

ISO 10273:2017-03 (E)

Microbiology of the food chain - Horizontal method for the detection of pathogenic *Yersinia enterocolitica*

Contents		Page
Foreword		v
Introduction		vii
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Abbreviated terms	2
5	Principle	2
5.1	General	2
5.2	Direct plating from liquid enrichment medium	2
5.3	Enrichment in liquid enrichment medium and selective liquid enrichment medium	2
5.4	Plating out after enrichment and identification	2
5.5	Confirmation	3
6	Culture media and reagents	3
7	Equipment and consumables	3
8	Sampling	3
9	Preparation of test sample	4
10	Procedure (as shown in Annex A)	4
10.1	Test portion and initial suspension	4
10.2	Direct plating on selective agar	4
10.3	Enrichment	5
10.4	Plating out and incubation of plates	5
10.4.1	Plating from PSB and ITC by KOH treatment on CIN agar	5
10.4.2	Plating from PSB and ITC by KOH treatment on chromogenic agar (optional)	5
10.5	Identification of characteristic colonies	5
10.6	Confirmation	6
10.6.1	General	6
10.6.2	Selection of colonies for confirmation	6
10.6.3	Determination of pathogenic <i>Yersinia</i> species	6
10.6.4	Confirmation of pathogenic <i>Y. enterocolitica</i>	8
10.6.5	Interpretation of confirmation tests for <i>Y. enterocolitica</i>	10
10.6.6	Interpretation of confirmation tests for pathogenic <i>Y. enterocolitica</i>	10
10.7	Biotyping of <i>Y. enterocolitica</i> (optional)	10
10.7.1	General	10
10.7.2	Fermentation of xylose	11
10.7.3	Tween-esterase test	11
10.7.4	Fermentation of salicin (optional) and trehalose	11
10.7.5	Indole formation	11
10.7.6	Interpretation of biotyping tests	11
11	Expression of results	12

12	Performance characteristics of the method	12
12.1	Interlaboratory study	12
12.2	Sensitivity	12
12.3	Specificity	12
12.4	LOD50	12
13	Test report	12
14	Quality assurance	13
Annex A (normative)	Diagrams of the procedures	14
Annex B (normative)	Composition and preparation of culture media and reagents	17
Annex C (informative)	Method validation studies and performance characteristics	32
Annex D (informative)	Procedure for cold enrichment	34
Bibliography		39