

SLANETZ BARTLEY AGAR

**Powdered and ready to use medium
for the enumeration of enterococci in water and foodstuffs**

TYPICAL FORMULA (g/l)

Tryptose	20.00
Yeast Extract	5.00
Glucose	2.00
Potassium Phosphate Bibasic	4.00
Sodium Azide	0.4
TTC	0.1
Agar	10.00

SLANETZ BARTLEY AGAR WITHOUT TTC

**Powdered medium for the enumeration
of enterococci in water and foodstuffs**

TYPICAL FORMULA (g/l)

Tryptose	20.00
Yeast Extract	5.00
Glucose	2.00
Potassium Phosphate Bibasic	4.00
Sodium Azide	0.40
Agar	10.00

DIRECTIONS

Suspend 41.4g in 1000ml of cold distilled water, heat to boiling with frequent agitation, cool to approximately 50°C and pour into sterile plates. Do not overheat, and do not sterilise in the autoclave. Preserve away from light. If Slantetz Bartley Agar Without TTC is used, add to 1 litre of the pre-cooled medium 10ml of TTC, 1% Solution (REF 42111801)

Final pH 7.2 ± 0.1

DESCRIPTION

Slanetz Bartley Agar, originally described by Slanetz and Bartley, is a selective medium recommended for the isolation and enumeration of enterococci in water and foodstuffs, by the membrane filtration technique or by direct plating. The presence of sodium azide inhibits the development of all contaminating microorganisms, whilst the triphenyltrazolium chloride (TTC) acts as an indicator. The microorganisms that reduce it grow with red colonies.

Slanetz Bartley Agar Without TTC is proposed for industrial preparation of poured plates, where big volumes cause the medium (with TTC included in the powder) to become light red.

TECHNIQUE

For the enumeration of enterococci in water samples proceed as follows.

1. Filter through a 0.45µm membrane an appropriate volume of water (100-10-1-0.1-0.01ml) according to the degree of pollution expected.
2. Transfer 10ml of medium to 60mm plates, pass a flame over the surface of the agar to eliminate any air bubbles.
3. Leave to solidify and lay the filter membrane on the surface.
4. After 48 hours of incubation at 37°C, count all the pink-dark red colonies, which can be considered to be enterococci.
5. Confirm the colonies by transferring the membrane on a plate of Bile Aesculin Azide Agar. If the colonies develop a brown or black halo they are confirmed as enterococci.

For the enumeration of enterococci in foods proceed as follows: spread the homogenate and dilute with saline sample onto the surface of the agar medium. Incubate at 37°C for 48 hours. Count the pink-dark red colonies in the plates where there is growth of 15-150 colonies.

USER QUALITY ASSURANCE (37°C-24HRS)

Productivity control

E.faecalis ATCC 29212: good growth red colonies;

Selectivity control

S.pyogenes ATCC 19615: inhibited*E.coli* ATCC 25922: inhibited**STORAGE**

Slantetz Bartley Agar, dehydrated medium: 2-8°C

Slantetz Bartley Agar w/o TTC, dehydrated medium: 10-30°C

User prepared plates (complete medium): up to 7 days at 2-8°C

REFERENCES

- Burkwall, M. K. & Hartman P.A. (1964)- App. Microbiol. **12**, 18.
- Department of Health and Social Security (1969) - Report n. 71, 4th Ed., London. HMSO.
- ISO 7899-2 :2000 Recherche et dénombrement des streptocoques fécaux. Partie 2 : méthode par filtration sur membrane
- Slantetz L.W. & Bartley, C.H. (1957)- J. Bact., **74**, 591.
- Taylor, E.W. and N.P. Burman (1964) - J. App. Bact. **27**, 294-303.

PACKAGING

402046	Slantetz Bartley Agar	500g (12.1 l)
402046	Slantetz Bartley Agar	5kg (121 l)
402047	Slantetz Bartley Agar Without TTC	500g (12.1 l)
402047	Slantetz Bartley Agar Without TTC	5 Kg (121 l)
542046	Slantetz Bartley Agar	20 ready to use plates
492046	Slantetz Bartley Agar	30 ready to use plates 55mm