

# Food Diagnostics & Food Safety

## Self-Quality Test system for Food Safety

- Bacterial Growth Test (10 Day)
  - E.coli Confirmation test (1 day) / Quantitative & Qualitative test for E.coli (1 day) / Fungi measurement (5 ~ 7 Day)
  - Culture isolation for Salmonella, Staphylococcus, Listeria, etc (Biochemical testing, 1 day)



- PCR & Real time PCR tests
  - Enterohemorrhagic Escherichia coli / Clostridium botulinum / Bacillus / Mycobacterium tuberculosis / Brucella / Norovirus
  - Food poisoning bacteria (Chronobacter (enterobacter) / Salmonella)
  - Lists of genetically modified testing



# Self-Quality Test Work Flow

## Total system



### Extraction Package

- Automated Nucleic acid Extraction system
  - AutoXT PGS Extraction Kit
  - AutoXT BAC Extraction Kit



### Diagnosis Package

- PCR Kit (PreMix type)
  - LiliF™ VTEC PCR Kit
  - LiliF™ SAL PCR Kit
- Real-time PCR Kit (MasterMix type)
  - LiliF™ VTEC Real-time PCR Detection Kit
  - LiliF™ Salmonella Real-time PCR Detection Kit
  - LiliF™ Listeria Real-time PCR Detection Kit
  - LiliF™ HEV Real-time RT-PCR Kit



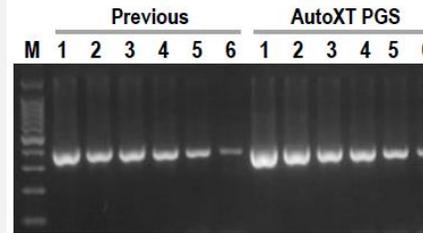
# Food Extraction System

## AutoXT Extraction Kit

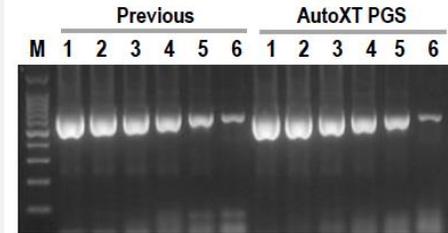
- AutoXT Extraction Kit has been developed to extract high purity genomic DNA from Bacteria, Whole Blood, Cultured Cell, Buffy Coat, Swab, CSF, Tissue, Serum/Plasma.



- Newcastle Disease Virus (Top conc. :  $4 \times 10^7$  EID<sub>50</sub>)



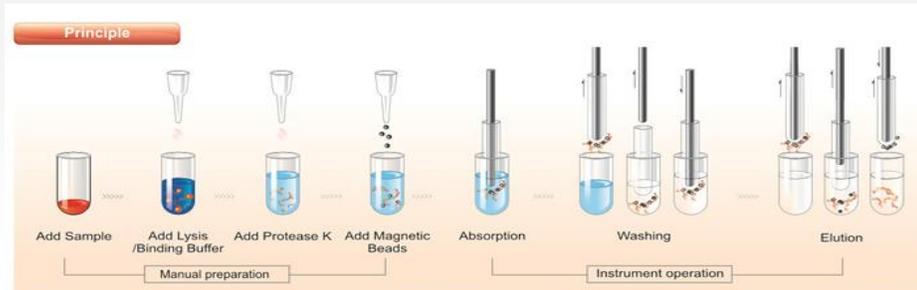
- Bovine corona virus (Top conc. :  $4 \times 10^4$  TCID<sub>50</sub>)



Product Name	Cat. No.	Size
AutoXT PGS Extraction Kit	17168-48 / -96	48 / 96 tests
AutoXT BAC Extraction Kit	17169-48 / -96	48 / 96 tests

## Automatic Extraction System

### ❖ LiliF™ Miracle-AutoXT instrument



- Extract nucleic acid using magnetic beads and purify nucleic acid from blood, tissue or cells, etc.

# LiliF™ MDx Real-time PCR kit

## Clean & Automatic system

LiliF™ Real-time PCR Kit (Listeria/Salmonella/VTEC) is designed for use by food and feed producers, dairies, marketers of these products, as well as regulators and auditors of food and feed quality and safety program. It is also used to identify contamination by a variety of germs(Listeria/Salmonella/VTEC).

### Features

- ✓ Premix type for qPCR – Ready to use
- ✓ High Specificity & Sensitivity
- ✓ Easy-to-use

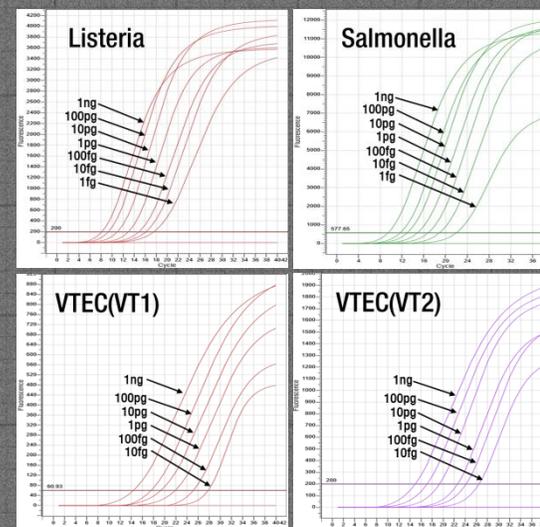
### Real-time PCR Kit

Product Name	CAT	Size
LiliF™ VTEC Real-time PCR Detection Kit	IP24736	50 tests
LiliF™ Salmonella Real-time PCR Detection Kit	IP24632	50 tests
LiliF™ Listeria Real-time PCR Detection Kit	IP24386	50 tests

### Items & Manual



### Results



Sensitivity

### Simple Protocol

Step. 1



Put water and sample!

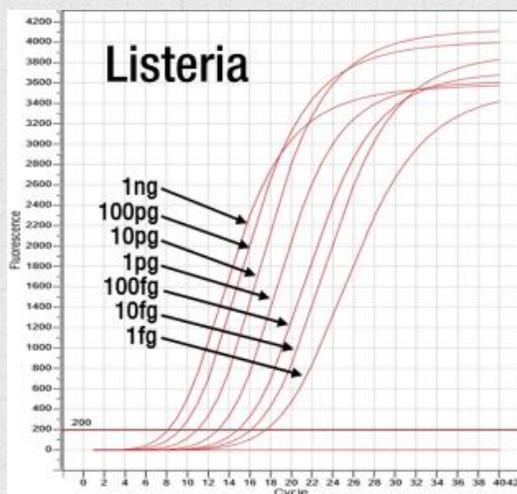
Step. 2



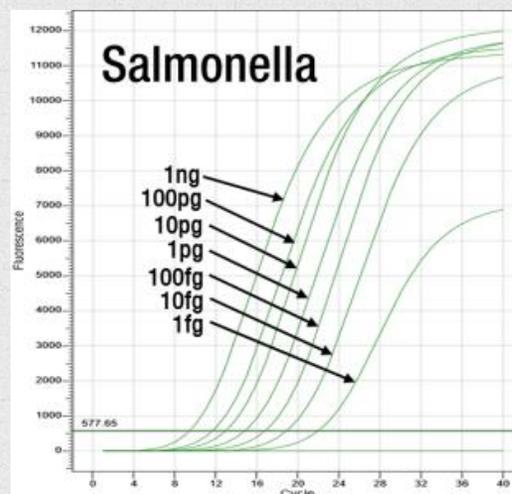
Running the instrument!

# Performance & Analytical Result

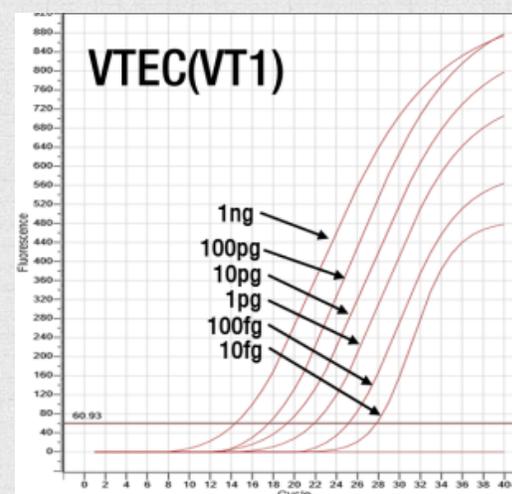
## Analytical Sensitivity



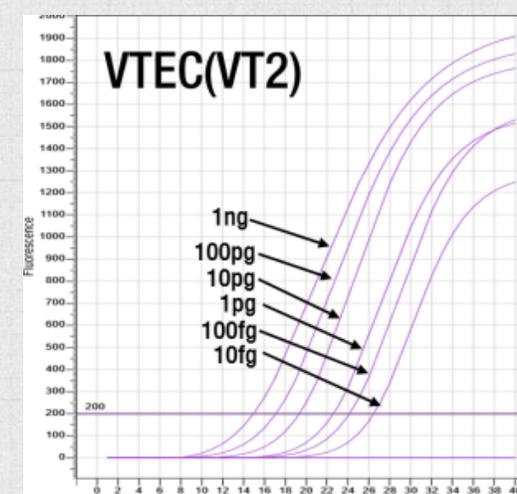
- Plasmid DNA containing hly gene in *Listeria monocytogenes* was extracted.
- Serial dilution of  $10^{-7}$  was performed and positive result was shown.



- Plasmid DNA containing the target gene (*invA* gene) in *Salmonella Typhimurium* was extracted.
- Serial dilution of  $10^{-7}$  was performed and positive result was shown.



- The gDNA was extracted from *E. coli* O157 enrichment culture.
- Serial dilution of  $10^{-7}$  was performed and positive result was shown. (Left: VT1, Right: VT2)



# iNtRON's Food System



## iNtRON Food System

Provided Total Food Safety System  
High Sensitivity / Ready to use / Reasonable price



## Food Diagnostics Business

We can supply our products as your request.

