Biomed Global

Rev: 0

TSA with 5% Sheep Blood | Ready-to-use Media

a product by Biomed MDX

Effective Date: 15/11/2024

REF FP90T1001

Intended Use:

General-purpose medium for the isolation and cultivation of non fastidious and fastidious microorganisms from a variety of clinical and nonclinical materials.

Principle of the Procedure:

TSA enriched with 5% sheep blood is a widely used culture medium in microbiology laboratories. Its formulation provides a nutrient-rich environment suitable for the cultivation of diverse bacterial species, encompassing both fastidious and non-fastidious organisms. The inclusion of sheep blood serves a dual purpose which is to enhance the cultivation of fastidious bacteria that may have complex nutritional requirements and allows for the differentiation of bacterial species based on their hemolytic properties.

Product Summary:

TSA is a widely used growth medium derived from a soybean-based formula outlined in the U.S. Pharmacopeia. The inclusion of blood in this medium enhances its ability to support the growth of fastidious bacteria, those with complex nutritional requirements. Furthermore, the presence of blood allows for the observation of hemolysis, the breakdown of red blood cells. This characteristic, particularly the type of hemolysis observed, is an important tool for differentiating various bacterial species, especially those belonging to the Streptococcus genus. The absence of carbohydrates in the medium ensures that hemolysis is accurately observed and not masked by other metabolic reactions.

Approximate formulation *Per Liter:

Pancreatic Digest of Casein	15.0g	**Sodium Chloride**	5.0g
Papaic Digest of Soybean	5.0g	**Agar**	15.0g
Sheep Blood	50.0g		

pH 7.3 +/- 0.2

*Adjust and/or supplemental as required to meet performance criteria

Procedure

Materials Provided

90mm TSA with 5% Sheep Blood.

Materials Required But Not Provided

Ancillary culture media, reagents, and laboratory equipment as required.

Test Procedure

1. Inoculate and streak the specimen as soon as possible after it is received in the laboratory with an aseptic technique.
2. Incubate at 35 ± 2°C for 24 hours.
3. Observe the result according to user requirements.
4. Dispose of all used reagents and contaminated materials as infectious waste. Laboratories must handle and dispose of all waste safely according to regulations.

Results

Examine for fungal colonies exhibiting typical microscopic and colonial morphology. Appropriate biochemical or immunological tests may be required for final identification

Quality Control

Inoculate representative samples with the following strains. Incubate the inoculated plates at 35 ± 2°C for 24 hrs. to allow colonies to develop on the medium.

Strains	ATCC®	Growth Results
Escherichia coli	25922	Growth at 24 hours, beta hemolysis
Streptococcus pyogenes	19615	Growth at 24 hours, beta hemolysis
Streptococcus pneumoniae	6305	Growth at 24 hours, alpha hemolysis
Candida albicans	60193	Growth at 24 hours, no hemolysis
Enterococcus faecalis	9533	Growth at 24 hours, gamma hemolysis
Uninoculated plate	-	No growth

Transportation:

Temperature fluctuations may occur during transportation. However, these fluctuations do not affect the performance, quality, or safety of the media.

Storage and Shelf Life:

Upon receipt, store plates at 2 to 8°C, in their original sleeve wrapping until just before use. Avoid freezing and overheating.

The plates may be inoculated up to the expiration date (see package label) and incubated for the recommended incubation times.

Warning and Precautions:

For in vitro diagnostic use. For Professional Use Only. Do Not Reuse.

Do not use plates if they show evidence of microbial contamination, discoloration, drying, cracking, or other signs of deterioration.

Limitations of the Procedure

This medium is for laboratory use only and is not intended for the diagnosis of disease or other conditions. Identifications are presumptive and colonies should be identified using appropriate methods

Reference

1. Zimbro, M. J., Power, D. A., Miller, S. M., Wilson, G. E., & Johnson, J. A. (Eds.). (2009). *Difco™ and BBL™ manual: Manual of microbiological culture media* (2nd ed.). Becton, Dickinson and Company.

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Packaging Symbol

Symbol	Definition
	Catalogue number
	In Vitro Diagnostic Medical Device
	Batch code
	Date of manufacture
	Temperature limit
	Use-by date
	Keep away from sunlight
	Do not re-use
	Fragile, handle with care
	Consult instructions for use or consult electronic instructions for use
	Do not use if packaging damaged and consult instructions for use
	Manufacturer

Further Information:

For further information please contact your Biomed MDX representative.

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