

Environmental Data



Neogen ANSR™ for *Salmonella* is a sophisticated molecular amplification chemistry that sets a new standard in assay time to results. The chemistry is easy to perform and requires minimal sample handling steps. The extremely rapid kinetics of this isothermal amplification produces results in 10 minutes following lysis of an enriched sample. The robust chemistry is scalable from low-volume uses to high-throughput facilities.

Environmental Sample Enrichment Instructions

- Place the sponge or swab sample in a Stomacher-type bag or tube.
- Add an appropriate amount of BPWw pyruvate for the sample type (typically 100–200 mL for sponge samples and 10 mL for swab samples).
- Incubate the culture at $36 \pm 1^\circ\text{C}$ for **16–24 hours**.
- Transfer the lysis tubes containing sample and buffer to the 80°C heater block. Incubate **20 minutes**.
NOTE: Tubes may be held at 80°C for up to **60 minutes** if necessary for ease of workflow.

ANSR Test Procedure

Prior to starting the assay

- Preheat the lysis heater block to $80 \pm 2^\circ\text{C}$.
- a. If using the reader separately: Preheat the reader to $56 \pm 1^\circ\text{C}$.
- b. If using a computer: Start the ANSR software using the computer connected to the ANSR reader. The instrument will preheat to $56 \pm 1^\circ\text{C}$.

Assay procedure

- Add 50 μL enrichment culture to a 1.2 mL cluster tube in the rack provided.
- Add 450 μL lysis buffer to the tube.
- 1–3 minutes** before the end of the lysis step, preheat the ANSR reagents by placing the reagent strip tubes in the ANSR reader.
NOTE: A strip of tubes can be cut to provide the number of tubes needed.
- Remove the caps from the reagent strip tubes.
- Using an 8-channel pipettor, carefully transfer 50 μL of lysed sample to the prewarmed reagent strip tubes in the reader.
- Place the permanent caps on the strip tubes and close lid on reader.
- Click **Start** in the ANSR software to begin the assay.
- Results will be displayed as positive or negative in the ANSR software at the end of the assay (**10 minutes**). The software will also indicate if the internal positive control is valid. If the positive control is invalid, the test must be repeated.

TECHNICAL PRODUCT INFORMATION

ANSR for *Salmonella* Data Summary for AOAC Submission

Matrix	Inoc. strain	Level (cfu/portion)	N	ANSR results		BAM reference	χ^2 16 hr**
				Assay	Conf.		
Stainless Steel	<i>S. Heidelberg</i>	140/1,500*	20	20	20	8	16.7
		0	5	0	0	0	NA
Plastic	<i>S. Javiana</i>	210	30	12	12	13	0.07
		0	5	0	0	0	NA
Sealed Concrete	<i>S. Infantis</i>	21,700	20	11	11	16	2.78
		0	5	0	0	0	NA
Ceramic Tile	<i>S. Meleagridis</i>	110	30	19	19	24	2.02
		0	5	0	0	0	NA
Rubber	<i>S. Arizonae</i>	210	20	7	7	7	0.00
		0	5	0	0	0	NA
TOTALS			120	69	69	68	
			25	0	0	0	

* Co-inoculation with *S. Heidelberg* and competitor cocktail consisting of *E. coli*, *E. agglomerans*, and *B. subtilis*.

**Chi square indicates unpaired samples not different if value is under 3.84 at 95% confidence level.



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