



## 1A-288

Alcian Blue 8GX

In Vitro Diagnostic



### Description

The product 1A-288 is a dry dye for preparing a dye solution for professional use in histology. The product is supplied in 10 different pack sizes: 1A-288.00003 (3 g bottle), 1A-288.00005 (5 g bottle), 1A-288.00010 (10 g bottle), 1A-288.00025 (25 g bottle), 1A-288.00100 (100 g bottle), 1A-288.00250 (250 g bottle), 1A-288.00500 (500 g bottle), 1A-288.01000 (1 Kg bucket), 1A-288.05000 (5 Kg drum) and 1A-288.10000 (10 Kg drum).

### Main components

Alcian blue 8GX (C.I. 74240)

### Intended use

Staining using Alcian blue 8 GX can be combined with the periodic acid-Schiff (PAS) reaction and is used as a chemical method for detecting acidic mucosubstances (mucins). Alcian blue staining is used in cell diagnostics for examining histological samples (e.g. histological sections) of human origin. Combining it with the PAS reaction also allows unsubstituted polysaccharides, neutral mucopolysaccharides, mucoproteins and glycoproteins, as well as glycolipids and phospholipids to be visualised.

### Sample material and sample preparation

Samples may only be taken by qualified personnel. All samples must be handled according to the state of the art. All samples must be clearly labelled.

Sample material: Sections of human tissue (3 - 5  $\mu$ m thickness) after fixation with, for example, buffered formol and fixation mixtures with ethanol and formalin and subsequent embedding in paraffin or cell smears.

### Test principle

For staining, the dry dye Alcian blue 8 GX is first mixed with acetic acid. During Alcian blue staining, the positively charged dye Alcian blue binds to the acidic mucins and stains them blue. This produces a qualitative result. Nuclear red is a suitable counterstain.

### Staining

Before staining, the sections must be deparaffinised and transferred to distilled water using a descending ethanol series. After being stained with the Alcian blue solution, the samples are washed in distilled water, counterstained with nuclear red and washed again in distilled water. After being washed in distilled water, the samples are transferred to xylene via an ascending ethanol series. The samples can be covered with a synthetic covering medium for the subsequent microscopy.

Suitable control preparations should be carried along with the staining to ensure that the target structures can be differentiated.

The usual staining protocols known from literature must be used. The staining may only be carried out by qualified personnel.

### Result

Cell nuclei	red
Acid mucosubstances	light blue

### Precautions

When withdrawing the product, care must be taken to avoid contaminating the storage container. Once the solution has been removed, it must not be returned to the canister. If there is any cloudiness or sediment present, the product must be discarded. The product is intended for single use and must not be reused.

### Storage and shelf life

Store the unopened containers in a dry place at 5 to 30°C, avoiding direct sunlight. The shelf life is 2 years. See also the best-before date (BBD) on the label. After the containers have been opened, the shelf life corresponds to the best-before date, provided that the storage conditions are observed and the solution is handled properly.

### Safety notice

If any serious incidents occur related to the product, please report them to the manufacturer and the national authority.

### Literature

Romeis, Mikroskopische Technik, Editors: Maria Mulisch, Ulrich Welsch, 2010, Springer Spektrum, 18th edition