

# GMO SCREENING KIT Real Time

## Real Time PCR GMO Detection Kit

### Real time PCR GMO Detection Kit with amplification control

Product code: IC-02-2015 (50 tests) / IC-02-2017 (100 tests)

#### Brief description

**GMO Screening Kit Real-Time** is based on the detection and amplification of 35S promoter (CaMV 35S Promoter obtained from cauliflower mosaic virus) and NOS terminator (NOS 3' terminator, obtained from *Agrobacterium tumefaciens* nopaline synthetase gene) in DNA obtained from fresh and processed samples for human and animal use. The amplified DNA segments are detected by hybridisation with a probe labelled with fluorescent dyes. The increase in fluorescence is continuously measured in a PCR real-time detection instrument (see figure 1).

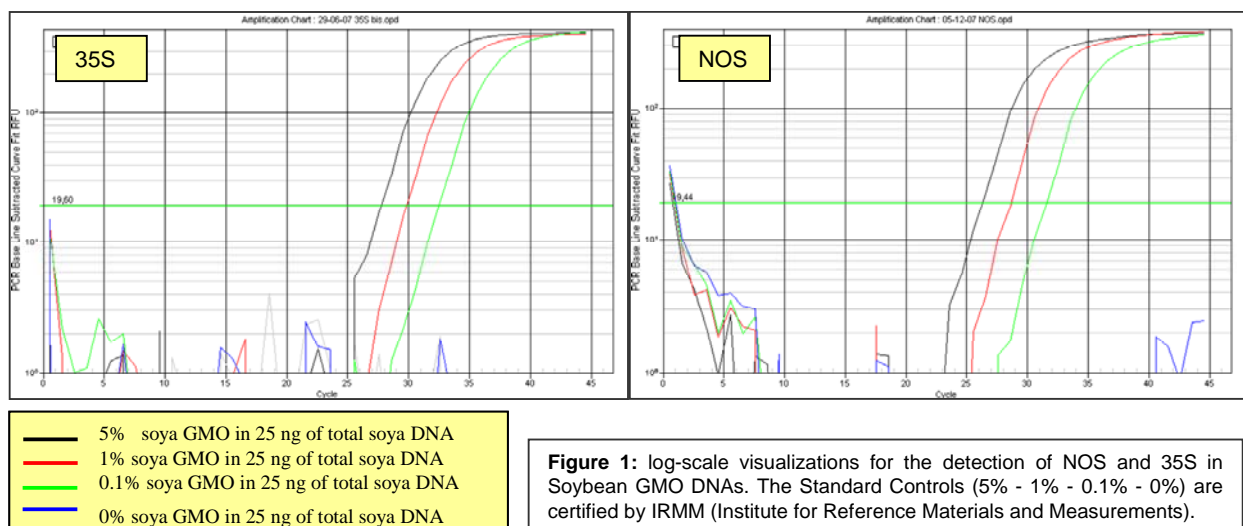
**GMO Screening Kit Real-Time** contains a chloroplastic amplification control that allows to highlight the presence of plant DNA, so confirming the presence of the target DNA (being GMOs on the market only vegetal GMOs) and excluding inhibition effect on the PCR reaction (which can lead to false negative results).

#### **GMO Screening Kit Real-Time took part in following PROFICIENCY TESTS:**

DLA – 20/2010 “GMO Screening qualitative: **MAIZE and SOYA on MATRIX CEREAL**”

DLA – 21/2011 “GMO Screening qualitative: **MAIZE and SOYA on PASTRIES, CEREAL PRODUCTS, DIETETIC POWDER**”

DLA – 23/2011 “GMO Screening qualitative: **FLAX SEED, RAPE SEED, MUSTARD PRODUCTS on SEEDS and SPICE POWDER**”



#### Technical features

<b>Number of test</b>	50/100 reactions
<b>Kit content</b>	Mix Test 35S – Mix Test NOS – Mix Test Amplification Control – DNA positive control – sterile H <sub>2</sub> O DNase free
<b>Specificity</b>	the amplification checks for 35S Promoter and NOS Terminator have been verified on OGM varieties containing combinations of target sequences.
<b>Sensitivity</b>	the LOD for both markers is equal to 5 copies of target DNA
<b>Detection limit</b>	up to 0.01% of RoundUp Ready® soy DNA extracted from samples derived from the mixing of IRMM standards.
<b>Detection</b>	probe labelled with fluorescent dyes (Taqman®) - FAM
<b>Results interpretation</b>	available an excel datasheet comprising more than 81 GMO events verified for 5 different targets: 35S, NOS, bar, ctp2-CP4epsps and P35S-pat, to facilitate the data interpretations and to reduce the number of GMO events to be detected after an initial screening.