

Food DNA Isolation Kit

Norgen's Food DNA Isolation Kit provides a rapid method for the isolation and purification of total DNA from a wide range of food samples originating from animals or plants. Norgen's Food DNA Isolation Kit is designed for identification of GMO-DNA or animal components in food and feed. Furthermore, the kit also provides a convenient method for the detection of food-related pathogens which may contaminate food sources. Total DNA can be purified from fresh, frozen or preserved food samples using this kit. The purified DNA is of the highest integrity, and can be used in a number of downstream applications including PCR based detection and sequencing. Purification is based on spin column chromatography. The DNA is pre-

ferentially purified from other cellular components such as proteins without the use of phenol or chloroform. The purified DNA is of the highest integrity, and can be used in a number of downstream applications.



Kit Specifications

| | | | |
|---------------------------------|--------|-------------------------------------------------|----------------|
| Minimum Column Binding Capacity | 50 µg | Maximum Amount of Starting Material: | |
| | | Solid food material | 200 mg |
| | | Liquid sample (e.g. milk or concentrated juice) | 1 mL to 1.5 mL |
| Maximum Column Loading Volume | 650 µL | Time to Complete 10 Purifications | 45 minutes |

Food DNA Isolation Kit Benefits

| | |
|--------------------------|----------------------------------------------------------------------------------------------|
| Fast and easy processing | Rapid processing using a spin-column format |
| No phenol or chloroform | No hazardous chemical required |
| Wide compatibility | Wide compatibility with a variety of food products for GMO-DNA isolation |
| Universal protocol | Universal protocol for food related pathogen DNA isolation (Gram positive and Gram negative) |

Food DNA Isolation Kit

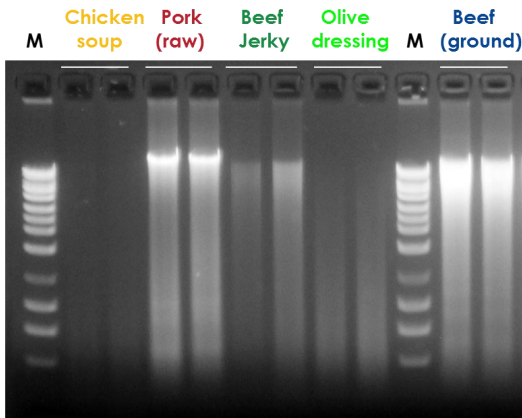


Figure 1. Total genomic DNA was isolated from 200 mg of processed (Chicken soup, Beef jerky) or non-processed (Raw pork, Olive dressing, ground beef) food materials using Norgen's Food DNA isolation kit. Following isolation, 10 μ L from each 100 μ L elution was loaded on 1% TAE agarose gel. Lane M: Norgen's HighRanger 1kb DNA Ladder.

Food DNA Isolation Kit Contents:

1. Lysis Buffer L
2. Binding Buffer I
3. Buffer SK
4. Wash Solution A
5. Elution Buffer B
6. Proteinase K
7. Spin Columns
8. Collection Tubes
9. Elution tubes (1.7 mL)
10. Product Insert

Storage Conditions

The kit contains ready-to-use Proteinase K which is dissolved in a specially prepared storage buffer. The Proteinase K should be stored at room temperature or 4°C. All other solutions should be kept tightly sealed and stored at room temperature.

Shipping Conditions

The Food DNA Isolation Kit is shipped at room temperature.

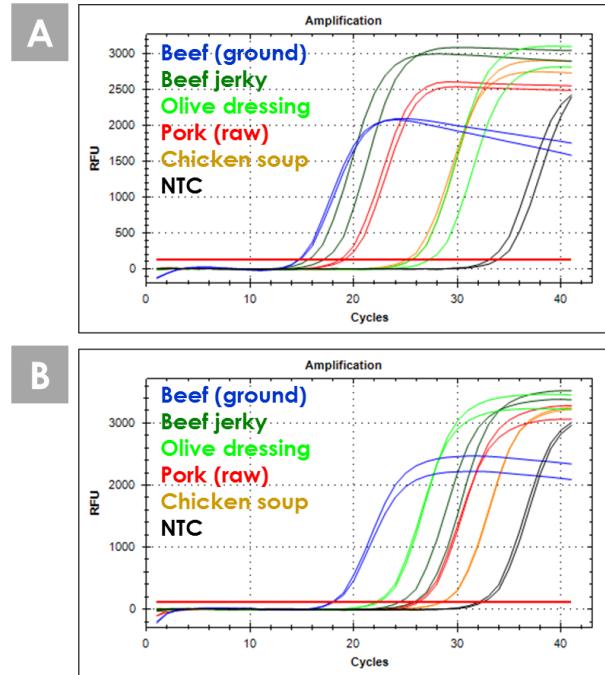


Figure 2. High Quality DNA free from PCR Inhibitors - Superior Quality to detect two house keeping genes (5S rDNA and 16S rDNA) representing GMO gene and food related pathogen detection. Total DNA was isolated from 200 mg samples of different food materials (processed and non-processed) using Norgen's Food DNA Isolation Kit. 4 μ L of the elution was then used as the template in 20 μ L PCR reactions using universal 5s rDNA primers (A) and prokaryotic 16s rDNA primers (B) in real-time PCR (SYBR Green). Norgen's DNA was successfully amplified, indicating the high quality of the inhibitor-free DNA for GMO and pathogen detection from diversified food materials.

Customer-Supplied Reagents and Equipment

- Benchtop microcentrifuge
- 55°C Incubator
- Ice bath
- 96-100 % ethanol
- 70 % ethanol
- Liquid nitrogen or any mechanical homogenizer

| Cat # | Description | Quantity |
|-------|------------------------|----------|
| 54500 | Food DNA Isolation Kit | 50 preps |