

UPUTSTVO ZA UPOTREBU (SRB)

Dichloran Rose Bengal Chloramphenicol Agar Plate

Podloga za selektivnu izolaciju i identifikaciju gljivica-kvasaca i plesni u pokvarenoj hrani

Sadržaj pakovanja:

Šifra artikla (pakovanja)	Opis	Šifra primarnog pakovanja:	Broj podloga
PRM1881V20	Podloga izlivena u petri posudama od ø90	PRM1881	20
PRM1881V60			60
PRM1881V240			240
PRM1881M40	Podloga izlivena u petri posudama od ø50		40

Uputstva

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

Princip i interpretacija

Dihloran rose bengal hloramfenikol agar (DRBC agar) formulisali su po King i gr.aut. (1) i preporučuje se za selektivnu izolaciju kvasaca i plesni prvenstveno u iz uzoraka namirnica.

Ovaj medijum je modifikacija Rose bengal hloramfenikol agara koji u svom sastavu ima dihloran.

Peptinski hidrolizat životinjskog tkiva je izvor azota, vitamina i mineral. Dekstroza je izvor ugljenih hidrata, fosfati puferuju medijum. Magnezijum sulfat obezbeđuje dvovalentne katjone i sulfate. Dihloran je antifungalni agens, dodat medijumu smanjuje dijаметar kolonija gljivica koje rastu. Rose Bengal pokazuje poboljšanu inhibitornu aktivnost na pH 5.6 i zbog toga je konačni pH medijuma smanjen na 5.6 u cilju inhibicije širenja gljivica (1). Prisustvo rose bengal indikatora u medijumu suprimira rast bakterija i smanjuje veličinu i visinu kolonija gljivica koje brže rastu. Hloramfenikol je uključen da suzbije porast bakterija koje su prisutne u uzorcima namirnica. Inhibicijom rasta bakterija i suzbijanjem širenja kolonija gljivica koje brže rastu, omogućena je izolacija kolonija gljivica koje sporije rastu koje time što nisu prekrivene brže rastućim vrstama.. Dodatno, kolonije gljivica i plesni iskorišćavaju rose bengal, što olakšava jasno prepoznavanje i određivanje broja.

Ovaj medijum ne bi trebalo izlagati direktnoj svetlosti s obzirom da rose Bengal podleže foto-degradaciji koja dovodi do nastanka produkata koji su toksični za gljivice (2,3).

Kontrola kvaliteta

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

Skladištenje i rok upotrebe

Čuvati između 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

	Držati uspravno		Kataloški broj
	Ne izlagati direktno sunčevim zracima		Lot broj
	Konsultovati uputstvo za upotrebu		Rok upotebe
	Ne koristiti više puta		Temperatura čuvanja
	Veličina pakovanja		Proizvođač

Literatura

- King D.A. Jr., Hocking A.D. and Pitt J.I., 1979, J. Appl. Environ. Microbiol., 37:959.
- Sharp A.N. and Jackson A.K., 1972, J. Appl. Bact., 24:175.
- U.S. Food and Drug Administration, 1995, Bacteriological Analytical Manual, 8th Ed., AOAC International, Gaithersburg, Md.

INSTRUCTION FOR USE

(EN)

Dichloran Rose Bengal Chloramphenicol Agar Plate

Recommended for selective isolation of fungi-yeasts and moulds of significance in food spoilage. The composition and performance criteria are in accordance with ISO 21527-1:2008

Package contents:

Item code (packaging) REF	Description	Primary packaging code:	Number of products
PRM1881V20	Substrate poured into petri dishes of ø90	PRM1881	20
PRM1881V60			60
PRM1881V240			240
PRM1881M40	Substrate poured into petri dishes of ø50		40

Directions

Either streak, inoculate or surface spread the test inoculum aseptically on the plate. After incubation, observe growth and color of colonies.

Principle And Interpretation

Dichloran Rose Bengal Chloramphenicol Agar (DRBC Agar) is formulated by as described by King et.al (4) and is recommended for selective isolation of yeasts and moulds especially in food samples. It is recommended by ISO (5).

This medium is a modification of Rose Bengal Chloramphenicol Agar which additionally contains dichloran.

Peptone provides nitrogenous compounds, carbon, long chain amino acids, vitamins and other essential growth nutrients. Dextrose (Glucose) is a carbohydrate source. Phosphate buffers the medium. Magnesium sulphate provides divalent cations and sulphate. Dichloran is an antifungal agent, added to the medium to reduce colony diameters of spreading fungi. Rose Bengal exhibits an improved inhibitory activity at pH 5.6 and hence the final pH of the medium is maintained at 5.6 for the inhibition of spreading fungi (4). The presence of Rose Bengal in the medium suppresses the growth of bacteria and restricts the size and colonies of the more rapidly growing moulds. Chloramphenicol is included to inhibit the growth of bacteria present in environmental and food samples. Inhibition of growth of bacteria and restriction of spreading of more-rapidly growing moulds aids in the isolation of slow-growing fungi by preventing their overgrowth by more-rapidly growing species.

Additionally Rose Bengal is taken by yeast and moulds colonies, which allows these colonies to be easily recognized and enumerated.

This medium should not be exposed to direct light as Rose Bengal undergoes photo-degradation leading to formation of toxic chemicals for fungi (6,7).

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 2-8°C . Use before expiry date on the label.

Warning and precautions











This product does not contain hazardous substances in concentrations that are above the prescribed limits set by applicable legislation and are therefore is not classified as hazardous. However, it is recommended to follow the guidelines provided in the safety data sheet for proper use. This product is intended for laboratory use only by a professionally trained person.

Do not use the product if the primary packaging is damaged or the product does not meet the stated characteristics.

Disposal

Waste disposal must be in accordance with national and local regulations. Each laboratory is responsible for handling and disposing of waste generated during operation.

Symbols used on labels

	This side up		Catalogue number
	Do not expose directly to sunlight		Batch code
	Consult instructions for use		Use-by date
	Do not re-use		Temperature limit
	Pack size		Manufacturer

Reference

- 1.King D.A. Jr., Hocking A.D. and Pitt J.I., 1979, J. Appl. Environ. Microbiol., 37:959.
- 2.Sharp A.N. and Jackson A.K., 1972, J. Appl. Bact., 24:175.
- 3.U.S. Food and Drug Administration, 1995, Bacteriological Analytical Manual, 8th Ed., AOAC International, Gaithersburg, Md.