Biomed Global

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Columbia Agar with 5% Horse Blood | Ready-to-use Media

a product by Biomed MDX

IVD

Intended Use:

Columbia Agar with 5% Horse Blood is a 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:

Columbia agar with 5% Horse Blood is a differential and enriched medium widely employed in clinical microbiology. Its composition of Columbia agar base supplemented with 5% defibrinated Horse Blood provides essential nutrients and growth factors, supporting the cultivation of a broad spectrum of microorganisms, including fastidious species. The Horse Blood component also facilitates the differentiation of bacteria based on their hemolytic properties. Columbia Agar Base is a foundational medium for cultivating a wide range of bacteria, including both fastidious and non-fastidious organisms. Introduced in 1966, it provides a rich environment for microbial growth. Modifications can be introduced to enhance its utility. For example, specific additives can be incorporated to selectively inhibit the growth of certain bacterial groups, allowing for the isolation of specific target organisms from complex samples.

Product Summary:

Columbia Agar Base is a foundational medium for cultivating a wide range of bacteria, including both fastidious and non-fastidious organisms. Introduced in 1966, it provides a rich environment for microbial growth[1]. Columbia Agar with Horse Blood is primarily used to show hemolysis of fastidious organism esp *Streptococcus spp* that is able to produce Beta, alpha and Gamma lysis pattern clearly on the plate. Modifications can be introduced to enhance its utility. For example, specific additives can be incorporated to selectively inhibit the growth of certain bacterial groups, allowing for the isolation of specific target organisms from complex samples.

Approximate formulation* (PER LITER):

Pancreatic Digest of Casein	10.0g	**Corn Starch**	1.0g
Meat Peptic Digest	5.0g	**Sodium Chloride**	5.0g
Yeast Extract	5.0g	**Agar**	13.5g
Heart Pancreatic Digest	3.0g	**Horse Blood**	50ml

pH 7.3 +/- 0.2

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

Procedure

Materials Provided

90mm Columbia Agar with 5% Horse 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 to 48 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 colonies exhibiting 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 to 48 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	29212	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. Ellner, P. D., Stoessel, C. J., Drakeford, E., & Vasi, F. A. (1966). New Culture Medium for Medical Bacteriology.
2. 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.

Packaging Symbol

Symbol	Definition
REF	Catalogue number
IVD	In Vitro Diagnostic Medical Device
LOT	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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