

ALCIAN BLUE 8 GX powder dye

IVD In vitro diagnostic medical device



Alcian blue dye, Ingrain Blue 1, C.I. 74240

For staining acid mucopolysaccharides according to Scott, Mowry and Dorling

INSTRUCTIONS FOR USE

REF Product code: CA8GX-P-5 (5 g)

CA8GX-P-10 (10 g)

CA8GX-P-25 (25 g)

Introduction

Histology, cytology and other related scientific disciplines study the microscopic anatomy of tissues and cells. In order to achieve a good tissue and cellular structure, the samples need to be stained in a correct manner. Alcian Blue is used to prove glycosaminoglycan in mucins, for staining amyloids, cysteines and for polychromatic staining of mastocytes according to Blue-Safranin. It is also used to determine bacterial species and detecting bacterial capsules. Combining PAS staining and Alcian Blue dye improves the identification of acid mucosubstances (glycosaminoglycan). The sample is treated with periodic acid and Schiff reagent that stains aldehydes recognizably red.

Product description

- **ALCIAN BLUE 8 GX** - powder dye for preparing microscopic identification of acid mucosubstances.

Other preparations and reagents used in preparing the dye solution:

- Glacial acetic acid (CH₃COOH)

Preparing the solutions for staining

- 3% acetic acid solution:
Cautiously stir 485 ml of distilled/demineralized water with 15 ml of glacial acetic acid.
- 1% solution of Alcian Blue 8 GX dye:
By simultaneously stirring, dilute 5 g of Alcian Blue dye in 500 ml of 3% acetic acid.

Result

Nuclei - red

Acid mucosubstances - light blue

Note

The mentioned formulation is only one of the ways of preparing the dye solution. Alcian Blue 8 GX is most commonly used with Scott, Mowry and Dorling methods. 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. 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 Alcian Blue 8 GX powder dye in a tightly sealed original packaging at temperature between 15°C and 25°C. Keep in dry places, do not freeze and avoid exposure to direct sunlight. Expiry date is stated on the product's label.

References

1. Conn, J. (1977): Biological Stains, 9th ed., Baltimore: Williams and Wilkins Co.
2. Mowry, R.W. (1956): Alcian blue techniques for the histochemical study of acidic carbohydrates, *Journal of Histochemistry and Cytochemistry*, 4, 407.
3. Scott, J.E., Dorling, J. (1965): Differential staining of acid glycosaminoglycans (mucopolysaccharides) by Alcian blue in salt solutions, *Histochemie*, 5, 221-233.

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	Refer to the supplied documentation		Storage temperature range		Number of tests in package	REF	Product code		European Conformity
	Refer to supplied instructions		Keep away from heat and sunlight		Valid until	LOT	Lot number		Manufacturer
IVD	For <i>in vitro</i> diagnostic use only		Keep in dry place		Caution - fragile				

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