



## VIDAS Immuno Concentration *Salmonella* (ICS) - AOAC 2001.09

### SCOPE

This method is applicable to:

- Raw meats, meat products and carcass swabs

### PRINCIPLES

VIDAS ICS is a fully automated system. It replaces selective enrichment with an immunological capture and specific release procedure. This method should be read with reference to VIDAS SLM (AOAC 996.08). The detection of *Salmonella* in samples can be broken down as follows:

- **Pre-enrichment in non-selective liquid medium (meat and meat products)**  
Sample is diluted in pre-warmed buffered peptone water and pre-enriched at  $37 \pm 1^\circ\text{C}$  for 18-24 h. Raw poultry samples are pre-enriched in BPW at  $41 \pm 1^\circ\text{C}$  for 18-24 h. 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 18-24 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.
- **Immuno-concentration**  
*Salmonella* is concentrated from pre-enrichment broth using the VIDAS ICS assay (following the manufacturer's instructions).
- **Post-enrichment**  
Within 30-minutes of the ICS assay the sample is enriched in ICS broth at  $41 \pm 1^\circ\text{C}$  for 5-6 h.
- **Immuno-screening assay**  
*Salmonella* is assayed using VIDAS *Salmonella* (SLM) by testing a portion of boiled ICS broth.
- **Cultural 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.

**CHECKLIST**

|   |   |       |
|---|---|-------|
| <b>Pre-enrichment</b>                           | Is the buffered peptone water (BPW) used for pre-enrichment?  | _____ |
|   | Is BPW warmed prior to use?   | _____ |
|   | 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 pre-enrichment done at $37 \pm 1^\circ\text{C}$ ( $41 \pm 1^\circ\text{C}$ for raw poultry) for 18-24 h? | _____ |
| <b>Post-Enrichment</b>                          | Are the manufacturer's instructions available?  | _____ |
|   | Is post-enrichment initiated within 30-minutes of capture?  | _____ |
|   | Is post-enrichment done at $41 \pm 1^\circ\text{C}$ for 5-6 h?  | _____ |
| <b>Immuno-screening</b>                         | Is the VIDAS SLM assay performed on boiled ICS broth?   | _____ |
|   | Are the manufacturer's instructions available and are they reproduced in the laboratory manual?             | _____ |
|   | Are kites stored at $2-8^\circ\text{C}$ when not in use?  | _____ |
| <b>Cultural confirmation</b><br>(if applicable) | Is <i>Salmonella</i> confirmed from pre-enrichment broth (if other, give details)?                          | _____ |
|   | Are <i>Salmonella</i> confirmed using AS 5013.10 (with appropriate selective agar plates)?                  | _____ |
|   | If an external laboratory is used is it department approved?  | _____ |
|   | BPW should be supplied to off-site laboratories for confirmation following AS 5013.10                       | _____ |