

FoodNet Annual Reports show that *Salmonella* spp. is the first cause for foodborne diseases and one of the major causes for FDA & FSIS recalls. Therefore, most countries have implemented strict criteria for this pathogen monitoring.

In response to industry concerns, Pall GeneDisc Technologies provides an ideal solution for food processors in need of a reliable control of *Salmonella* spp. risk.

## GeneDisc System Benefits

**Rapid** — Accelerate the batch release of your short shelf life products and raw materials. While other methods such as immunoassays or culture methods require up to 3 days, the Pall GeneDisc method allows a detection of *Salmonella* in as fast as 10 hours.

**Easy to use** — GeneDisc solutions are designed for routine use. Implementing PCR (Polymerase Chain Reaction) has never been this easy.

**High throughput capability** — Process up to 96 samples DNA extractions simultaneously in less than one hour.

**Modular** — System modularity fits your throughput needs: up to 96 samples can be analyzed in a one hour PCR run.

## A Solution Designed For Food Industries

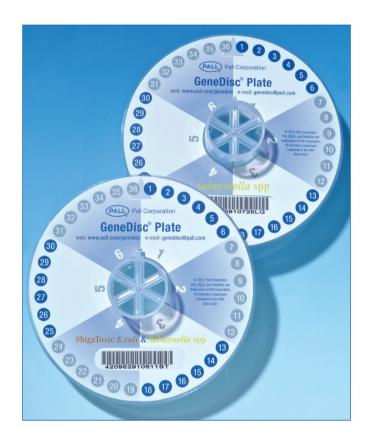
In line with MLG 4 and ISO 6579 – NF VALIDATION and AOAC certified method.

**Test multiple pathogens simultaneously –** Analysis with pathogenic *E. coli* O157 or STEC is available and does not require any additional hands-on time nor enrichment.

**Evaluate product rapidly –** Dedicated application enables industries to set a limit of detection range from 1 CFU/sample to 1 CFU/g with a time to result as little as 4 hours.

# GeneDisc® Technologies

For an easy, rapid and specific detection of *Salmonella* spp. in food



## Salmonella spp. Identification

Bacteria	Gram –, motile enterobacteria
Food Vehicle	Large variety of food especially dairy and egg products, poultry and beef cattle
Disease	Zoonosis (Salmonellosis)
Incidence of Cases (per 100,000 population)	15.29 (FoodNet, 2014)
Notification Rate (per 100,000 population)	23.4 (EFSA, ECDC, 2014)
Related Outbreaks	226 (strong evidence) (EFSA, ECDC, 2014) 154 (CDC, 2014)
Related Recalls	80 (FDA & FSIS, 2015)
Related Alerts / Information	516 (RASFF, 2015)



## **How the System Works**



### **Technical Information**

Enrichment Time	Down to 8 hours	
Sample Preparation Time	< 1 hour for 48 samples	
PCR Cycle Time	< 1 hour	
Total Turnaround Time	Down to 10 hours	
Hands On Time	About 30 minutes for 48 samples (<40 s/sample)	
Limit Of Detection	1 bacteria in 25 g of food sample	
Specificity	Wide range of strains tested for inclusivity and exclusivity	
Internal Positive Control Per Sample Analysis	Detects presence of inhibitors in each sample DNA extract	

### **Validations**

Validation	Matrix	Time to Result
AOAC	Raw ground beef / Raw beef trim	10 h
	Variety of food (including dairy products, poultry meat, seafood, eggs, vegetables, chocolate, pet food, sprouts) and environmental samples <sup>1</sup>	20 h
NF VALIDATION	Raw beef meat	10 h
	All human food and animal feed	20 h

<sup>&</sup>lt;sup>1</sup> Refer to AOAC certificate for more information

## **Ordering Information**

Part Number	Description	Samples/pack
	Equipment	
EGDCV3A	GeneDisc Cycler Base Unit	-
EGDSV3A	GeneDisc Cycler Sub Unit	-
EGDUL1A230 (EU) EGDUL1A120 (US)	GeneDisc Ultra-Lyser	-
	Consumables	
PF00D1100	Extraction Pack Food 1	100
GSLMSPP206006 GSLMSPP212006	GeneDisc Salmonella spp.	36 72
GECOSLM206006 GECOSLM212006	GeneDisc Pathogenic <i>E. coli</i> 0157 & <i>Salmonella</i> spp.	36 72
GSTECSL206006 GSTECSL212006	GeneDisc Shiga Toxic <i>E. coli*</i> & <i>Salmonella</i> spp.	36 72

<sup>\*</sup>Includes identification of pathogenic E. coli 0157

We also offer a full product range for pathogen detection in food and water and for spoilage organisms in beverage.

Quantitative tests for pathogens in water (*Legionella*, *E. coli*, *Enterococcus...*) are also available.

For more information including part numbers please contact us.











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