

Rapid Pathogen Detection

- Rapid positive or negative results
- Easy integration
- *Salmonella* (AOAC-PTM), *Listeria* (AOAC-PTM), *L. monocytogenes* (AOAC-PTM), *E. coli* O157:H7 (AOAC-PTM), and *Campylobacter* (AOAC-PTM) assays now available





What is ANSR?

ANSR (Amplified Nucleic Single Temperature Reaction) utilizes patent-pending, unique amplification reaction technology for *in vitro* DNA amplification. Unlike PCR, ANSR is isothermal, replicating DNA at a constant temperature using a polymerase to exponentially amplify the DNA at 56°C.

ANSR's DNA amplification methodology exponentially amplifies the DNA of any target bacteria present in an enriched food sample to detectable levels in only minutes. Target nucleic acid is amplified through a mechanism of polymerization from the ends of nicks created in double-stranded DNA by the action of a specific endonuclease. Amplified target sequences are detected in real time using fluorescent molecular beacon probes.

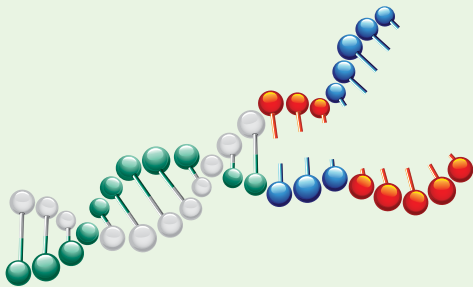


ANSR offers accurate and fast results

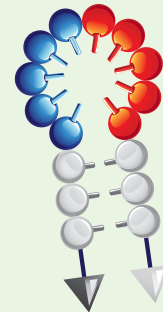
- Genetic level discrimination of specified pathogen targets
 - 10^4 cfu/mL in 10 minutes for *Salmonella* spp., *L. monocytogenes* and *E. coli* O157:H7
 - 10^2 cfu/mL in 18 minutes for *Listeria* spp. and *Campylobacter*
- Quick turnaround time with total time to results in 10–32 hours in both food and environmental samples
- Rapid *Salmonella* spp. confirmation method-AOAC OMA
 - 48 hours faster than traditional methods



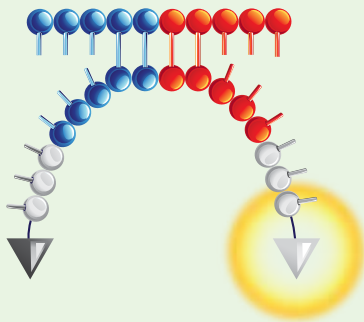
Isothermal DNA amplification and fluorescent detection



1. A special lysis reagent is added to the enrichment sample. Target pathogen DNA or RNA is released through the lysis step.



2. The lysed sample is added to ANSR reagents. A special primer targets specific regions of the pathogen DNA and starts amplification of the DNA, creating millions of copies in minutes.



3. The amplified segments of the pathogen DNA bind to special molecular beacons which then fluoresce and are detected by the ANSR reader.



4. Results will be reported in 10 minutes for *Salmonella*, *L. monocytogenes* and *E. coli* O157:H7, or 18 minutes for *Listeria* spp. and *Campylobacter*, and displayed as positive, negative or invalid.

Neogen's NeoSeek™ service offers unique genetic identification for positive samples

Coupled with its GeneSeek genomics operations, Neogen provides producers the products and services they need to enhance food safety and security inside and outside of the farm gate.

NeoSeek is a breakthrough pathogen detection and identification service that provides genomic-based serotype identification within 72 hours from suspected *Salmonella*-positive isolates and next day, DNA-specific test results for seven pathogenic Shiga toxin-producing *E. coli* strains (STECs).

Go to foodsafety.neogen.com/en/neoseek or contact Neogen for more information.

Ordering Information

Product No.	Description
9870	ANSR for <i>Salmonella</i> – up to 96 tests
9871	ANSR for <i>Listeria</i> – up to 96 tests
9824	ANSR for <i>Listeria monocytogenes</i> – up to 96 tests
9822	ANSR for <i>E. coli</i> O157:H7 – up to 96 tests
9872	ANSR for <i>Campylobacter</i> – up to 96 tests
9837	ANSR 2-Block Basic System (reader with computer, 2-block lysis system, 20–200 µL pipette, 100–1000 µL pipette and 8-channel pipette [10–100 µL])
9825	ANSR Basic System (reader, with computer, lysis system, 20–200 µL pipette, 100–1000 µL pipette and 8-channel pipette [10–100 µL])
9836	ANSR 2-Block Lysis System (2 lysis blocks, 2 heater blocks, 2 thermometers)
9811	ANSR for <i>Salmonella</i> Enrichment Broth 1 – for use with processed meat and processed foods with a moderate to high microbial load, 500 g
9812	ANSR for <i>Salmonella</i> Enrichment Broth 2 – for use with raw meat, poultry carcass rinses, and raw leafy greens and flours, 500 g
9813	ANSR for <i>Salmonella</i> Enrichment Broth 3 – for use with processed foods with a low microbial load and environmental samples, 500 g
9817	ANSR for <i>Salmonella</i> Enrichment Broth 3B – for use with pet food and pasteurized egg products, 500 g
9814	ANSR for <i>Listeria</i> Enrichment Broth 1, 500 g
9815	ANSR for <i>E. coli</i> Enrichment Broth, 500 g
9818	ANSR for <i>Campylobacter</i> Enrichment Broth, 500 g
7167A	Tryptic Soy Broth, modified with acid digest of casein, 500 g
9880	LESS Plus Media, 500 g
9790A	LESS Medium, 500 g
9494	Vortex, adjustable speed

ANSR is backed by our unmatched technical support and our years of experience in genomics and food safety diagnostics. Call today to learn more about this revolutionary technology.



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