

CYSTINE HEART AGAR

Medium for cultivating *Francisella tularensis* and gram-negative cocci

| TYPICAL FORMULA | (g/l) |
|---------------------------------|-------|
| Beef Heart, infusion from 500 g | 10.0 |
| Proteose Peptone | 10.0 |
| Dextrose | 10.0 |
| Sodium Chloride | 5.0 |
| L-Cystine | 1.0 |
| Agar | 15.0 |
| Final pH 6.8 ± 0.2 at 25°C | |

DESCRIPTION

CYSTINE HEART AGAR is a medium used with hemoglobin enrichment for cultivating *Francisella tularensis* and without enrichment for cultivating gram-negative cocci

PRINCIPLE

Infusion from beef heart, proteose peptone and L-cystine provide nitrogen, vitamins and amino acids. Dextrose is a carbon source. Sodium chloride maintains the osmotic balance of the medium and agar is the solidifying agent. The introduction of a 2% hemoglobin solution makes the medium suitable for cultivating *Francisella tularensis*.

PREPARATION

Unenriched medium

Suspend 51 g of powder in 1 liter of distilled water. Heat until completely dissolved. Autoclave at 121°C for 15 minutes. Cool to 45-50°C. Dispense in petri dishes.

Enriched medium

Suspend 10.2 g of powder in 100 ml of distilled water. Heat until completely dissolved. Autoclave at 121°C for 15 minutes. Cool to 45-50°C. Add 100 ml sterile 2% hemoglobin solution and mix well. Dispense in petri dishes.

TECHNIQUE

Inoculate and streak specimens as soon as possible.

INTERPRETATION OF RESULTS

Refer to appropriate references and procedures for results.

STORAGE

The powder is very hygroscopic, store the powder at 10-30°C, in a dry environment, in its original container tightly closed and use it before the expiry date on the label or until signs of deterioration or contamination are evident. Store prepared plates at 2-8°C away from light.

WARNING AND PRECAUTIONS

The product does not contain hazardous substances in concentrations exceeding the limits set by current legislation and therefore is not classified as dangerous. It is nevertheless recommended to consult the safety data sheet for its correct use. The product is intended for *in vitro* diagnostic use only and must be used by properly trained operators.

DISPOSAL OF WASTE

Disposal of waste must be carried out according to national and local regulations in force.

REFERENCES

1. Wong and Shapiro (1999) In Murray, Baron, Pfaller, Tenover and Tenover (ed.), Manual of clinical microbiology, 7th ed. American Society for Microbiology, Washington, D.C.
2. Francis (1928) JAMA 91:1155.
3. Shaw (1930) Zentr. Bakt. I. Abt. Orig. 118:216.
4. Rhamy (1933) Am. J. Clin. Pathol. 3:121.
5. Isenberg (ed.) (1992) Clinical microbiology procedures handbook, vol.1 American Society for Microbiology, Washington, D.C.
6. U.S. Public Health Service, Centers for Disease Control Prevention and National Institutes Health (2007) Biosafety in microbiological laboratories, 5th ed. HHS publication No. (CDC) 93-8395. U.S. Government Printing Office, Washington, D.C.



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PRODUCT SPECIFICATIONS

NAME

CYSTINE HEART AGAR

PRESENTATION

Dehydrated medium

STORAGE

10-30°C

PACKAGE

| Ref. | Content | Packaging |
|--------|---------|-----------------------------------|
| 610506 | 500 g | 500 g of powder in plastic bottle |

pH OF THE MEDIUM

6.8 ± 0.2

USE

CYSTINE HEART AGAR is a medium used with hemoglobin enrichment for cultivating *Francisella tularensis* and without enrichment for cultivating gram-negative cocci

TECHNIQUE

Refer to technical sheet of the product

APPEARANCE OF THE MEDIUM

Dehydrated medium

Appearance: free-flowing, homogeneous

Colour: beige

Prepared medium

Appearance: slightly opalescent, may have a fine precipitate

Colour: light to medium amber, chocolate with hemoglobin

SHELF LIFE










4 years

QUALITY CONTROL

- Control of general characteristics, label and print
- Microbiological control
Inoculum for productivity: 10-100 CFU/ml
Inoculum for selectivity: 10⁴-10⁵ CFU/ml
Inoculum for specificity: ≤10⁴ CFU/ml
Incubation conditions: 18-24 h at 36 ± 1°C

| Microorganism | ATCC | Recovery W/O Hemoglobin | Recovery With Hemoglobin |
|---------------------------------|-------|-------------------------|--------------------------|
| <i>Francisella tularensis</i> | 29684 | N/A | Good |
| <i>Neisseria meningitidis</i> | 13090 | Good | Good |
| <i>Staphylococcus aureus</i> | 25923 | Good | Good |
| <i>Streptococcus pneumoniae</i> | 6303 | Good | Good |

TABLE OF SYMBOLS

| | | | | |
|--|---|---|---|---|
|  Batch code |  <i>In vitro</i> Diagnostic Medical Device |  Manufacturer |  Use by |  Keep away from heat sources |
|  Catalogue number |  Temperature limitation |  Contains sufficient for <n> tests |  Consult instruction for use | |



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