PROREADY
Ready To Use Culture Media

CE IVD

UPUTSTVO ZA UPOTREBU (SRB)

Baird Parker Agar Plate

Preporučuje se za izolaciju i enumeraciju koagulaza pozitivnih bakterija roda Staphylococcus iz hrane i drugih uzoraka.

Sadržaj pakovanja:

Šifra artikla (pakovanja) REF	Opis	Šifra primarnog pakovanja:	Broj podloga
PRM043V20	Podloga izlivena u petri posudama od ø90	**PRM043**	**20**
PRM043V60			**60**
PRM043V240			**240**
PRM043M40	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

Baird Parker agar je razvio Baird-Parker (1,2) iz Telurit-glicin formulacije Zebovitz i sar. (3), za izolaciju i enumeraciju Staphylococcus vrsta iz hrane i drugih uzoraka, obzirom da omogućava dobru diferencijaciju koagulaza pozitivnih sojeva. Ustanovljen je visok stepen korelacije između koagulaza testa i prisustva prozirne zone lipolize u ovoj podlozi, što je posledica prisustva lecitinaze stafilokoka koja razgrađuje žumance jajeta. Sa druge strane, ispitivanja pokazuju da je gotovo 100% koagulaza pozitivnih stafilokoka sposobno da redukuje telurit, što daje crne kolonije, što kod drugih stafilokoka uglavnom nije slučaj. Utvrđeno je i da je podloga manje inhibitorna za Staphylococcus aureus od drugih medijuma i time istovremeno i selektivnija (4, 5, 6). Zato je upotreba Baird-Parker agara i zvanično usvojena od strane AOAC International (7), a USP je preporučuje za izvođenje Microbial Limit Tests (8). Nedavno je ISO komitet takođe preporučio ovaj medijum za izolovanje i određivanje broja stafilokoka (9).
Staphylococcus aureus izolovan na Baird-Parker agaru mora se potvrditi reakcijom koagulaze (koagulaza test). Baird-Parker agar se takođe može koristiti za detekciju koagulazne aktivnosti dodatkom fibrinogena plazme (11).
Enzimski hidrolizat kazeina, ekstrakt mesa B i ekstrakt kvasca su izvori azotnih, ugljenikovih i sumpornih jedinjenja i vitamina. Natrijum piruvat ne samo da štiti oštećene ćelije i olakšava njihov oporavak, već i stimuliše rast Staphylococcus aureus bez negativnog uticaja na selektivnost. Litijum hlorid i kalijum telurit inhibiraju veći deo kontaminirajuće, prateće mikropopulacije, izuzimajući Staphylococcus aureus. Telurit je inhibitoran za sojeve koji dovode do prosvetljenja žumanca, izuzimajući Staphylococcus aureus i daje crnu boju kolonija. Glicin i piruvat stimulišu rast stafilokoka. Uz dodatak žumanceta medijum postaje neproziran i žuto opalescentan. Žumance kao dodatak, uz to što obogaćuje podlogu, pomaže i u identifikaciji aktivnosti lecitinaze (reakcija žumanceta). Pojava prozirne zone oko sivo-crnih kolonija na ovoj podlozi je dijagnostički značajno za koagulaza pozitivne stafilokoke. Nakon dalje inkubacije, oko kolonija se razvija neprozirna zona, koja može biti rezultat lipolitičke aktivnosti.

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	REF	Kataloški broj
	Ne izlagati direktno sunčevim zracima	LOT	Lot broj
	Konsultovati uputstvo za upotrebu		Rok upotebe
	Ne koristiti više puta		Temperatura čuvanja
Σ	Veličina pakovanja		Proizvođač
EC REP	Ovlašćeni predstavnik u Evropskoj uniji		

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

Literatura

1. Baird-Parker A. C., 1962, J. Appl. Bacteriol., 25:12.
2. Baird-Parker A. C. and Davenport E., 1965, J. Appl. Bacteriol., 28:390.
3. Zebovitz E., Evans J. B. and Niven C.F., 1955, J. Bacteriol., 70:686 .
4. Tardio and Baer, 1971, J. Assoc. Off. Anal. Chem., 54:728.
5. Baer, 1971, J. Assoc. Off. Anal. Chem., 54:732.
6. Assoc. off. Anal. Chem., 1971, 54:401.
7. Horwitz (Ed.), 2000, Official methods of analysis of AOAC International, 17th Ed., Vol. I., AOAC International, Gaithersburg, MD.
8. The United States Pharmacopoeia, 2008, USP31, The United States Pharmacopoeial Convention. Rockville, MD.
9. International Organization for Standardization (ISO), 1983, Draft ISO/DIS 6888.
10. Smith B. A. and Baird-Parker A.C., 1964, J. Appl. Bacteriol., 27:78.
11. Beckers N. J. et al, 1984, Can. J. Microbiol., 30:470.

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

PROREADY
Ready To Use Culture Media

CE IVD

INSTRUCTION FOR USE (EN)

Baird Parker Agar Plate

Medium is recommended for the isolation and enumeration of coagulase positive Staphylococci from food and other materials.

Package contents:

Item code (packaging) REF	Description	Primary packaging code:	Number of products
PRM043V20	Substrate poured into petri dishes of ø90	**PRM043**	**20**
PRM043V60			**60**
PRM043V240			**240**
PRM043M40	Substrate poured into petri dishes of ø50		**40**

Directions

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

Principle and interpretation

Baird Parker Agar was developed by Baird Parker (1, 2) from the Tellurite-glycine formulation of Zebovitz et al (3) for isolation and enumeration of Staphylococci in food and other material since it allows a good differentiation of coagulase positive strains. A high correlation has been found between the coagulase test and the presence of clear zone of lipolysis in this medium, which is due to the lecithinase of Staphylococci that breakdown, the egg yolk. On the other hand, studies show that almost 100% of coagulase positive Staphylococci are capable of reducing tellurite, which produces black colonies, whereas other Staphylococci cannot always do so. The medium was found to be less inhibitory to Staphylococcus aureus than other media at the same time being more selective (4, 5, 6). Subsequently the use of Baird-Parker Agar was officially adopted by AOAC International (7) and is recommended in the USP for use in the performance of Microbial Limit Tests (8). Recently, ISO committee has also recommended this medium for the isolation and enumeration of Staphylococci (9). The identity of Staphylococcus aureus isolated on Baird-Parker Agar must be confirmed with a coagulase reaction (coagulase test). Baird-Parker Agar can also be used to detect coagulase activity by adding fibrinogen plasma (11). Enzymatic casein hydrolysate, meat extract B and yeast extract are sources of nitrogen, carbon, sulphur and vitamins. Sodium pyruvate not only protects injured cells and helps recovery but also stimulates Staphylococcus aureus growth without destroying selectivity. Lithium chloride and potassium tellurite inhibit most of the contaminating microflora except Staphylococcus aureus. The tellurite additive is toxic to egg yolk- clearing strains other than Staphylococcus aureus and imparts a black color to the colonies. Glycine, pyruvate enhances growth of Staphylococcus. With the addition of egg yolk, the medium becomes yellow, opaque. The egg yolk additive, in addition to provide enrichment, aids in the identification process by demonstrating lecithinase activity (egg yolk reaction). A clear zone and grey-black colonies on this medium are diagnostic for coagulase positive Staphylococci. Upon further incubation, an opaque zone developed around colonies, which can be due to lipolytic activity.

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)		

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

Reference

1. Baird-Parker A. C., 1962, J. Appl. Bacteriol., 25:12.
2. Baird-Parker A. C. and Dacenport E., 1965, J. Appl. Bacteriol. 28:390.
3. Zebovitz E., Evans J. B. and Niven C. F. 1955, J. Bacteriol., 70:686.
4. Tardio and Baer, 1971, J. Assoc. Off. Anal. Chem., 54:728.
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