



TANBEAD



# 6GM

## Food and Plant Extraction Kit

TANBead Food and Plant Extraction Kit is suitable for isolating nucleic acid from food and plant samples. using the TANBead nucleic acid extractor and 6GM Kit enables efficient purification of nucleic acid from raw and processed food sample, GMO food, feed and plant with high yield and quality. These extracted products can be used directly in downstream applications, such as qPCR, and PCR.

### Key Features

- Effortless pretreatment and time-saving process.
- Accommodates a diverse range of food and plant samples by three different incubation buffers.
- To detect food adulteration and authenticate ingredients.

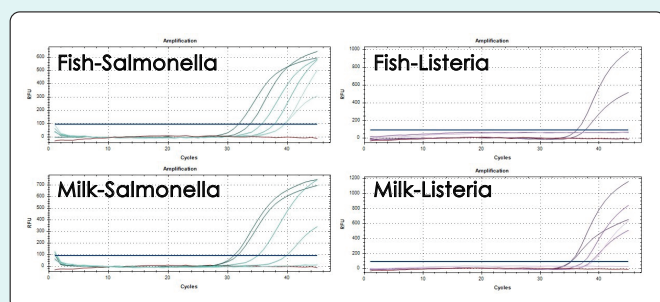
## Specification

Feature	Specification
Application	PCR, and qPCR
Sample	Food raw materials, processed food, genetically modified food, seed, feed, and plant
Reagent kits	6GM series
Operation time	60 – 90 min

## Figure & Table

Food type	Sample	Amount (mg)	Qubit DNA (ng/ $\mu$ L)	260/280
Raw material	Peanut	50	6.18 $\pm$ 0.25	1.91 $\pm$ 0.03
	Soybean	50	52.93 $\pm$ 6.10	2.13 $\pm$ 0.00
	Chicken Breast	50	37.23 $\pm$ 11.30	2.06 $\pm$ 0.01
	Beef	50	16.35 $\pm$ 8.82	1.99 $\pm$ 0.04
	Lettuce	50	6.79 $\pm$ 0.06	1.74 $\pm$ 0.01
	Kiwi	100	1.91 $\pm$ 0.33	2.12 $\pm$ 0.01
Processed food	Tofu	50	19.67 $\pm$ 0.97	2.46 $\pm$ 0.60
	Plain flour	50	70.07 $\pm$ 8.03	2.02 $\pm$ 0.01
	Canned corn	250	7.49 $\pm$ 0.25	1.89 $\pm$ 0.03
	Soy milk	1000	27.23 $\pm$ 7.97	2.08 $\pm$ 0.01
Highly processed food	Spicy corn chips	50	0.27 $\pm$ 0.03	1.70 $\pm$ 0.08
	Miso	50	0.81 $\pm$ 0.04	1.68 $\pm$ 0.04
	Dried banana	50	25.67 $\pm$ 5.81	1.95 $\pm$ 0.03
	Ketchup	100	0.58 $\pm$ 0.13	2.19 $\pm$ 0.04
	Kimchi	200	8.67 $\pm$ 1.58	2.09 $\pm$ 0.05
	Chocolate	200	12.03 $\pm$ 1.00	1.44 $\pm$ 0.05

**Table 1.** NanoDrop and Qubit measurements of nucleic acids extracted from different food samples using 6GM kit.



**Figure 1.** qPCR analysis of nucleic acids extracted from different food samples spiked with two bacteria using 6GM kit.

Sample	Kit	Ct value			
		HMG	Lectin	35S	Halal
Soybean	Q-Brand	-	23.50 $\pm$ 0.08	-	-
	6GM		22.09 $\pm$ 0.20		
GM Tofu	Q-Brand	-	24.90 $\pm$ 1.19	27.48 $\pm$ 1.35	-
	6GM		24.15 $\pm$ 0.51	25.80 $\pm$ 0.40	
Canned corn	Q-Brand	30.08 $\pm$ 0.61	-	-	-
	6GM	28.08 $\pm$ 0.14			
Bacon	Q-Brand	-	-	-	15.70 $\pm$ 0.09
	6GM				13.48 $\pm$ 0.20

**Table 2.** Comparison of qPCR analysis of nucleic acids extracted from different food samples using 6GM kit and Q-brand kits.



more details