

## Real Time PCR Peach DNA Detection Kit

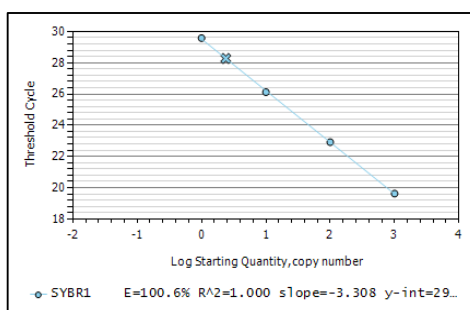
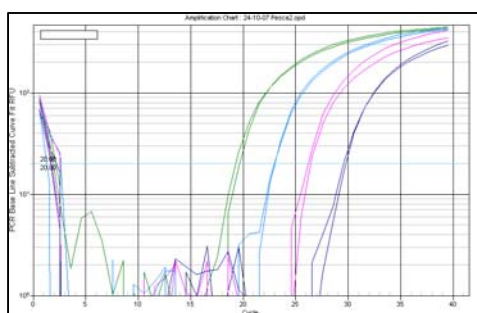
### Test system for the qualitative detection of peach DNA in food products by PCR Real time

Product code: IC-02-1041 (50 tests) / IC-02-1043 (25 tests)

#### Brief description

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

**PeachKit Real Time PCR** is a useful tool to monitor the presence of undeclared species, like peach, in food products, thus detecting possible alteration and fraud.



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

— 1000 copies peach genome  
— 100 copies peach genome  
— 10 copies peach genome  
— 1 copy peach genome

#### Technical features

##### Number of tests

25/50 target DNA specific reactions

##### Kit components

Mix *Test Peach* – Mix Test Inhibition – DNA positive control – sterile H<sub>2</sub>O DNase 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 peach haploid genome, equal to roughly 0.28 pg of *Prunus persica* DNA (see Fig.1).

##### Detection

Probe labelled with fluorescent dyes Taqman® - FAM

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

Apricot (*Prunus armeniaca*)  
 Blackcherry (*Prunus cerasus*)  
 Pineapple (*Ananas sativa*)  
 Orange (*Citrus sinensis*)  
 Banana (*Musa sp.*)  
 Sugar beet (*Beta vulgaris*)  
 Bergamot (*Citrus bergamia*)  
 Bovine (*Bos taurus*)  
 Carrot (*Daucus carota*)  
 Chestnut (*Castanea sativa*)  
 Clementine (*Citrus clementina*)  
 Cherry (*Prunus avium*)

Fig (*Ficus carica*)  
 Strawberry (*Fragaria vesca*)  
 Kiwi (*Actinidia chinensis*)  
 Raspberry (*Rubus idaeus*)  
 Lime (*Citrus latifolia*)  
 Lemon (*Citrus limon*)  
 Maize (*Zea mays*)  
 Almond (*Prunus dulcis*)  
 Mango (*Mangifera indica*)  
 Apple (*Malus domestica*)  
 Blackberry (*Rubus fruticosus*)

Maracuja (*Passiflora edulis*)  
 Mandarin (*Citrus reticulata*)  
 Papaya (*Carica papaya*)  
 Tomato (*Lycopersicon esculentum*)  
 Grapefruit (*Citrus paradisi*)  
 Pear (*Pyrus communis*)  
 Plum (*Prunus domestica*)  
 Rice (*Oryza sativa*)  
 Soya (*Glycine max*)  
 Man (*Homo sapiens*)  
 Grape (*Vitis vinifera*)