239	58.2
LADA	10/45	22.2
Type 2 Diabetes	2/57	3.5
Rheumatoid Arthritis	1/20	5.0
Hashimoto's thyroiditis	1/20	5.0
Graves' Disease	0/19	0.0
Systemic Lupus Erythematosus	0/14	0.0
Metabolic Syndrome	1/35	2.8
Addison's Disease	3/27	11.1
Celiac Disease	0/50	0.0
Healthy Blood Donors	14/718	1.9

CLINICAL SENSITIVITY & SPECIFICITY

Sensitivity	58.2%
Specificity	97.0%

ORDERING INFORMATION

KR7755 – 96 Well Kit

The KRONUS IA-2 Autoantibody (IA-2Ab) ELISA Kit is for the quantitative determination of autoantibodies to Islet Antigen-2 (IA-2) in human serum and may be useful as an aid in the diagnosis of Type 1 diabetes mellitus (autoimmune mediated diabetes). The IA-2Ab ELISA Kit is not to be used alone and is to be used in conjunction with other clinical and laboratory findings.

The KRONUS IA-2Ab ELISA Kit depends on the ability of IA-2 autoantibodies to act divalently, forming a bridge between IA-2 coated on ELISA plate wells and liquid phase IA-2-biotin. The resulting antigen-antibody-antigen complexes are then quantitated by the addition of streptavidin peroxidase (SA-POD) and tetramethylbenzidine (TMB) to produce a colorogenic reaction. Stop solution is added to halt the reaction and absorbance is read using an ELISA plate reader. The absorbance of each well is directly proportional to the amount of antibody present. IA-2Ab levels are derived from a standard curve, traceable to the WHO reference preparation NIBSC 97/550 and expressed in U/mL.

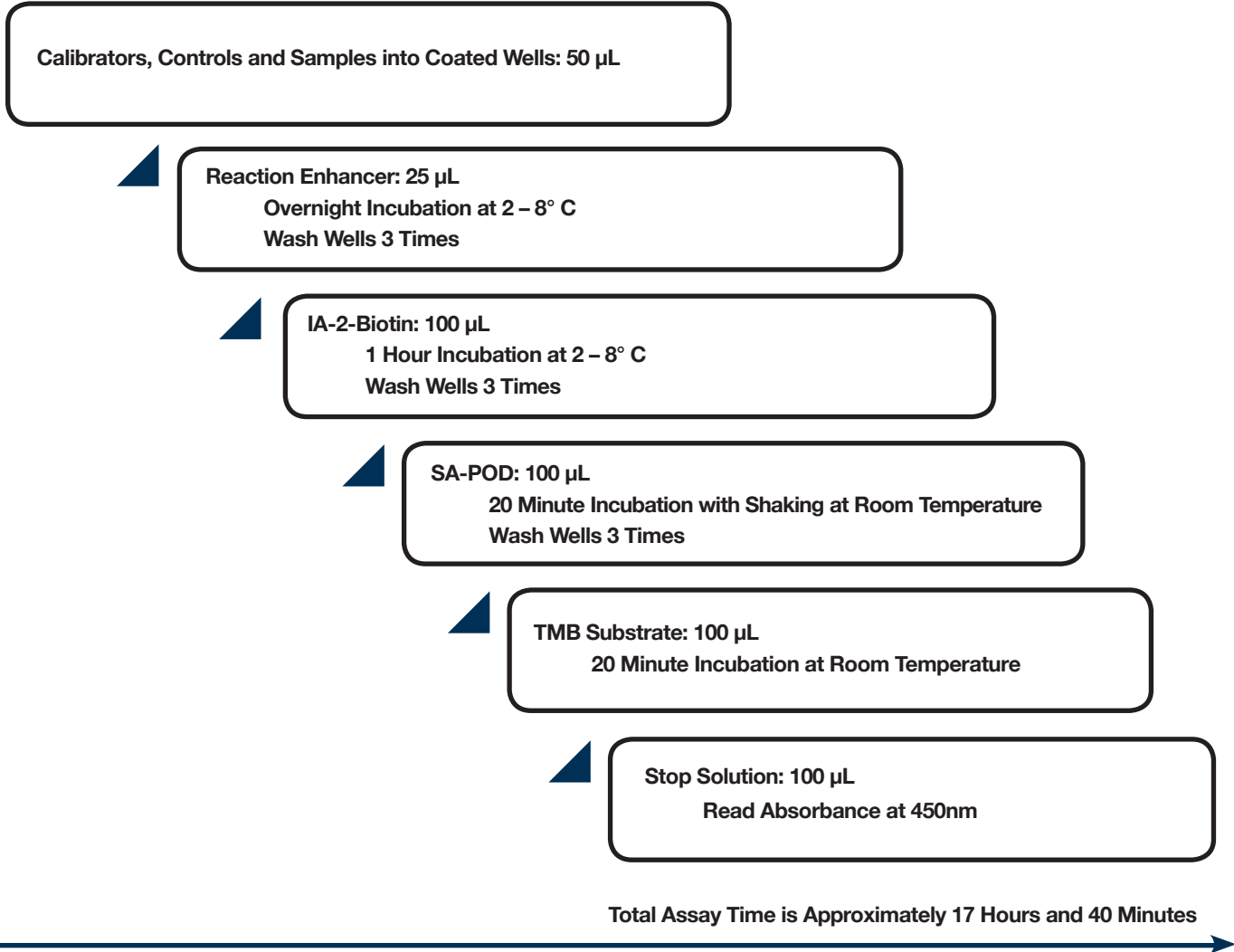


For In Vitro Diagnostic Use. Rx Only.



ASSAY PROCEDURE

Sample Volume: 50 μ L per Well



REFERENCES

1. Borg H, Fernlund P & Sundkvist G, 'Measurement of antibodies against glutamic acid decarboxylase 65 (GADA): two new 125I assays compared with [35S] GAD 65-ligand binding assay', Clinical Chemistry, 1997, 43(5); 779-785.
2. Pardini VC, Mourão DM, Nascimento PD et al, 'Frequency of islet cell autoantibodies (IA-2 and GAD) in young Brazilian type 1 diabetes patients', Brazilian Journal of Medical and Biological Research, 1999, 32: 1195-1198.
3. Winter WE, Harris N & Schatz D, 'Type 1 diabetes islet autoantibody markers', Diabetes Technology & Therapeutics, 2002, 4(6); 817-839.
4. S. Chen et al. Sensitive non isotopic assays for autoantibodies to IA-2 and to a combination of both IA-2 and GAD65., Clinica Chimica Acta 2005 357:74-83.
5. E. Nilsson et al. Calcium addition to EDTA plasma eliminates falsely positive results in the RSR GADAb ELISAClinica Chimica Acta 388 (2008) 130-134.
6. K. Rahmati et al. A Comparison of Serum and EDTA Plasma in the Measurement of Glutamic Acid Decarboxylase Autoantibodies (GADA) and Autoantibodies to Islet Antigen-2 (IA-2A) Using the RSR Radioimmunoassay (RIA) and Enzyme Linked Immunosorbent Assay (ELISA) Kits., Clin. Lab. 2008 54:227-235.
7. C. Törn et al. Diabetes Antibody Standardization Program: evaluation of assays for autoantibodies to glutamic acid decarboxylase and islet antigen- 2. Diabetologia 2008 51:846-852



...Your Source for Sensitive Autoimmune Diagnostics