

A T C A T C G T A T C C A T C C C T A T C C A T C C C T
T C A T C C C T A T C G C T T C C A T C T G C T T C A
A T C T T C A T C C G T A T C T G C T T C C A T C T G C T
C C A T T T C A T C C G T A T C
G C T T C C A T C C C T A T C G C
T C A T C C A T C C C T A T C T G C T T C C A T C T G C T



BIOTEC CON

Diagnostics

foodproof®

GMO Soya Quantification Kits

Hybridization and Hydrolysis Probes

For safer food – BIOTEC CON Diagnostics – simply builds up trust!

Soy has become one of the most important food crops worldwide and is mainly used for the production of oils, animal feed and as protein-rich food. In 1996, GTS 40-3-2, better known as Roundup Ready soya, was the first GMO crop approved in the EU. The next generation product, Roundup Ready 2 Yield (MON89788), followed in 2008. According to EU law, foods and additives with more than 0.9% relative amount of genetically modified organisms must be labelled as GMO products. Other countries have similar regulations, e.g. Switzerland (1%), Brazil (1%) or Japan (5%).

The **foodproof® GMO Soya Quantification Kits** are based on the real-time PCR technology, which is well-established in the food industry as a highly sensitive and specific detection and quantification method.

Fast: 2 h to result with < 50 min of hands-on time

Safe: Prevention of false-positive results and carry-over contamination by using Uracil-N-Glycosylase

Sensitive: Validated to detect $\geq 0.1\%$ relative GMO content

Easy: Convenient, complete solution including DNA extraction and real-time PCR analysis

Experienced: Manufacturer of PCR-based rapid tests for the food industry since 1998 with an ISO 17025 accredited service lab

Licensed: Fully licensed technology

Best Specificity

Target Region

- 35S promoter gene of Cauliflower Mosaic Virus (CaMV) and
- downstream chloroplast transit signal sequence of *Petunia hybrida*

Reference Gene

- A fragment of the native soya specific lectin gene (Le1) as reference to the relative quantification and control of DNA integrity

Quantification Options

- by using external standards (calibration curves)
- by using the LightCycler® Relative Quantification Software



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C C A T T T C A T C C G T A T C
G C T T C C A T C C C T A T C G C
T C A T C C A T C C C T A T C T G C T T C C A T C T G C T



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Workflow



Start	40 min	10 min	60 or 100* min	10 min
Homogenized Sample	DNA Extraction	PCR Set-up	PCR run	Analysis
120 or 160* min Total				

* 5' Nuclease PCR run

GMO Soya Quantification Kits

- R 300 19 **foodproof®** GMO RR Soya Quantification Kit (LC 1.x, 2.0)
- R 302 19 **foodproof®** GMO RR Soya Quantification Kit (5' Nuclease)
- R 302 35 **foodproof®** GMO RR 2 Yield Soya Quantification Kit (5' Nuclease)

Matrix-Specific DNA Extraction Kits

- S 400 06 **foodproof®** Sample Preparation Kit III
- S 400 13 L **foodproof®** Magnetic Preparation Kit III



Storage at -15 °C to -25 °C
128 Reactions for a maximum of
44 samples (R 300 19) or
60 samples (R 302 19)

DNA Extraction (max. 40 min)

foodproof®
Sample Preparation Kit III
enables the extraction of plant
DNA from matrices

Instrument Compatibility

- all LightCycler®
- 5' Nuclease / TaqMan®
cyclers (e.g. Mx3005P,
CFX 96, ABI7500)

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