

foodproof® SL

# GMO GA21 Maize Detection Kit

## Ready Reference Guide

Revision A, December 2023

Product No. KIT230204

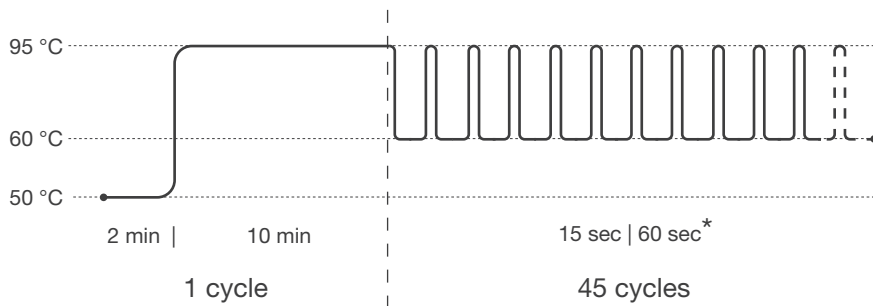
PCR kit for the qualitative detection of GA21 DNA using real-time PCR instruments.

Before starting, it is strongly recommended to read the entire product manual available on our website.

### PROGRAM SETUP

Program your real-time PCR instrument before setting up the PCR reactions. Select the following channels:

- ▶ FAM (GA21) and VIC/HEX (Internal Control).



**Pre-incubation: 1 cycle**

Step 1: 50 °C for 2 min

Step 2: 95 °C for 10 min

**Amplification: 45 cycles**

Step 1 : 95 °C for 15 sec

Step 2\*: 60 °C for 60 sec

\* Fluorescence detection

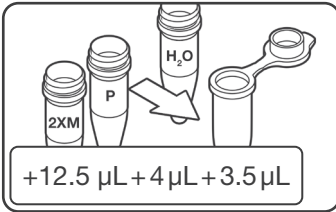
### DATA INTERPRETATION

Verify results of positive (Control Template) and negative (H<sub>2</sub>O) controls, before interpreting the sample results. Always compare samples to positive and negative controls. Review data from each channel and interpret results as described in the table.

FAM	VIC/HEX	Result Interpretation
+	+ or -	Positive for GA21
-	+	Negative for GA21
-	-	Invalid

# PREPARATION OF THE PCR MIX

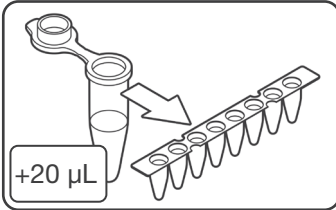
Take appropriate precautions to prevent contamination, e.g., by using filter tips and wearing gloves. Thaw reagents, mix (do not vortex!) and briefly spin vials before opening.



## 1. PREPARE PCR MIX

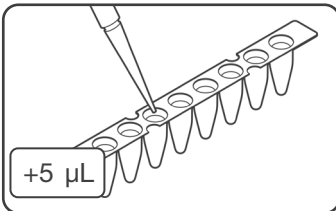
Add 12.5 µL Master Mix (2XM),  
4.0 µL Primer/Probe Mix (P) and  
3.5 µL PCR-grade H<sub>2</sub>O (not included) } for each reaction to  
a suitable tube.

(n samples + 2 controls + at least one additional reaction to cover pipetting loss).  
Mix carefully but thoroughly by pipetting up and down.



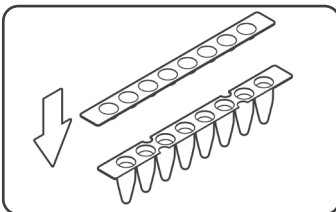
## 2. ADD PCR MIX

Pipette 20 µL of prepared PCR mix into each strip or plate well.



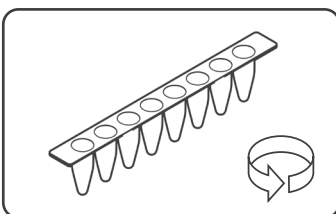
## 3. ADD SAMPLES AND CONTROLS

Pipette 5 µL of samples, negative control (PCR-grade H<sub>2</sub>O) or  
Control Template (C) into respective wells.



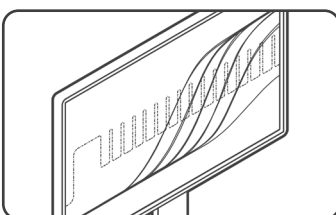
## 4. SEAL

Carefully seal strips/plate.



## 5. CENTRIFUGE

Briefly spin strips/plate in a suitable centrifuge.



## 6. START REAL-TIME PCR RUN

Cycle samples as described above.