MUSTARDKIT Real Time PCR

Real Time PCR Mustard DNA Detection Kit

Test system for the qualitative detection of mustard DNA in food products by PCR Real time

Product code: IC-02-1036 (50 tests) / IC-02-1038 (25 tests)

Brief description

MustardKit Real Time PCR provides reagents for the qualitative detection of mustard DNA in several food products, fresh and processed. The PCR Real Time kit amplifies a DNA fragment that is present solely in mustard. The amplified DNA segment is detected by hybridisation with a probe labelled with fluorescent dyes. The increase in fluorescence is continuously measured in a PCR real-time detection instrument.

Mustard is considered allergenic food and it is explicitly mentioned in the European Food Labelling Directive.

MustardKit Real Time PCR is an useful tool to monitor the food allergens to ensure compliance with food labelling (2003/89/EC Directive) and to improve consumer protection.

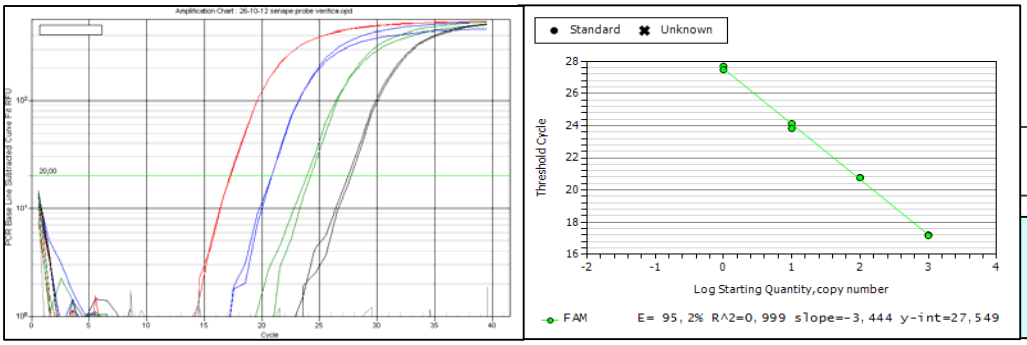

Figure 1: Test sensitivity for *Mustardkit DNA Detection kit*.

Technical features

Number of tests	25/50 target DNA specific reactions
Kit components	Mix *Test Mustard* (with duplex inhibition control) – DNA positive control – sterile H_2O DN*ase* free
Specificity	the kit has been tested with DNA extracted from both raw material and processed food. The specificity of the system has been validated with several other species normally used in food production (see the Panel below). No cross-reactivity effects have been revealed.
Limit of Detection	1 copy of mustard haploid genome, equal to roughly 0.5 pg of *Sinapis alba* DNA (see Fig.1).
Detection	Probe labelled with fluorescent dyes Taqman ® - FAM and JOE

Specificity control group tested negative for cross-reactivity:

Almond (*Prunus dulcis*)
Barley (*Hordeum vulgare*)
Black tiger prawn (*Penaeus monodon*)
Bovine (*Bos taurus*)
Brasilian walnut (*Bertholletia excelsa*)
Broccoli (*Brassica oleracea convar. Botrytis cult. Italica*)
Cauliflower (*Brassica oleracea convar. Botrytis*)
Cashew nut (*Anacardium occidentalis*)
Celery (*Apium graveolens*)
Chicken (*Gallus gallus*)
Cod (*Merluccius capensis*)
Common wheat (*Triricum aestivus aestivus*)
Hazelnut (*Coryllus avellana*)
Lupin (*Lupinus luteus*)
Man (*Homo sapiens*)
Mussel (*Mytilus chilensis*)
Papaya (*Carica papaya*)
Peanut (*Arachis hypogaea*)
Pistachio nut (*Pistacia vera*)
Radish (*Raphanus sativus*)
Rucola (*Eruca sativa*)
Rye (*Secale cereale*)
Savoy cabbage (*Brassica oleracea capitata conv cult. Savoy*)
Sesame (*Sesamum indicum*)
Soybean (*Glycine max*)
Walnut (*Juglans regia*)

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