

VIDAS®UP Salmonella (SPT) – AOAC 2013.01 (or AOAC 071101)

SCOPE

This method is applicable to:

Raw meats, meat products and carcass swabs.

PRINCIPLES

Detection of *Salmonella* is based on enzyme-linked fluorescent immunoassay using a novel recombinant phage protein-based technology for used with the automated VIDAS instrument. The detection protocol can be broken down as follows:

Enrichment

Sample (25 g) is enriched in pre-warmed (room temperature or 42 \pm 1°C for large volumes) 225 mL buffered peptone water (BPW) supplemented with <code>Salmonella</code> supplement (1 mL/225 mL, or 400 μ L/100 mL) and incubated at 42 \pm 1°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 42 \pm 1°C for 18 - 24 h. In the case of sponges BPW need not be warmed to room temperature before being used to rehydrate the sponge, for all subsequent additions BPW should be warmed to room temperature.

For 375g sample weights 1125 mL buffered peptone water pre-warmed at $42 \pm 1^{\circ}$ C is added to 375g sample and then 5 mL *Salmonella* supplement is added. The bag is then incubated at $42 \pm 1^{\circ}$ C for 22-26 hours.

Enzyme immunoassay

VIDAS SPT test is performed using a portion of boiled post-enrichment broth. The assay is automated and carried out in the VIDAS instrument following the manufacturer's instructions.

Cultural confirmation

All *Salmonella* positive samples should be confirmed using enrichment broth following AS 5013.10. Confirmation carried out at an 'off-site' laboratory must be from retained BPW enrichment.

CHECKLIST

Is BPW + Salmonella Supplement used for enrichment? Is BPW warmed prior to use (room temperature or 42°C)? Is the correct amount of Salmonella supplement added to BPW? Is the supplement homogenized prior to sampling?
or 42°C)? Is the correct amount of <i>Salmonella</i> supplement added to BPW? Is the supplement homogenized prior to
added to BPW? Is the supplement homogenized prior to
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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 42 ± 1°C for 18 - 24h or 22-26 hours in the case of 375g samples?
Enzyme Are the manufacturer's instructions available?
Are kits stored at 2-8 °C when not in use?
Cultural Is Salmonella confirmed from BPW?
(if applicable) If an external laboratory is used is it department approved?
Is BPW supplied to off-site laboratories for confirmation following AS 5013.10?
Is Salmonella confirmed using AS 5013.10 (with appropriate selective agar plates)?