NQAC
Nestlé Quality Assurance Center
Dublin

Technical Datasheet

Analysis Name: TC1507 GM-Maize Quantification by RTi-PCR

Method Number: LI-00.397

Scope of Application: DNA extracted from raw materials, derivatives (e.g. flour, semolina, grits) & finished products

Description: A multiplex real-time PCR system was developed to amplify respectively both the endogenous *zein* gene (specific for maize) and the construct-specific target for TC1507 GM-maize event in such a way that both amplifications are carried out in the same reaction without any interference (multiplex PCR). For this purpose, two fluorescent probes, respectively specific for TC1507 GM-maize and *zein* gene are used in the same assay, in addition to the forward and reverse PCR primers. TC1507 and Zein specific probes are FAM and VIC labelled, respectively.

Two standard curves, relative to TC1507 and to Zein portion, are established based on PCR amplifications of known amounts of TC1507 GM-maize DNA extracted from certified powder reference material. Both standard curves are necessary since the GM-maize content in unknown samples must be quantified in the maize portion.

Sample Weight Required: 50 g

Analytical Platform: Real-Time PCR

Analyte Reported	Alias	Unit of Measure	Limit of Quantification	Reproducibility
GM maize (corn) TC1507	N/A	%, (m/m)	0.05	35%