

# **ALCIAN YELLOW, C.I. 12480**

IVD In vitro diagnostic medical device

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## **Ingrain Yellow 1**

Used for distinguishing types of glycosaminoglycans and for detection of neuro-secretory material

## **INSTRUCTIONS FOR USE**

REF Product code: AY-P-10 (10 g)

#### Introduction

Histology, cytology and other related scientific disciplines study the microscopic anatomy of tissues and cells. In order to achieve good tissue and cellular structure visualization, the samples need to be stained in a correct manner. Alcian Yellow is used with Alcian Blue dye for differentiating between different types of glycosaminoglycans. It is also used with Toluidine Blue O dye as a counterstain for rapid detection of Helicobacter pylori bacteria, but it can also be used for detecting *Giardia* and *Cryptosporidium* genera.

#### **Product description**

ALCIAN YELLOW - Powder dve for manufacturing solution for microscopic identification of glycosaminoglycans.

Other preparations and reagents used in preparing the dye solution:

- Glacial acetic acid (CH<sub>3</sub>COOH)
- 50% ethanol (C<sub>2</sub>H<sub>5</sub>OH)

#### Preparing the solutions for staining

3% alcoholic solution of acetic acid:

. Mix 100 ml of 50% ethanol with 3 ml of glacial acetic acid.

1% solution of Alcian Yellow dye:

• By simultaneously mixing, dilute 1 g of Alcian Yellow dye in 3% alcoholic solution of acetic acid.

#### Results

Gastric mucins - yellow Nuclei, cytoplasm - blue

Note: Blue color is the result of counterstaining with Toluidine Blue O.

## Note

Filter before use. The mentioned formulation is only one of the ways of preparing the dye solution. Alcian Yellow is the most commonly used dye according to Leung and Gibbon. Depending on personal requests and standard laboratory operating procedures, the dye solution can be prepared 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 handling. In order to avoid mistakes, the staining procedure and diagnostics should only be conducted by authorized and qualified personnel. Use only microscope according to standards of the medical diagnostic laboratory. Both positive and negative controls are recommended before applying.

## Safety at work and environmental protection

Handle the product in accordance with safety at work and environmental protection quidelines. 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 which is available on demand.

#### Storing, stability and expiry date

Keep the Alcian Yellow powder dye in a tightly closed original package at room temperature. Keep in dry places, do not freeze and avoid exposure to direct sunlight. Expiry date is printed on the product's label.

#### References

- 1. Conn, J. (1977): Biological Stains, 9th ed., Baltimore: Williams and Wilkens Co.
- 2. Kiernan, J. A. (2008): Histological and Histochemical Methods, Theory and Practice, 4th ed., Banbury: Scion Publishing Ltd.

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