Cell Science Systems

CICA — Celiac, IBS,Crohn's Array

Patient Information	Name: SAMPLE, PATIENT		
Date of Birth: 7/10/1900	Gender: F	**Lab ID:**	**999197**
Date Received: 4/16/2016	Date Collected:	Date Reported:	05/06/2016
Physician: Dr SAMPLE		Clinic ID:	99999

Celiac Disease Genetic Markers

(2) **VERY LOW** ← **1:2518**

LOW

MODERATE

ELEVATED

**These tests were performed using Polymerase Chain Reaction with Sequence Specific Primers (SSP-PCR) Technique.*

Genetic Markers - HLA-DQ Typing*

HLA-DQ2.5	Positive	**HLA-DQ8**	Negative
DQA1*05	Positive	**DQA1*03**	Negative
DQB1*02	Positive	**DQB1*0302**	Negative

HLA-DQ Typing Commentary

The Risk for Celiac Disease is 1:2518 (1)

Patient does not have the HLA-DQ variants associated with Celiac Disease and hence is essentially excluded or highly unlikely to have the disease.

(1) Megiorni F, Mora B, Bonamico M, Barbato M, Nenna R, et al: HLA-DQ and risk gradient for celiac disease. Hum Immunol 2009, 70:55-59.

(2) Megiorni F, Pizzuti, A. HLA-DGA1: HLA-DQB1 in Celiac Disease predisposition: practical implications of the HLA molecular typing.

Crohn's Genetic Markers*

ATG16L1 (T300A)	Heterozygous	*A gene inherited from one parent has this mutation while the other gene is normal (heterozygous appearance).*
NOD2 (R702W)	Homozygous Negative	*Genes inherited from both parents do not have this mutation (homozygous negative appearance).*
NOD2 (L1007sinsC)	Homozygous Positive	*Genes inherited from both parents have this mutation (homozygous positive appearance).*
NOD2 (G908R)	Homozygous Negative	*Genes inherited from both parents do not have this mutation (homozygous negative appearance).*

Crohn's Comments

This appearance has been associated with inflammatory bowel disease (IBD) and Crohn's disease(1-3), but disease expression also appears dependent upon additional environmental and/or genetic risk factors.

(1) Aditya Murthy and Menno van Lookeren Campagne: Understanding Crohn's diseases through genetics. Cell Cycle 13:18, 2803-2804; September 15, 2014.

(2) Aditya Murthy et all: A Crohn's disease variant in Atg16l1 enhances its degradation by caspase 3. Nature, Vol 506, 27 February 2014.

(3) Denie K. Bohnen et all: Crohn's Disease-Associated NOD2 Variants Share a Signaling Defect in Response to Lipopolysaccharide and Peptidoglycan. Gastroenterology 2003;124:140-146.

** This test was developed and its performance characteristics determined by Cell Science Systems. It has not been cleared or approved by the U.S. Food and Drug Administration.*

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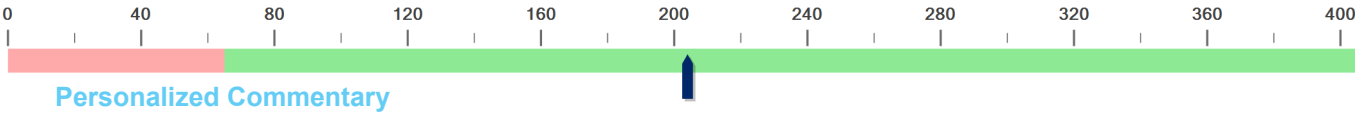
Serologic Markers

Total IgA 204

Reference Range (age/gender based) :

(65 - 421 mg/dL)



Personalized Commentary

	NEGATIVE < 20.1 units	WEAK POSITIVE 20.1 - 30 units	MODERATE TO STRONG POSITIVE > 30 units	REMARKS
Tissue transglutaminase (tTg) IgA	7			
Tissue transglutaminase (tTg) IgG	3			
Deamidated gliadin peptide (DGP) IgA	6			
Deamidated gliadin peptide (DGP) IgG	4			

	NEGATIVE < 20.1 units	EQUIVOCAL 20.1 - 24.9 units	POSITIVE > 25 units	REMARKS
Anti-*Saccharomyces cerevisiae* Antibodies (ASCA) IgA	17			
Anti-*Saccharomyces cerevisiae* Antibodies (ASCA) IgG			25.7	

Antibody Markers Commentary

A finding of tissue transglutaminase (tTG) IgA antibodies may be indicative for Celiac Disease. For patients with normal total IgA levels and negative tTG IgA antibodies results, an indication of Celiac Disease is very unlikely. However, it is important to remember that a certain percentage of patients with Celiac Disease may be seronegative. If the testing for tTG IgA is negative, but Celiac Disease is still suspected based on clinical presentation or even a strong family history, looking to the results of the DGP-IgA antibody test and the HLA DQ2.5/ DQ8 genetic typing would be appropriate

High values of ASCA (IgA or IgG) may be indicative of Crohn's Disease. Further evaluation by a Gastroenterologist is recommended especially if GI symptoms are present.