

Real Time PCR Cashew DNA Detection Kit

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

Product code: IC-02-1014 (50 tests) / IC-02-1016 (25 tests)

Brief description

CashewKit Real Time PCR provides reagents for the qualitative detection of cashew DNA in several food products, fresh and processed. The PCR Real Time kit amplifies a DNA fragment that is present solely in cashew. 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.

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

CashewKit 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.

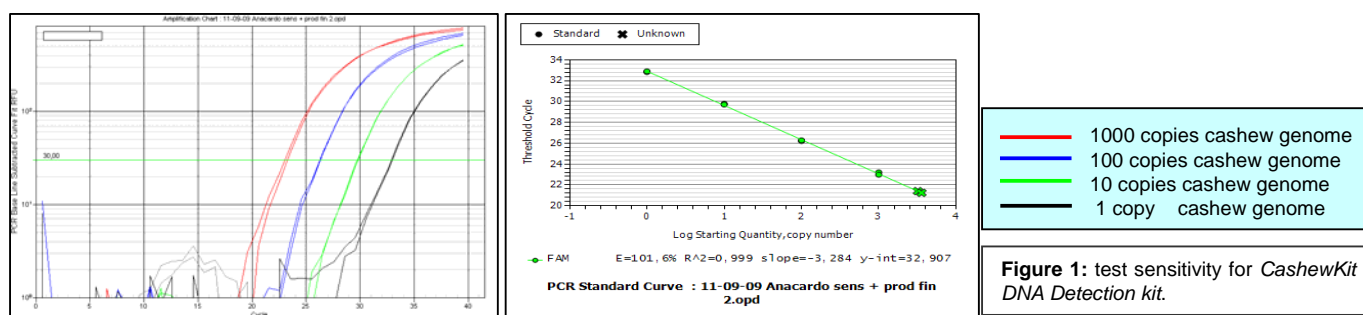


Figure 1: test sensitivity for CashewKit DNA Detection kit.

Technical features

Number of tests	25/50 target DNA specific reactions.
Kit components	Mix <i>Test Cashew</i> (with duplex inhibition control) – DNA positive control – sterile H ₂ O DNase free.
Specificity	the kit has been tested with DNA extracted from raw material (<i>Anacardium occidentale</i>) and processed food (sauce with cashew). 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 cashew haploid genome, equal to roughly 0.51 pg of <i>Anacardium occidentale</i> DNA (see Fig.1).
Detection	Probe labelled with fluorescent dyes Taqman® - FAM and JOE

Specificity control group tested **negative** for cross-reactivity:

Almond (<i>Prunus dulcis</i>)	Lupin (<i>Lupinus albus</i>)	Black tiger Prawn (<i>Penaeus monodon</i>)
Barley (<i>hordeum vulgare</i>)	Man (<i>Homo sapiens sapiens</i>)	Rye (<i>Secale cereale</i>)
Bovine (<i>Bos taurus</i>)	Mussel (<i>Mytilus chilensis</i>)	Sesame (<i>Sesamum indicum</i>)
Brazilian walnut (<i>Bertholletia excelsa</i>)	Celery (<i>Apium graveolens</i>)	Soy (<i>Glycine max</i>)
Chicken (<i>Gallus gallus</i>)	Mustard (<i>brassica alba</i>)	Walnut (<i>Juglans regia</i>)
Cod (<i>Merluccius capensis</i>)	Peanut (<i>Arachis hypogaea</i>)	Wheat (<i>Triticum aestivum</i>)
Hazelnut (<i>Corylus avellana</i>)	Pistachio nut (<i>Pistacia vera</i>)	