

Celiac Disease Panels

Test Codes:	Celiac Disease Comprehensive Panel, Adult	901716
	Celiac Disease Comprehensive Panel, Infant (0-3 Yrs)	902868
	Celiac Disease Panel	14263
	Celiac Disease Panel without Gliadin	902047

Clinical Use

- Assists physicians in differentiating Celiac Disease from Irritable Bowel Syndrome
- Enables early detection of gluten sensitivity, which may help avoid progression of Celiac Disease, particularly in children
- Useful in monitoring adherence to gluten-free diet

Clinical Background

Celiac Disease is caused by an immune response to gluten in genetically susceptible individuals. Patients may develop partial to complete villous atrophy of the small intestine, crypt hyperplasia, and lymphocytic infiltration of the epithelium and lamina propria. This disease is more common than once thought, affecting as many as 1 in 133 "not-at-risk" Americans (i.e., those without family history or gastrointestinal symptoms); rates are even higher among first and second-degree relatives of patients.¹ Untreated, Celiac Disease may be accompanied by progression of villous atrophy and development of other autoimmune diseases (e.g., thyroid disease and insulin-dependent diabetes mellitus), osteoporosis, and neoplasia, including T-cell lymphoma and adenocarcinoma of the small intestine.

Diagnosis is based on biopsy of the small intestine, but serologic assays help identify patients who require this invasive procedure. Tissue transglutaminase (tTG; IgA) antibody is an excellent first-line marker, with high sensitivity and specificity in untreated individuals.² The endomysial antibody (EMA; IgA) assay has high specificity for Celiac Disease and is used to confirm positive IgA anti-tTG results. Although this panel tests for EMA only when IgA anti-tTG results are positive, EMA testing can be ordered separately if the anti-tTG result is negative but

clinical suspicion remains high. Some patients with limited villous atrophy have been reported to lack EMA and tTG antibodies; testing for IgA anti-gliadin antibody (AGA) may help detect

Celiac Disease in such patients.³ Total serum IgA is measured to identify selective IgA deficiency, present in about 2% to 10% of Celiac Disease patients. Such patients would have negative results on IgA anti-tTG and EMA assays but may have positive IgG anti-tTG results.

Because levels of anti-tTG and EMA tend to wane in the absence of gluten ingestion, these markers are useful to monitor adherence to a gluten-free diet.

Specimen Requirements

See table on reverse

Panel Components

See table on reverse

CPT Codes*

See table on reverse

Leaders in Digestive Diseases

Sonora Quest Laboratories offers extensive clinical and pathology testing services to assist physicians in the diagnosis and management of a broad spectrum of gastroenterological disorders, including:

- Inflammatory Bowel Disease
- Celiac Disease and gluten sensitivity
- Colorectal and other gastrointestinal cancers
- Liver disease and hepatitis
- Peptic ulcer disease (*H. pylori*)

Test Name	Test Code	Specimen Requirements	CPT Codes*
Celiac Disease Comprehensive Panel, Adult	901716	10 mL refrigerated serum from a plain red-top tube or serum separator tube (4 mL minimum)	Screen: 83516, 82784 Reflexes (if indicated): 86255, 86256, 83516
<p><u>Profile Components:</u> Tissue Transglutaminase (tTG) antibody IgA, Total IgA</p> <p><u>Reflex Testing:</u> EMA (endomysial antibody) screen IgA performed when anti-tTG IgA is positive (additional charge), EMA titer performed when EMA screen is positive (additional charge), tTG antibody IgG performed when total IgA is ≤ 40 mg/dL (additional charge)</p> <p><u>Clinical Application:</u> Differential diagnosis of Celiac Disease</p>			
Celiac Disease Comprehensive Panel, Infant (0-3 Years)	902868	5 mL refrigerated serum from a plain red-top tube or serum separator tube (2 mL minimum)	Screen: 83516 x2, 82784 Reflexes (if indicated): 86255, 86256, 83516
<p><u>Profile Components:</u> Tissue Transglutaminase (tTG) antibody IgA, Gliadin antibody IgA, Total IgA</p> <p><u>Reflex Testing:</u> EMA (endomysial antibody) screen IgA performed when anti-tTG IgA is positive (additional charge), EMA titer performed when EMA screen is positive (additional charge), tTG antibody IgG performed when total IgA is ≤ 40 mg/dL (additional charge)</p> <p><u>Clinical Application:</u> Differential diagnosis of Celiac Disease. A positive Gliadin antibody, IgA, has been reported to increase the positive predictive value for Celiac Disease in children.</p>			
Celiac Disease Panel	14263	2 mL refrigerated serum from a plain red-top tube or serum separator tube	83516 x2, 82784
<p><u>Profile Components:</u> Tissue Transglutaminase (tTG) antibody IgA, Gliadin antibody IgA, Total IgA</p> <p><u>Clinical Application:</u> Differential diagnosis of Celiac Disease</p>			
Celiac Disease Panel without Gliadin	902047	2 mL refrigerated serum from a plain red-top tube or serum separator tube	83516, 82784
<p><u>Profile Components:</u> Tissue Transglutaminase (tTG) antibody IgA, Total IgA</p> <p><u>Clinical Application:</u> Differential diagnosis of Celiac Disease</p>			

For more information about Celiac Disease testing, please contact your Sonora Quest Laboratories Account Manager or visit www.sonoraquest.com.

References

1. Fasano A, Berti I, Gerarduzzi T, et al. Prevalence of celiac disease in at-risk and not-at-risk groups in the United States: a large multicenter study. Arch Intern Med. 2003;163:286-292.
2. Farrell RJ, Kelly CP. Diagnosis of Celiac sprue. Am J Gastroenterol. 2001;96:3237-3246.
3. Green PH, Jabri B. Celiac disease. Lancet. 2003;362:383-391

*The CPT codes provided are based on AMA guidelines and are for informational purposes only. CPT coding is the sole responsibility of the billing party. Please direct any questions regarding coding to the payor being billed.