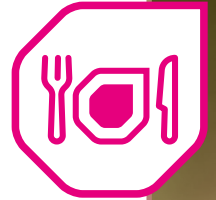


# GRAIN QUANTITATIVE KIT



Durum wheat is legally required for high-quality dried pasta production in Italy, with contamination by common wheat limited to a maximum of 3%. Traditional protein-based detection methods fail due to high-temperature processing and protein denaturation. The Grain Quantitative Kit overcomes these limitations using advanced Real-Time PCR and dual labelled probe technology. It provides highly sensitive and specific relative quantification of the *T. aestivum*. This DNA-based approach guarantees accurate results, allowing producers to verify product purity against fraudulent labeling and regulatory standards, ensuring consumer trust and informed choice worldwide.

This kit is designed for use in combination with the Grains DNA Extraction Kit (Diatheva, MBK0064) and supports compliance with Italian law, which allows a maximum of 3% soft wheat in dry pasta.

## Product highlights

### MULTIPLEX ASSAY FORMAT

Simultaneous detection of total Triticum and *T. aestivum* DNA

### QUANTIFICATION CONTROL

Includes a 3% DNA Solution that functions as a crucial Quantification Control

### LOT TO LOT CONSISTENCY

The assay ensures reproducible and reliable quantification results over time

## Intended use



Detection and relative quantification of *Triticum aestivum* DNA within the Triticum genus



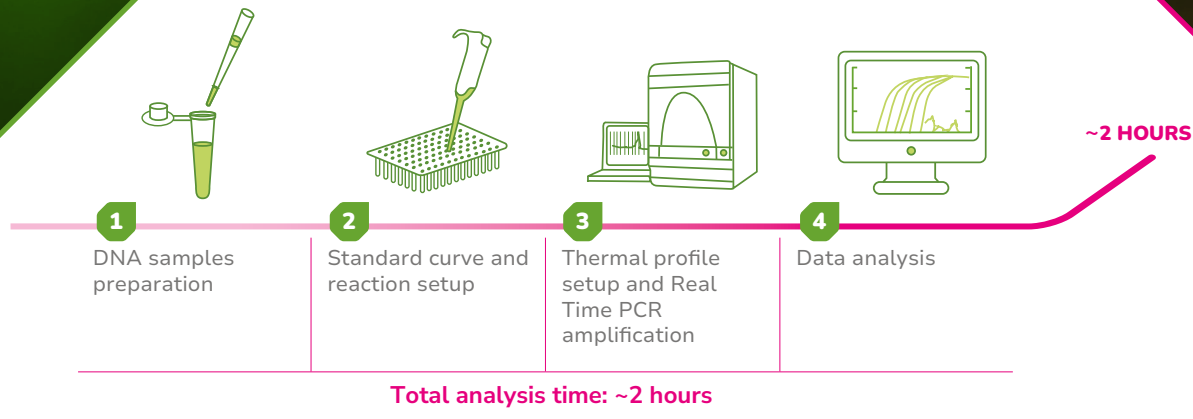
Measurement of soft wheat contamination in semolina and pasta



Verification of compliance with food quality and labeling regulations



## Workflow



## Product Features

### SUPERIOR PERFORMANCE

High analytical sensitivity and specificity for the detection and quantification of *T. aestivum* DNA in *Triticum spp.*

### RELIABILITY

Consistent results supported by validated LOD, LOQ, repeatability and reproducibility parameters

### COMPATIBILITY

Validated on major Real-Time PCR platforms (CFX96, ABI 7500, Rotor-Gene Q, QuantStudio 3 etc)

### EASE OF USE

Ready-to-use reagents and simple workflow minimize hands-on time

### ACCURACY

Dual-target amplification and two calibration curves ensure precise percentage quantification

### CONVENIENCE

Includes standard DNA and 3% reference DNA solution for immediate setup and verification

## Technical specifications

<b>TEST METHOD</b>	Real-Time PCR (Dual labelled probe)
<b>FORMAT</b>	150 tests
<b>STORAGE TEMPERATURE</b>	-20 °C
<b>SPECIES SAMPLE</b>	<i>Triticum spp.</i>
<b>SAMPLE TYPE</b>	DNA extracted from semolina, flour, or pasta
<b>ASSAY TURNAROUND TIME</b>	< 2 hours

## ORDERING INFORMATION

CODE	SIZE
MBK0062	150 TESTS

For more information or to place an order, contact us at [info@diatheva.com](mailto:info@diatheva.com)