

Real Time PCR Crustacean DNA Detection Kit

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

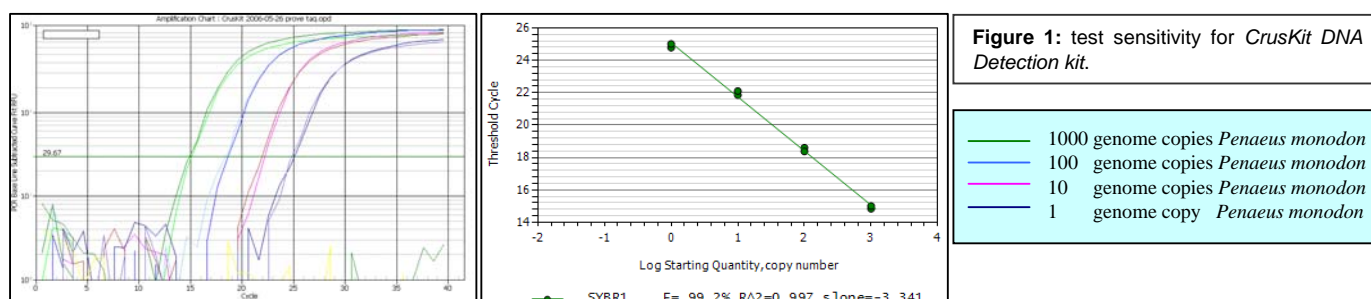
Product code: IC-02-1001 (50 tests) / IC-02-1003 (25 tests)

Brief description

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

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

CrusKit 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.



Technical features

Number of tests	25/50 target DNA specific reactions
Kit components	Mix <i>Test Crustaceans</i> (with duplex inhibition control) – DNA positive control – sterile H ₂ O DNase free
Specificity	the kit has been tested with DNA extracted from several crustacean species. 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 crustacean haploid genome, equal to roughly 2.5 pg of <i>Penaeus monodon</i> DNA (see Fig.1).
Detection	Probe labelled with fluorescent dyes Taqman® - FAM and JOE

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

Cashew (<i>Anacardium occidentale</i>)	Lentils (<i>Lens esculenta</i>)	Swordfish (<i>Xiphias gladius</i>)
Peanut (<i>Arachis hypogea</i>)	Lupin (<i>Lupinus albus</i>)	Green Pea (<i>Pisum sativum</i>)
Herring (<i>Clupea harengus</i>)	Corn (<i>Zea mays</i>)	Pistachio (<i>Pistacia vera</i>)
Basilic (<i>Ocimum basilicum</i>)	Almond (<i>Prunus dulcis</i>)	Chicken (<i>Gallus gallus</i>)
Bovine (<i>Bos taurus</i>)	Eggplant (<i>Solanum melongena</i>)	Tomato (<i>Lycopersicon esculentum</i>)
Squid (<i>Loligo edulis</i>)	Cod (<i>Merluccius capensis</i>)	Rice (<i>Oryza sativa</i>)
Carrot (<i>Daucus carota</i>)	Hake (<i>Merluccius merluccius</i>)	Celery (<i>Apium graveolens</i>)
Common carp (<i>Cyprinus carpio</i>)	Hazelnut (<i>Corylus avellana</i>)	Rye (<i>Secale cereale</i>)
Cucumber (<i>Cucumis sativus</i>)	Walnut (<i>Juglans regia</i>)	Mustard (<i>Brassica alba</i>)
Onion (<i>Allium cepa</i>)	Brazilian walnut (<i>Bertholletia excelsa</i>)	Sesame (<i>Sesamum indicum</i>)
Mussel (<i>Mytilus chilensis</i>)	Gilthead sea-bream (<i>Sparus aurata</i>)	Soya (<i>Glycine max</i>)
Drosophila (<i>Drosophila melanogaster</i>)	Barley (<i>Hordeum vulgare</i>)	Swine (<i>Sus scrofa</i>)
Ant (<i>Tetramorium caespitum</i>)	Potato (<i>Solanum tuberosum</i>)	Tuna fish (<i>Thunnus albacares</i>)
Weath (<i>Triticum aestivum</i>)	Smooth-hound (<i>Mustelus mustelus</i>)	Man (<i>Homo sapiens sapiens</i>)
Mushroom (<i>Agaricus bisporus</i>)	Pepper (<i>Capsicum annuum</i>)	Clam (<i>Chamelea gallina</i>)
		Zucchini (<i>Cucurbita pepo</i>)