

INTRODUCTION

Celiac disease is a flammatory, chronic, gluten-sensible enteropathy, characterised by malabsorption and damage of the intestinal mucosa.

It is a multifactorial disease with a very strong genetic component (it shows a high concordance, about 75%, in monozygote twins) and for this reason it is strongly inheritable.

The main environmental factor is gluten ingestion, and the main genic factor is represented by the presence of HLA-DQA1*05, HLA-DQB1*02 e HLA-DQB1*0302 genes.

The kit is a confirmation test for CELIAC DISEASE diagnosis for the cases in which EMA research gives a negative result, or in all the cases in which the histological exam shows minimal lesions. Moreover, it is the easiest and fastest first-level screening test for excluding CELIAC DISEASE in those groups which have a major risk (first degree relatives of celiac patients, patients with IDDM, Down syndrome and with IgA deficiency).

AB CELIACHIA method is fast, reliable, easy to apply and only basic molecular biology laboratory instruments are necessary.

The employment of an amplification technique, instead of a serologic characterisation for the DQ2 and DQ8 haplotypes interpretation, reduces execution time and costs.

AB CELIACHIA kit is a diagnostic device to type the haplotypes involved in the disease, based on the use of couples of sequence-specific primers targeted to an allele or a group of alleles (this technique is also known like PCR-SSP: *Polymerase Chain Reaction-Sequence Specific Primers*).

TECHNICAL DESCRIPTION

KIT FORMAT: 25 or 50 tests.

STABILITY: 6 months.

STARTING MATERIAL: DNA extracted from whole peripheral blood.

AMPLIFIED REGION: HLA-DQA1*0501, HLA-DQA1*0505, HLA-DQA1*02, HLA-DQB1*0201 HLA-DQB1*0202, HLA-DQB1*0302, HLA-DRB1*04.

AMPLIFICATION: 3 MULTIPLEX AMPLIFICATIONS IN PREMIXED monodose and ready to use tubes.

INTERNAL POSITIVE CONTROL: the 22q13.1 region TST (thiosulfate sulfurtransferase rhodanese) gene amplification is included in each reaction.

RESULT VISUALISATION: agarose gel electrophoresis.

SPECIFICITY: *Primers* were designed to be very specific to allow the identification only of the human genes belonging to the HLA 6p21.3 regions and they have not shown aspecific amplifications of other genes.

Cross reactions with genomic HLA region have not been revealed.

INFORMATION FOR ORDERS

Cod	Prod	Pckg
02-10A	AB CELIACHIA	25/50 test
02-10R	AB CELIACHIA amplification reagents	25/50 test

AB CELIACHIA

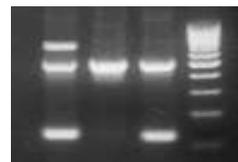
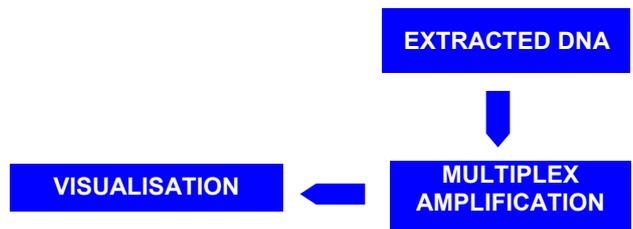
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Complete system for determination of genetic predisposition to CELIAC DISEASE by selective amplification of HLA alleles related to DQ2 and DQ8 haplotypes.

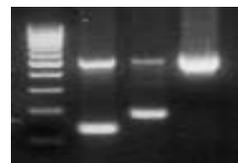


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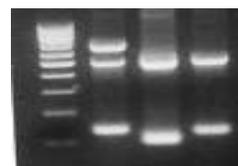
PROCEDURE



DQ2 in CIS
Heterodimer



DQ8
Heterodimer



DQ2 in TRANS
Heterodimer

BIBLIOGRAPHIC REFERENCES

- F. Bouguerra *et al.*,
Genetic Epidemiology 14: 413-422 (1997)
- A.S. Louka, L.M. Sollid,
Tissue Antigens 61: 105-117(2003)
- L.M. Sollid, Nature Reviews Immunology 2 : 647-655
(September 2002).