

LAB BEYOND

IDENTIFISH TONNO (TUNA)







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Cat. No. EBT 411_48 48 tests

KIT REAGENTS AND COMPONENTS – Kit consists of the following ready-to-use reagents:

Extraction buffer *yellow cap* bottles containing extraction buffer

Primer mixFreeze-dried primers specific for Tuna species in 0.2 ml tube's stripLAMP mixgreen cap tube containing a mix including enzym and buffer

Mineral oil blue cap tube containing mineral oil

Positive control red cap tube containing freeze-dried genomic DNA ready-to-use for LAMP reaction

Negative controlwhite cap tube containing extraction bufferSterile Waterclear cap vial containing sterile water

IdentiFish Tonno badge Contactless badge for identification of the kit containing information related

to lot number, expiration date and provides the parameters associated with the kit

KIT FEATURES

 Ready-to-use system for total nucleic acid extraction in only few minutes without sophisticated laboratory equipment

- Ready-to-use reagents reduce the risks related to environmental contamination or human error
- Speed and easiness of the test (about 60 minutes)
- Useful for testing food matrices
- Possibility of performing genetic tests directly in the field
- All reagents are stable at room temperature for the shipment/transport, however they should be stored at 4°C

Specific kit for rapid detection of *Tuna* species including *Euthynnus pelamis* from food matrices.

The kit *IdentiFish Tonno* is designed for rapid nucleic acid extraction and amplification by LAMP technology using the ICGENE MINI device (Enbiotech Cat. No. EBT411). The kit has been tested for detection of *Thunnus spp.* and *E. pelamis*.

ANALYTICAL PROCEDURE – ICGENE Mini performs 3 steps:

1. | Nucleic acid extraction

2. **{** Gene amplification

3. { Interpretation of results

After DNA extraction (in few minutes), samples can be processed by LAMP amplification. For each sample, Primer mix tubes are used dispensing the recommended aliquots of the extracted DNA, LAMP mix, and mineral oil, as specified in the kit manual.

By placing the kit's badge near to the ICGENE MINI device, the system recognizes the kit through radio-frequency identification (RFID) technology and performs the analyses specifically designed for *Tuna* detection.

RESULTS INTERPRETATION

ICGENE MINI system performs automatic interpretation of the results. Data are displayed on an Android tablet connected to ICGENE MINI, through which it is possible to control the analytical steps and manage the results. A sigmoid curve indicates a positive sample, whereas a straight line indicates a negative sample for *Tuna*. On the left of the tablet screen, a "+" symbol appears next to the sample's name in case it is positive. The analysis results are synchronized with the ICGENE portal server where they can be browsed using its web app.

PERFORMANCE CRITERIA

Stability: The kit is stable at room temperature during transportation. Upon arrival, the kit must be stored at 4° C. Following the strict storage parameters the kit is stable for 1 year.



