

Technical Datasheet

Analysis Name: GMO Identification by RTi-PCR

Method Number: LI-00.386

Scope of Application: The method is applicable to all DNA extracted with LI-00.385 from raw materials and derivatives (such as flour, semolina, grits ...) or finished products (including petfood).

Description: DNA that has been screened using LI-00.047 GMO screening by Fast RTi PCR with a result of “Detected” will automatically be analyzed for LI-00.386 by the lab. Primers and probes for 48 targets are coated onto a 384-well plate. The 47 assays were obtained from the validated European official methods, whereas the plant assay was obtained from Cottenet et al, 2013 . The 47 assays allow the qualitative detection of 6 plant species, 6 GM-markers, 21 GM-maize events and 14 GM-soya events in a single run to provide a GMO profile of the sample. Samples are analyzed in duplicate from two separate DNA extractions.

Sample Weight Required: DNA extracted from LI-00.385

Analytical Platform: Real-Time PCR

Special information: Qualitative results are expressed as “Detected” or “Not Detected” per analyte based on the LOD Listed in Table 1 below.

In case where GM maize or GM soya is detected contact Customer service for possible quantification of these GM-events.

When at least one genetic marker is detected without any identification of GM-maize or GM-soya a potential list of GM-event can be requested.

Analyte Reported	Type	Limit of Detection (LOD _{REL})	Unit of Measure
Maize	Corn (Hmg gene)	0.07	%
Soya	Soy (Le1 gene)	0.01	%
Rapeseed	Canola (CruA gene)	0.06	%
Cotton	Cotton (Sah7 gene)	0.03	%



Potato	Potato (UDP gene)	0.03	%
Rice	Rice (PLD gene)	0.005	%
p-35S	GM marker	0.01	%
t-NOS	GM marker	0.03	%
CTP2-Cp4epsps	GM marker	0.01	%
Pat	GM marker	0.01	%
Bar	GM marker	0.1	%
Cry1Ab	GM marker	0.01	%
SYN3272	GM-maize	0.1	%
5307	GM-maize	0.07	%
DP-98140	GM-maize	0.05	%
Bt11	GM-maize	0.1	%
Bt176	GM-maize	0.1	%
DAS-40278-9	GM-maize	0.1	%
DAS-59122-7	GM-maize	0.1	%
GA21	GM-maize	0.05	%
LY038	GM-maize	0.07	%
MIR604	GM-maize	0.1	%
MIR162	GM-maize	0.07	%
MON810	GM-maize	0.1	%
MON863	GM-maize	0.1	%
MON87460	GM-maize	0.14	%
MON89034	GM-maize	0.14	%
MON88017	GM-maize	0.07	%
NK603	GM-maize	0.1	%
T25	GM-maize	0.14	%
TC1507	GM-maize	0.05	%
VCO-1981-5	GM-maize	0.01 *	%
MON87427	GM-maize	0.04 *	%
A2704-12	GM-soya	0.01	%
A5547-127	GM-soya	0.03	%
BPS-CV127-9	GM-soya	0.01	%
DAS-68416-4	GM-soya	0.01	%
DP-305423	GM-soya	0.01	%
DP-356043	GM-soya	0.01	%
FG72	GM-soya	0.01	%
RRS (GTS-40-	GM-soya	0.01	%
MON89788	GM-soya	0.06	%
MON87701	GM-soya	0.01	%
MON87705	GM-soya	0.01	%
MON87751	GM-soya	0.04 *	%
MON87769	GM-soya	0.01	%
PLANT	Plant (trnL gene)	0.001	