

UPUTSTVO ZA UPOTREBU

(SRB)

HiVeg MacConkey Agar Plate

Podloga za izolaciju i oporavak Enterobacteriaceae i odgovarajućih enteričnih Gram-negativnih bacila.

Sadržaj pakovanja:

| Šifra artikla (pakovanja) REF | Opis | Šifra primarnog pakovanja: | Broj podloga |
|-------------------------------|--|----------------------------|--------------|
| PRV081V20 | Podloga izlivena u petri posudama od Ø90 | PRV081 | 20 |
| PRV081V60 | | | 60 |
| PRV081V240 | | | 240 |
| PRV081M40 | Podloga izlivena u petri posudama od Ø50 | | 40 |

Uputstva

Pod aseptičnim uslovima inkulirati ploču metodom površinskog zasejavanja. Nakon inkubacije posmatrati rast i boju kolonija.

Princip i interpretacija

Ova podloga je pripremljena korišćenjem biljnog umesto životinjskog peptona što je čini podlogom bez rizika od BSE/TSE. HiVeg MacConkey Agar je modifikacija MacConkey Agara koji je najranija selektivna i diferencijalna podloga za kultivaciju enteričnih mikroorganizama iz različitih kliničkih uzoraka (7,8). HiVeg MacConkey Agar se kao i konvekcionalne podloge preporučuju za upotrebu u mikrobiološkom ispitivanju prehrabnenih proizvoda (9) i za direktnu inkulaciju uzorka vode u cilju određivanje broja koliforma (10,14). Podloga sadrži proteine, sintetičke deterdžente, natrijum hlorid i dve boje. Selektivnost ove podloge se pripisuje kristal ljubičastom i sintetičkom deterdžentu koji su inhibitori za većinu vrsta Gram-pozitivnih bakterija. Gram-negativne bakterije obično rastu dobro na podlozi i razlikuju se po svojoj sposobnosti fermentacije lakoze. Lakoza-fermentativni sojevi rastu kao crvene ili roze kolonije. Crvena boja je posledica proizvodnje kiseline iz lakoze, apsorpcije od strane neutralno crvenog i naknadne promene boje kada vrednost pH podloge padne ispod 6,8. Lakoza-nefermentativni organizmi kao što su *Shigella* spp. i *Salmonella* spp. daju bezbojne i transparentne kolonije koje i obično ne menjaju izgled podloge. *Yersinia enterocolitica* može dati male, lakoza-nefermentirajuće kolonije nakon inkubacije na sobnoj temperaturi. *Klebsiella* spp. su koliformne bakterije prisutne u distributivnim sistemima za vodosnabdevanje i često predstavljaju glavnu komponentu u otpadu industrije papira, tekstila i dr. Normalna koliformna mikrobiota fecesa ljudi i toplokrvnih životinja može da sadrži 30-40% *Klebsiella* spp. Iz ove populacije patogeni sojevi *Klebsiella* se uzročnici oko 4% bakterijskih pneumonija i 18% infekcija urinarnog trakta.

Kontrola kvaliteta

Podaci i rezultati kontrole kvaliteta dati su u sertifikatu analize za svaku seriju.

Skladištenje i rok upotrebe

Čuvati između 15-25°C. Nakon prvog otvaranja čuvati na 2-8°C. Upotrebiti pre isteka datuma označenog na nalepnici.

Mere predostrožnosti

Ovaj proizvod ne sadrži hazardne supstance u koncentracijama koje su iznad propisanih limita određenih važećim zakonskim regulativama i zato nije klasifikovan kao opasan. Ipak, preporučeno je slediti smernice iz bezbednosnog lista za pravilnu upotrebu. Ovaj proizvod je namenjen isključivo za upotrebu u laboratorijskim uslovima, od strane profesionalno obučene osobe.

Proizvod ne upotrebljavati ukoliko je primarno pakovanje oštećeno ili proizvod ne odgovara navedenim karakteristikama.

Odlaganje otpada

Odlaganje otpada mora biti u skladu sa nacionalnim i lokalnim regulativama koje su na snazi. Svaka laboratorija je odgovorna za rukovanje i odlaganje otpada koji nastaje u toku rada.

Upotrebljeni simboli

| | | | |
|---------------|--|------------|---------------------|
| CE | Evropski znak usaglašenosti | | Držati uspravno |
| IVD | In vitro dijagnostičko medicinsko sredstvo | | Kataloški broj |
| | Ne izlagati direktno sunčevim zracima | LOT | Lot broj |
| | Konsultovati uputstvo za upotrebu | | Rok upotebe |
| | Ne koristiti više puta | | Temperatura čuvanja |
| | Veličina pakovanja | | Proizvođač |
| EC REP | Ovlašćeni predstavnik u Evropskoj uniji | | |

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| EC REP | Salus Cons kft. 6722 Szeged, Bécsi krt 23, HUNGARY e-mail: office@saluscons.com |
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Literatura

- Greenberg A. E., Trussell R. R. and Clesceri L. S. (Eds.), Standard Methods for the Examination of Water and Wastewater, 1985, 16th ed., A.P.H.A., Washington, D.C.
- Rappaport F. and Henigh E., 1952, J. Clin. Path., 5:361.
- International Organization for Standardization (ISO), 1990, Draft ISO/DIS 9308-2.
- Harrigan W.F. and McCance M.E. (Eds.), 1976, Laboratory Methods in Food and Dairy Microbiology, Academic Press, London.
- Holt, Harris and Teague, 1916, J. Infect. Dis., 18:596.
- MacConkey, 1900, The Lancet, ii:20.
- MacConkey, 1905, J. Hyg., 5:333.
- Speck M. (Ed.), 1985, Compendium of Methods for the Microbiological Examination of Foods, 2nd ed., APHA, Washington, D.C.
- Greenberg A. E., Clesceri L. S. and Eaton A. D., (Eds.), 1992, Standard Methods for the Examination of Water and Wastewater, 18th ed., APHA, Washington, D.C.
- Marshall R. (Ed.), 1992, Standard Methods For the Examination of Dairy Products, 16th ed., APHA, Washington, D.C.
- Karmali M.A., Petric M., Lim C., et al, 1985, J. Infect. Dis., 151:775.
- Lior H. and Borczyk A., 1987, Lancet, i:333.
- MacFaddin J., 1985, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol. I, Williams and Wilkins, Baltimore.

Broj rešenja o registraciji: 515-02-02534-22-003

INSTRUCTION FOR USE

(EN)

HiVeg MacConkey Agar Plate

Medium is recommended for the isolation and recovery Enterobacteriaceae and related enteric Gram-negative bacilli.

Package contents:

| Item code (packaging) REF | Description | Primary packaging code: | Number of products |
|------------------------------|---|-------------------------------|-----------------------|
| PRV081V20 | Substrate poured into petri dishes of ø90 | PRV081 | 20 |
| PRV081V60 | | | 60 |
| PRV081V240 | | | 240 |
| PRV081M40 | | | 40 |

Directions

Surface spread the test inoculum aseptically on the plate. After incubation, observe growth and color of colonies.

Principle and interpretation

These media is prepared by using vegetable peptone in place of animal based peptones which makes the medium free of BSE/TSE risks. MacConkey HiVeg Agar is the modification of MacConkey Agar which is the earliest selective and differential medium for cultivation of enteric microorganisms from a variety of clinical specimens (7, 8). HiVeg MacConkey Agar like the conventional medium have been recommended for use in microbiological examination of food samples (9) and for direct plating/inoculation of water samples for coliform counts (10, 14). Medium contains protein, synthetic detergents, sodium chloride and two dyes. The selective action of this medium is attributed to crystal violet and synthetic detergents, which are inhibitory to most species of Gram-positive bacteria. Gram-negative bacteria usually grow well on the medium and are differentiated by their ability to ferment lactose. Lactose fermenting strains grow as red or pink coloured colonies. The red colour is due to production of acid from lactose, absorption of neutral red and a subsequent colour change of the dye when the pH of medium falls below 6,8. Lactose non-fermenting strains, such as Shigella sp. and Salmonella sp. are colourless and transparent and typically do not alter appearance of the medium. Yersinia enterocolitica may appear as small, non-lactose fermenting colonies after incubation at room temperature. Klebsiella species are associated with coliforms in water supply distribution systems and are often present as a major component in industrial wastes of paper mill, textile and other industries. The normal coliform population in human and other warm blooded animal faeces may contain 30 to 40% Klebsiella strains. Out of this population 4% are of bacterial pneumonia cases and 18% of urinary tract.

Quality control

The data and results of quality control are given in the certificate of analysis for each lot.

Storage and shelf life

Storage between 15-25°C. After opening storage between 2-8°C. Use before expiry date on the label.

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.

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.

Symbols used on labels

| | | | |
|---|--|---|-------------------|
| CE | European Conformity mark |  | This side up |
| IVD | is an in vitro diagnostic medical device (IVD) | REF | Catalogue number |
|  | Do not expose directly to sunlight | LOT | Batch code |
|  | Consult instructions for use |  | Use-by date |
|  | Do not re-use |  | Temperature limit |
|  | Pack size |  | Manufacturer |
| EC REP | European Authorized Representative (Authorised Representative) | | |

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