



Anti-Gliadin Antibodies Test for Gluten-Sensitive Enteropathies

*Lawrence M. Killingsworth, Ph.D., DABCC, Chief Science & Technical Officer
Thomas Allarding, M.D., Medical Director*

THE GLUTEN-SENSITIVE ENTEROPATHIES (GSE) represent a wide spectrum of small bowel disorders, with variable clinical expression. GSE is characterized by intolerance to gliadins, a group of proteins found in the gluten of wheat and rye grains. The immune inflammatory response to gliadins leads to malabsorption and damage to other tissues in the body.

At the most symptomatic end of the GSE spectrum is celiac disease. Celiac disease is a genetically-determined, immunologically-mediated small bowel enteropathy. Common symptoms include diarrhea, weight loss, malnutrition, abdominal pain and fatigue.

IgA and IgG antibodies to gliadin are found in GSE. IgA antibodies are more specific markers for the disease, but IgG antibodies are more sensitive. The measurement of anti-gliadin antibodies is useful in diagnosing GSE, in following disease activity and in monitoring compliance with a gluten-free diet. Patients with active disease have a higher frequency of both IgA and IgG antibodies than asymptomatic patients. The level of IgA antibodies decreases with a gluten-free diet.

Testing for GSE is best done through measuring both IgA and IgG antibodies. Combined testing not only ensures greater sensitivity and specificity, but also will detect GSE in patients with IgA deficiency. This is an important consideration, since there is a high incidence of IgA deficiency in patients with celiac disease.

Anti-gliadin antibodies can also be found in some clinical conditions where gastrointestinal symptoms are may be absent, including Dermatitis Herpetiformis and some forms of alopecia. In addition, patients with Down syndrome, osteoporosis, selective IgA deficiency, Type 1 Diabetes and other autoimmune diseases, have an increased risk for the development of GSE.

Selected References

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3. Collin P. Selective IgA deficiency and celiac disease in children. *Scand J Gastroenterol* 1997;27:367-71.
4. Cronin CC and Shanahan F. Insulin-dependent diabetes mellitus and celiac disease. *The Lancet* 1997;349:1096-7.
5. Pruessner HT. Detecting celiac disease in your patients. *American Family Physician* 1998;57:1023-34.
6. Murry JA. The widening spectrum of celiac disease (Review). *Am J Clin Nutr* 1999;69:354-65.
7. Hill I, et al. The prevalence of celiac disease in at-risk groups of children in the United States. *J Pediatr* 2000;136:86-90.
8. Giorgetti TA et al. Prevalence and clinical presentation of subclinical / silent celiac disease in adults: An analysis on a 12-year observation. *Hepatogastroenterology* 2001;48:462-4.

QUICK FACTS Anti-Gliadin Antibodies

- ▶ **Gluten-sensitive enteropathies (GSE) result from intolerance to proteins known as gliadins.**
- ▶ **IgA and IgG antibodies to gliadins are found in GSE.**
- ▶ **Measuring anti-gliadin antibodies is useful in diagnosing GSE, following disease activity, and monitoring compliance with a gluten-free diet.**
- ▶ **Optimal testing for GSE includes measuring IgA and IgG antibodies.**

**For more information, please
contact Client Services.**

Test Information

DESCRIPTION **ANTI-GLIADIN ABS, IGA & IGG**

METHOD ELSIA

ORDER CODE GLIGA

CPT CODE 83516 × 2

SPECIMEN 1 mL frozen serum (red-top tube). Separate serum from cells and put in separate plastic tube and freeze. Store and transport frozen.

COMMENTS *Minimum amount:* 0.5 mL

Unacceptable conditions: Heat-inactivated samples. Avoid repeated freeze/thaw cycles.

Stability: 5 days refrigerated, 6 months frozen.

SCHEDULE Monday – Friday

TURNAROUND 1-3 days

RANGES	Anti-Gliadin Ab, IgA	Negative	LT 5.0 U/mL
		Positive	5.0 or greater
	Anti-Gliadin Ab, IgG	Negative	LT 10.0 U/mL
		Positive	10.0 or greater

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