

LISTERIA SPECIES, LISTERIA MONOCYTOGENES & SALMONELLA DETECTION BY REAL TIME PCR

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What is real-time PCR?

PCR (Polymerase Chain Reaction) is a widely used molecular laboratory technique that amplifies number of copies of a targeted DNA template present in a sample.

A Real-Time PCR (rt PCR) allows to monitor the amplification of a target DNA in 'Real-Time' during the exponential phase meaning faster result delivery.

Closed-tube system of rt PCR and use of fluorescent dyes in product detection eliminates post-PCR processing, use of some harmful reagents and manual handling.

This technique guarantees high resolution, sensitivity and specificity to the target organism.

Rapid Detection Methods In Pathogen Testing

Bacteria are a common cause of foodborne illness and Salmonella, Listeria and Listeria monocytogenes are of a great importance in food monitoring processes.

It can take 3 to 5 days to obtain a result using traditional methods of detection so rapid techniques utilising several different approaches like enzyme immunoassays or molecular techniques are becoming the standard testing in food industry delivering results more quickly.

Why Use Real-Time PCR?

Symbio Real-Time PCR methods for detection of Salmonella, Listeria and Listeria monocytogenes provide reliable and fast results and offer advantages even over other rapid techniques widely used and established in food and environmental testing industry.

Benefits of rt PCR tests available at Symbio Laboratories, include:

FAST TURNAROUND TIME (24 HOURS)

rt PCR technique offers a great advantage of delivering the result next day for all negative and presumptive samples.

SUITABLE FOR HIGH VOLUME TESTING

HIGHLY SELECTIVE METHOD

Food and swabs samples containing background flora tend to have a higher occurrence of Presumptive Positive results in ELISA based technique.

Specific gene targeting in rt PCR is molecular based test and have no effect of cross reactive proteins and therefore reduces the cross incidence of Presumptive Positive readings.

COST EFFECTIVE

rt PCR is cheaper than other rapid alternatives available on the market and it is achieved by the nature of PCR testing and full automation.

APPLICABLE ON ALL FOOD AND ENVIRONMENTAL SAMPLES INCLUDING SWAB

ALL SALMONELLA, LISTERIA AND LISTERIA MONOCYTOGENES METHODS ARE NATA ACCREDITED

Method Information

- *Symbio Method M13.10 Detection of Listeria and Listeria monocytogenes by Real Time PCR*
- *Symbio Method M16.10 Detection of Salmonella by Real Time PCR*

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