SALMONELLA SPECIES (COLORIMETRIC POLYCLONAL IMMUNOASSAY)

PRINCIPLE

Detection of *Salmonella* antigens is based on enzyme immunoassay using highly purified antibodies prepared from antigens unique to *Salmonella*. The presence of *Salmonella* antigen in the sample is indicated by a colorimetric reaction.

SCOPE

The method is applicable to starches, sugars, syrups and most coproducts of the corn wet milling industry.

APPARATUS

Colorimetric Polyclonal Immunoassay Kit.

PROCEDURE

A. Pre-Enrichment of sample:

Weigh 25 gm of sample into a 500 mL flask containing 225 mL of sterile Lactose Broth (1000 mL flask and 450 mL Lactose for a pre-gelatinized starch). Shake the contents until thoroughly dispersed. Let stand at room temperature for 60 mins. Mix well by swirling and determine pH with test paper. Adjust pH, if necessary, to 6.6 to 7.0 with sterile 1*N* NaOH or HC1. Mix well, and determine final pH. Loosen cap, and incubate at 35-37°C for 18-22 hrs.

B. Selective Enrichments:

Pipet 1.0 mL from pre-enrichment into two tubes containing, respectively, 9.0 mL of Selenite-Cystine Broth and Tetrathionate Broth, mix and incubate at 35-37°C for 6-8 hrs.

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C. Post-Enrichments:

Pipet 1.0 mL from each selective enrichment, separately, into tubes containing 9.0 mL of M-broth (Difco), mix and incubate at 35-37°C for 16-20 hrs.

D. Proceed according to manufacturer's directions.

REFERENCES

1. FDA Bacteriological Analytical Manual (BAM) 8th Edition, www.cfsan.**fda**.gov/~e**bam**/**bam**-toc.html.

2. Association of Official Analytical Chemistry, www.aoac.org.