

Veriflow™ *Salmonella* species (SS) - AOAC 011404

SCOPE

This method is applicable to:

- Raw ground beef and other foods¹

PRINCIPLES

Veriflow™ *Salmonella* species (SS) is a PCR assay combined with a rapid chromatographic vertical flowthrough system that provides specific and highly sensitive detection of *Salmonella* species. The system provides a rapid and easy-to-interpret results.

All samples identified as potentially positive for *Salmonella* using this test must be confirmed using AS 5013.10.

The detection of *Salmonella* spp. is broken down into following stages:

■ **Pre-enrichment in non-selective medium**

As per AS 5013.10. For meat and meat products a 1:10 dilution of the sample is enriched in buffered peptone water at $37 \pm 1^\circ\text{C}$ for $18 \text{ h} \pm 2 \text{ h}$. Buffered peptone water should be warmed to room temperature or to $37 \pm 1^\circ\text{C}$ for large volumes (i.e. >225 mL). For carcass sponges, buffered peptone water is added to the moistened sponge to bring the total volume to 60-100 ml and the sample incubated at $37 \pm 1^\circ\text{C}$ for $18 \text{ h} \pm 2 \text{ h}$. In the case of sponges BPW need not be warmed to room temperature before being used to re-hydrate the sponge, for all subsequent additions BPW should be warmed to room temperature

A positive control culture must be run through all procedures daily or when testing is carried out.

■ **Veriflow™ SS screening**

Salmonella species is screened in the sample following the manufacturer's recommended protocol². Veriflow™ *Salmonella* species is a PCR based test for qualitative detection of *Salmonella* spp. in selected foods and environmental samples. The assay combines PCR with chromatographic flowthrough system that provides a rapid and highly sensitive detection of target organisms.

■ **Confirmation**

All *Salmonella* positive samples should be confirmed using AS 5013.10. Confirmation must be carried out according to the manufacturer's instructions using AS 5013.10 as appropriate, if confirmation is carried out off-site then the 'pre-enrichment' broth (i.e. BPW) must be used.

¹ See the original method for enrichment medium and food types cover by this method

² The Invisible Sentinel, Inc, Veriflow™ *Salmonella* species (SS) protocol

CHECKLIST

Pre-enrichment	Is the BPW warmed to room temperature (to 37± 1°C for large quantities)?	_____
	Is the correct amount of enrichment broth used for the weight of sample analysed?	_____
	Is a positive control run with each batch of samples analysed?	_____
	Are reference cultures inoculated into primary enrichment broth at a level of 10 to 100 cells?	_____
	Is enrichment carried out at 37± 1°C for 18± 2h?	_____
Veriflow™ screening	Are the manufacturer's instructions available and are they reproduced in the laboratory manual?	_____
	Are kites stored at recommended conditions when not in use?	_____
Confirmation	Are all suspect <i>Salmonella</i> sent to a reference Laboratory (see AS 5013.10) to be serotyped?	_____
	BPW should be supplied to off-site laboratories for confirmation following AS 5013.10	_____
	If <i>Salmonella</i> confirmation is done in-house refer to AS 5013.10.	_____