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Microbiology

Clostridium perfringens Selective Supplement

Contents: 10 vials (lyophilisate) for the preparation of 5.0 l TSC-Agar

Principle

D-Cycloserine inhibits the accompanying bacterial flora and causes the colonies which develop to remain smaller. It also reduces a diffuse and thus disturbing blackening around the Clostridium perfringens colonies. 4-Methylumbelliferyl-phosphate (**MUP**) is a fluorogenic substrate for the alkaline and acid phosphatase. The acid phosphatase is a high specific indicator for Clostridium perfringens. The acid phosphatase splits the fluorogenic substrate MUP forming 4-methylumbelliferone which can be identified as it fluorescence in long wave UV-light. Thus a strong suggestion for the presence of Clostridium perfringens can be obtained.

Composition per vial

200 mg D-Cycloserine

50 mg 4-Methylumbelliferylphosphate Disodium salt

Preparation

Add 3 ml of sterile demin. water to 1 vial and dissolve the mixture. To prepare 500 ml of TSC agar add the dissolved mixture to the sterile culture medium base cooled to a temperature of 50 °C. Mix homogeneously the supplement into the culture medium solution by carefully swirling.

Experimental Procedure and Evaluation

Inoculate by the pour-plate technique only.

Incubation: 18–24 hours at 37 °C or 44 °C under anaerobic conditions (e.g. Anaerocult® A or Anaerocult® P, Merck Cat. no. 1.13829.0001 and 1.13807.0001). Fluorescence can be detected with an UV lamp, Merck Cat. no. 1.13203.; light blue fluorescent colonies denote Clostridium perfringens.

Ordering information

Cat. no.

1.11972.0500

Pack-Size

TSC Agar (Base) 500 g

Version: 2009-07-03

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