

AI-FIA

INDIA'S 1ST

TR-FIA ANALYZER

FOR SPECIALITY PARAMETERS :

Autoimmunity, Liver, Cardiac,
Vasculitis, Dermatomyositis with routines



TEST SMART. TRUST THE BEST

FLUORESCENCE IMMUNOASSAY PRINCIPLE



Fluorescence labeling

A specific antibody is conjugated with a fluorochrome, which emits light upon suitable excitation for analyte detection.

Binding to the analyte

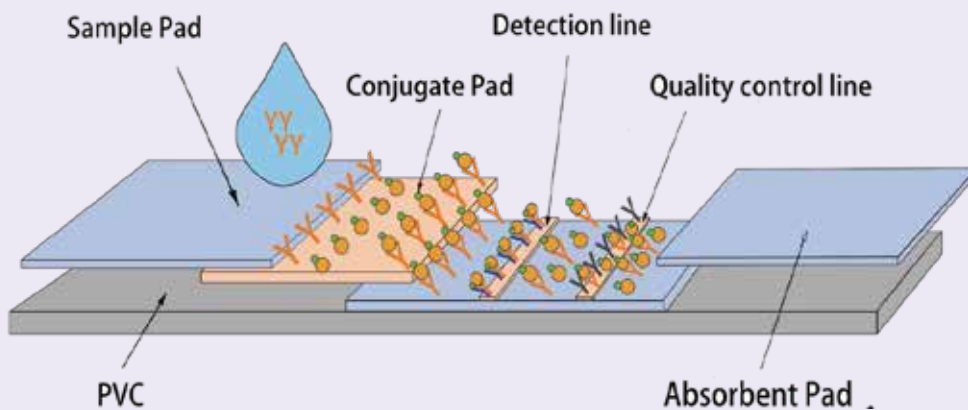
The labeled antibody binds specifically to the analyte in the sample.

Excitation and emission

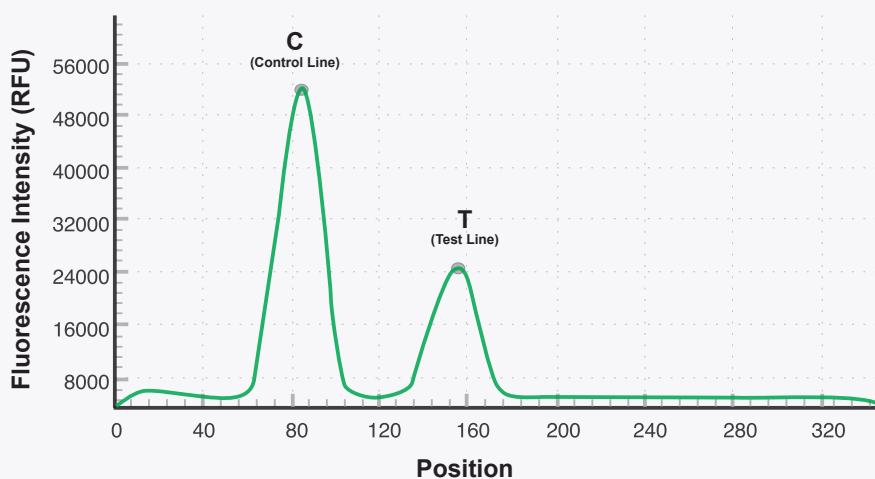
The sample is exposed to light of a specific wavelength, causing the fluorochrome to emit light at a different wavelength.

Time-resolved measurement

Background fluorescence and nonspecific signals are minimized, resulting in an increased sensitivity and accuracy.



REAL-TIME FLUORESCENCE QC GRAPH



C VALUE
48765
RFU

T VALUE
23124
RFU

T/C RATIO
0.47

ASSAY STATUS
VALID

Representative QC graph showing Control (C) and Test (T) fluorescence peaks with automatic T/C ratio calculation.

ASSISTS IN IDENTIFYING



Incomplete Migration

Irregular or missing peaks indicate incomplete flow of the sample.



Weak Control Line Signals

Low or absent Control (C) peak indicates invalid test.



Low Signal Intensity

Detects low fluorescence intensity that may affect result reliability.



Abnormal Assay Behavior

Unusual peak patterns help identify assay or instrument issues early.

Rheumatoid Arthritis

- ASO
- Anti-CCP
- RF
- RF IgG+IgM+IgA
- Anti-MCV
(Anti-Mutated Citrullinated Vimentin)

Antiphospholipid Syndrome

- Anti-β2 GlycoproteinI IgG+IgM
- Anti- Cardiolipin IgG+IgM
- Anti-β2GPI-D1 IgG
- Anti-aPS/PT IgG+IgM*

Connective Tissue disease

- ANA screen 15 Ag
(SSA, SSB, Ro52, Sm, U1-RNP, nRNP, Jo-1, CENB, rRNPO, Scl70, dsDNA, PCNA, PM-Scl, Nuc, His)
- Anti-dsDNA
- Anti-SSA
- Anti-SSB
- Anti-Centromere B
- Anti-JO-1
- Anti-SCL70
- Anti-UlnRNP
- Anti-Sm

Autoimmune Vasculitis

- Anti-MPO
(P-ANCA)
- Anti-PR3
(C-ANCA)
- Anti-GBM

Dermatomyositis

- MDA5
(Melanoma Differentiation - Associated gene 5)

Primary Membranous Nephropathy

- PLA2R
(Phospholipase A2 Receptor)

Autoimmune Hepatitis

- ASMA*
(Anti-smooth muscle antibodies)

Primary Biliary Cholangitis

- AMA-M2*
(Anti-Mitochondrial M2 antibodies)

Gastro Intestine

- H pylori Antibody
- Fecal Occult Blood
- Calprotectin

Coeliac Disease

- tTG IgG+IgA
(Anti-tissue transglutaminase)
- Gliadin IgG+IgA*

Interstitial Pneumonia

- KL-6
(Krebs von den Lungen-6)

Immunoglobulin

- Total IgE
- Free IgE*

Anemia

- Ferritin

Bone Metabolism

- 25-OH Vitamin D
- Vitamin B12*

Reproductive Health

- AMH
- LH
- FSH
- Prolactin
- Progesterone
- Testosterone
- β HCG
- Estradiol (E2)*

Diabetes

- HbA1c
- Cortisol
- MicroAlbumin
- Cystatin C
- Insulin*
- IA2*
- ICA*
- GAD65*

Thyroid

- T3
- T4
- TSH
- FT3*
- FT4*

Cardiac Markers

- HFABP
- NT-proBNP
- Cardiac Troponin I (cTnI)
- Cardiac Troponin T (cTnT)
- cTnI/CKMB/MYO
- D Dimer
- ST2
(Soluble Suppression of Tumorigenicity 2)

Inflammation

- Procalcitonin (PCT)
- CRP+hsCRP
- Interleukin-6 (IL-6)
- Dengue NS1
- Dengue IgG+IgM

Tumor Markers

- PSA
- AFP
- CEA
- CA-19.9
- CA-125*

INNOVATIVE TIME-RESOLVED IMMUNOFLUORESCENCE TECHNOLOGY

Fast. Precise. Reliable. Designed for Specialty and Routine Diagnostics.

Exceptional Sensitivity	Superior Specificity	Enhanced Accuracy	Europium (Eu ³⁺) Based Detection	Rapid Turnaround Time
Detects low-abundance biomarkers with outstanding precision, supporting early diagnosis and timely clinical intervention.	Advanced antibody-fluorochrome technology ensures highly selective detection with minimal cross-reactivity.	Time-Resolved Fluorescence (TRF) technology effectively suppresses background noise, ensuring reliable and reproducible results.	Provides strong, stable fluorescence signals for consistent analytical performance.	Provides fast and dependable quantitative results, improving laboratory efficiency and accelerating clinical decision-making.

TECHNICAL SPECIFICATIONS AT A GLANCE

Model	AI-FIA / DL300
Assay kit size	20 single cartridges
Analyzer type	Benchtop
System description	Random-access immunoassay system
Result reporting	Quantitative
Testing Modes	Quick, Standard, Batch
Assay technology	Time-Resolved Fluorescence (TR-FIA)
Dimensions (W × D × H)	45× 38 × 22 (cm)
Display	7-inch color touchscreen (800×480 pixels)
Storage results	5000 pcs
Connectivity	4 x USB, RS-232, LAN, connect to LIS
Sample types	Whole blood, serum, plasma, stool
Barcode Reader	Integrated for assay verification, optional for patient data
Quality control standard	Internal quality control standard
Fluorescence excitation / emission waveband	365/610 (nm)
Transfer/Print	Can transmit LIS system, data can be printed on designated printing device or automatically print by built-in thermal printer
Consumables	Zero (No hidden charges)

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