Autoimmunity





The Diagnostic Specialist

Autoimmunity LIAISON[®] tTG IgA

Number of tests	100
Label	Isoluminol derivative
Method	CLIA
Assay format	Quantitative
Sample type	Serum/Plasma

LIAISON[®] main features

- Time to first result: 35 min.
- Up to 144 samples on board
- Up to 15 assays on board in a refrigerated area
- Continuous reloading of bar-coded samples
- Continuous reloading of bar-coded and ready-to-use kit reagents
- Random access, batch mode, stat function
- Reagent stability on board: 4 weeks
- Stored master curve

LIAISON[®] Autoimmunity

LIAISON® tTG IgA is included in the LIAISON® Autoimmunity test menu intended to cover the screening of the most important autoimmune diseases.

CONNECTIVE TISSUE DISEASE

- ANA Screen
- dsDNA
- ENA Screen

PHOSPHOLIPID SYNDROME

- Cardiolipin IgG
- Cardiolipin IgM

THYROID DISEASE

- Anti-Thyroglobulin (hTg) Antibodies
- Anti-Thyroid peroxidase (TPO) Antibodies
- COELIAC DISEASE
- tTG lgA



The Diagnostic Specialist

UiaSorin S.p.A Via Crescentino, sni 13040 Saluggia (VC) Italy el. +39 0161 487 526/94 Fax +39 0161 487 677 www.diasorin.com info@diasorin i



Looking for high specifity?

The Coeliac Disease

Gluten-sensitive enteropathy or coeliac disease is a chronic condition affecting genetically susceptible children and adults.

Their inability to digest gluten leads to chronic inflammation and damage the small intestinal mucosa, with flattening of the gut epithelium.

The disease is caused by a pathological intolerance to gliadin, the alcohol-soluble fraction of gluten in wheat, rye and barley. Untreated subjects affected by coeliac disease may suffer from failure to thrive, diarrhoea, gastrointestinal disorders, anaemia, chronic fatigue, psychiatric problems, or they may be asymptomatic.

Gluten-free diet leads to complete remission of the disease, and thus has to be maintained for life. Consumption of gliadin will cause the symptoms to recur.

LIAISON® tTG lgA assay



An important aid in the diagnosis of coeliac disease

DiaSorin introduces the automated LIAISON[®] tTG IgA assay, an innovative chemiluminescence test for quantitative determination of tissue transglutaminase IgA antibodies.

The use of human recombinant tissue transglutaminase (from baculovirus) and monoclonal antibody to human IgA ensures high specificity in respect to other current testing technologies. In fact, tissue transglutaminase has been identified as the major autoantigen, while IgA antibodies against tissue transglutaminase are a highly specific serological marker for coeliac disease. In addition, IgA correlates with disease activity and thus is of paramount importance for diet monitoring.



Clinical performace

Total of 154 samples (1-20 years)

	BIOPSY		ELISA REF.			LIAISON [®] tTG lgA			TOTAL
	neg.	pos.	neg.	equiv.	pos.	neg.	equiv.	pos.	
Controls	59	0	59	0	0	59	0	0	59
Patient affected by Coeliac Disease (CD)	0	67	8	3	56	1	0	66	67
Patients affected by CD in Gluten-Free Diet (GFD)	28*	-	21	1	6	21	0	7	28

Dr. D. Basso, Dept. Med. Laboratory, University Hospital, Padua Italy * Positive biopsy at the time of diagnosis becomes negative after Gluten-Free Diet

Diagnostic specificity: 100% (95% confidence interval: 93.94-100%)

Diagnostic sensitivity: 98.51% (95% confidence interval: 91.96-99.96%)



LIAISON[®] tTG IgA is the solution



The Assay

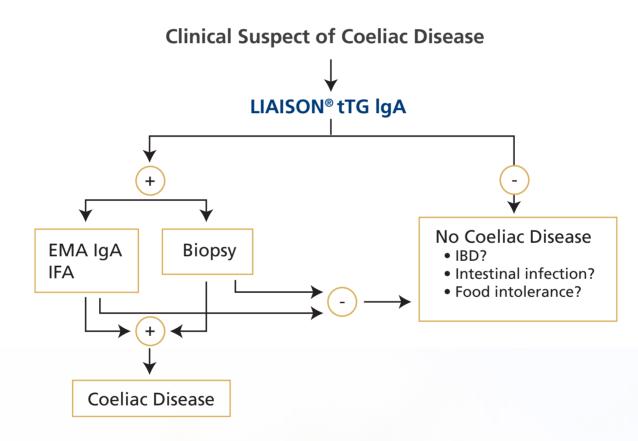
• LIAISON[®] tTG IgA assay uses human recombinant coating magnetic particles (solid phase) and a mouse monoclonal antibody to human IgA is linked to an isoluminol derivative (isoluminol -antibody conjugate).

• LIAISON[®] tTG IgA is a quantitative assay. tissue transglutaminase (from baculovirus) for Calibrators are referenced to an in-house antibody preparation and may aid in the diagnosis and monitoring the disease.

> • LIAISON[®] tTG IgA with its broad range allows the classification of Coeliac Disease staging of children and adults



tTG IgA algorithm



EASE OF USE

- Full automation
- **Two-point recalibration** stable for 2 weeks
- **Controlled reagent** cooling and incubation conditions
- **Calibrators included**
- Ready-to-use reagent cartridge

FLEXIBILITY ENABLES QUICK RESULTS

- High throughput: 45 results/hour •
- Time to first result: 35 min.
- Stored master curve •
- Small sample volume: 20 µL