



## HiCrome™ Yersinia Agar Base

M2025

### Intended Use

Recommended for detection and isolation of pathogenic *Yersinia enterocolitica* from clinical specimens and food samples.

### Composition\*\*

Ingredients	Gms / Litre
Peptone mix	24.240
Selective mix	7.740
Chromogenic mixture	10.450
Growth factor	3.000
Agar	12.500
Final pH ( at 25°C)	7.4±0.2

\*\*Formula adjusted, standardized to suit performance parameters

### Directions

Suspend 57.93 grams in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45 - 50°C and aseptically add reconstituted contents of 1 vial of Yersinia Selective Supplement (FD034). Mix well before pouring into sterile Petri plates.

### Principle And Interpretation

*Yersinia enterocolitica* is widely distributed in lakes and reservoirs. Epizootic outbreaks of diarrhea, lymphadenopathy, pneumonia and spontaneous abortions occur in various animals. It is the most common species of *Yersinia* recovered from clinical specimens. *Y. enterocolitica* is biochemically more active at room temperature than at 37°C. Yersinia Selective Agar Base with added Yersinia Selective Supplement is used to isolate *Y. enterocolitica* from clinical and food samples. Yersinia Selective Agar Base is recommended for selective isolation of *Yersinia* (1,2) with modification of chromogenic identification.

Peptone mix and growth factor provides nitrogen and carbon source, long chain amino acids, vitamins and other essential growth nutrients. The medium is selective due to the presence of selective mix, which inhibit gram-positive and a number of gram-negative bacteria. Addition of antibiotic supplement makes it highly selective for *Yersinia*. thus imparting additional selectivity. One of the chromogen is split by *Yersinia* species and results in purple coloured colonies. Other organisms are either inhibited or results in colourless colonies. For the isolation of *Y. enterocolitica* by direct plating and pour plating, inoculate the specimen directly onto the medium. Incubate at 22-32°C for 24-48 hours or suspend the sample (food, faeces, etc.) in sterile Phosphate Buffer Saline and incubate for upto 21 days (4) at 4°C.

### Type of specimen

Clinical samples - Blood; ; Food samples; Water samples

### Specimen Collection and Handling:

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (5,6).

For food samples, follow appropriate techniques for sample collection and processing as per guidelines (7).

For water samples, follow appropriate techniques for sample collection, processing as per guidelines and local standards(8).

After use, contaminated materials must be sterilized by autoclaving before discarding.

### Warning and Precautions :

In Vitro diagnostic Use only. Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/ face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets

## Limitations :

Due to variable nutritional requirements, some strains show poor growth on this medium.

## Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

## Quality Control

### Appearance

Light yellow to greenish yellow homogeneous free flowing powder.

### Gelling

Firm, comparable with 1.25% Agar gel.

### Colour and Clarity of prepared medium

Reddish purple coloured clear to slightly opalescent gel forms in Petri plates.

### Reaction

Reaction of 5.8% w/v aqueous solution at 25°C. pH : 7.4±0.2

### pH

7.20-7.60

## Cultural Response

Cultural characteristics observed with added Yesinia Selective Supplement (FD034) after an incubation at 22-32°C for 24-48 hours.

Organism	Inoculum (CFU)	Growth	Recovery	Colour of colony
<i>Escherichia coli</i> O157:H7 (NCTC 12900)	≥10 <sup>3</sup>	inhibited	0%	
<i>Salmonella</i> Typhimurium ATCC 14028 (00031*)	≥10 <sup>3</sup>	inhibited	0%	
<i>Listeria monocytogenes</i> ATCC 19112	≥10 <sup>3</sup>	inhibited	0%	
<i>Campylobacter jejuni</i> ATCC 29428	≥10 <sup>3</sup>	inhibited	0%	
<i>Yersinia enterocolitica</i> ATCC 27729	50-100	good-luxuriant	≥50%	Purple
<i>Escherichia coli</i> ATCC 25922 (00013*)	≥10 <sup>3</sup>	inhibited	0%	
<i>Enterococcus faecalis</i> ATCC (00087*)	≥10 <sup>3</sup>	inhibited	0%	

Key : \*Corresponding WDCM numbers.

## Storage and Shelf Life

Store dehydrated powder and the prepared medium at 2-8° C in tightly closed container. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition Seal the container tightly after use.

Product performance is best if used within stated expiry period.

## Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (5,6).

## Reference

1. Schiemann D. A., 1979, Can. J. Microbiol., 25: 1298.
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7. Downes F. P. and Ito K., (Ed.), 2001, Compendium of Methods for the Microbiological Examination of Foods, 4th Ed., American Public Health Association, Washington, D.C.
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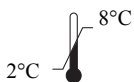
Revision : 00/ 2016



In vitro diagnostic medical device



CE Marking



Storage temperature



Do not use if package is damaged



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