BIOGNOST®

KOVAC INDOLE REAGENT

IVD *In vitro* diagnostic medical device CE

Reagent for identification of indole-positive and indole negative microorganisms
INSTRUCTIONS FOR USE

REF Catalogue number: KOV-OT-100 (100 mL)

Introduction

Kovac indole reagent is used for qualitative testing used to determine the ability of a certain organism (bacteria) to split indole from tryptophan. Intracellular tryptophanase enzymes mediate in the indole creation process by using hydrolytic activities on tryptophane amino acid. Indole reacts with para-Dimethylaminobenzaldehyde and creates red compound. The reaction is conducted via condensation process as the consequence of acid splitting of proteins.

Product description

- **KOVAC INDOLE REAGENT** – Reagent for use in microbiology – for identification of indole-positive and indole negative microorganisms

Warning:

Do not use the product if:

- the reagent changed in color
- the reagent's expiry date is due
- there are other signs of reagent waste

Accessories necessary for conducting the test:

- inoculation loop, swab, sampling container
- inoculation loops sterilization equipment
- incubator
- culture medium
- quality control organisms
- indole broth
- pipette, tube

Procedure:

Heat Kovac indole reagent until it reaches room temperature before use.

1.	Take 2 ml of broth aliquot with indole (incubated at + 35-37°C overnight) and pour into the tube.
2.	Add 5 drops (0.5 ml) of Kovac indole reagent down the tube wall. Gently mix
3.	Monitor the formation of red ring between the broth and the reagent.

Results

Positive - pink-red ring between the broth and the reagent

Negative - no pink-red color appearing

Quality control

Testing of the control strains should be conducted in accordance with standardized laboratory procedures of quality control. If aberrant quality control results occur, patient's test results cannot be accepted as valid.

Control strain:	**Incubation:**	**Results:**
Escherichia coli	aerobic conditions, 24 h, + 35-37°C	Positive
Salmonella enterica	aerobic conditions, 24 h, + 35-37°C	Negative

Note

Staining procedures are not standardized and they depend on standard operating procedures of individual laboratories and the experience of the personnel conducting the staining procedure. Depending on personal requests and standard laboratory operating procedures, sample processing and staining can be carried out according to other protocols.

Preparing the sample and diagnostics

Use only appropriate instruments for collecting and preparing the samples. Process the samples with modern technology and mark them clearly. Follow the manufacturer's instructions for use. In order to avoid mistakes, the staining procedure and diagnostics should only be conducted by authorized and qualified personnel. In order to avoid an erroneous result, a positive and negative check is advised before application.

Safety at work and environmental protection

Handle the product in accordance with safety at work and environmental protection guidelines. Used solutions and out of date solutions should be disposed of as special waste in accordance with national guidelines. Chemicals used in this procedure could pose danger to human health. Tested tissue specimens are potentially infectious. Necessary safety measures for protecting human health should be taken in accordance with good laboratory practice. Act in accordance with signs and warnings notices printed on the product's label, as well as in BioGnost's material safety data sheet.

Storing, stability and expiry date

Keep Kovac indol reagent in a tightly sealed original packaging at temperature of 2°C and 8°C. Do not freeze and avoid exposing to direct sunlight. Date of manufacture and expiry date are printed on the product's label.

References

1. Kovacs, N. (1928): Eine vereinfachte Methode zum Nachweis der Indolbildung durch Bakterien, Z. Immunitats. Forsch. Exp. Ther., 55, 311
2. Gadebusch, H.H. et Gabriels, S. (1956): Modified Stable Kovacs's Reagent for detection of Indol., Am. J. Cli. Pathol., 26, 1373
3. Isenberg, H.D. et Sundheim, L.H. (1958): Indol Reactions in Bacteria., J. Bact., 75, 682

KOV-OT-100, V2-EN2, 14 February 2017, AK/VR

	Refer to the supplied documentation	°C	Storage temperature range	Σ	Number of tests in package	REF	Product code	CE	European Conformity	BIOGNOST Ltd. Medjugorska 59 10040 Zagreb CROATIA www.biognost.com	CE
	Refer to supplied instructions		Keep away from heat and sunlight		Valid until	LOT	Lot number		Manufacturer		
IVD	For *in vitro* diagnostic use only		Keep in dry place		Caution - fragile						