

## TISSUE MARKING DYES

IVD In vitro diagnostic medical device

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# Synonym: Marking dyes for tissue INSTRUCTIONS FOR USE

REF Product code:

Tissue marking dyes, kit 3408-SET (5 x 50 mL) Tissue marking dyes, kit 3408-SET-7 (7 x 50 mL) Tissue marking dye, green 3408-1-50 (50 mL) 3408-1-100 (100 mL) 3408-1-250 (250 mL) 3408-2-50 (50 mL) Tissue marking dye, yellow 3408-2-100 (100 mL) 3408-2-250 (250 mL) Tissue marking dye, black 3408-3-50 (50 mL) 3408-3-100 (100 mL) 3408-3-250 (250 mL) Tissue marking dye, red 3408-4-50 (50 mL) 3408-4-100 (100 mL) 3408-4-250 (250 mL) 3408-5-50 (50 mL) 3408-5-250 (250 mL) Tissue marking dye, blue 3408-5-100 (100 mL) Tissue marking dye, orange 3408-6-50 (50 mL) 3408-6-100 (100 mL) 3408-6-250 (250 mL) 3408-7-50 (50 mL) 3408-7-250 (250 mL) Tissue marking dye, lilac 3408-7-100 (100 mL)

#### Introduction

Tissue marking dyes are used in marking and orientation of tissue samples for histopathological processing. Only removed tissues can be marked. Dye pigments can create permanent stains on living tissues, which is why the dye must not be applied on living patients.

#### **Product description**

• TISSUE MARKING DYES – dyes for marking histological samples.

#### Procedure of marking histological samples

- The main purpose of the dyes is marking tissue edges.

  Note: The dyes are most effective if they are applied to a fresh tissue sample, but are also effective when applied to samples fixated in formalin
- · Gently dry the fresh sample
- Slowly wipe fixated samples in order to remove the liquid on theirs surface
- Dyes can be applied using various methods. One method is by immersing a wooden stick into the dye (excessive dye is removed by pressing the
  stick on the top of the dye's bottle), then the dye is applied onto the corresponding area of the sample. Cotton swab is used if the sample area is
  larger. It is immersed in the dye and then the dye is applied onto the corresponding area of the sample
- SHAKE THE BOTTLE CONTAINING THE DYE BEFORE USE!
- After applying the dye, leave it to bind for the surface of the sample and dry for 2-5 min. It is not necessary to dry the sample (with a hair dryer),
  leaving the sample to dry for 2-5 min is sufficient. The sample can be placed in the cassette, put in formalin and get permanently fixated, or it
  could be prepared for cryostatic cutting. Small doses of dye are sufficient for successful staining.

### Caution

Adhesion of tissue marking dyes on adipose tissues requires a special procedure. Surface of the sample must be degreased using acetone before applying the dye. Spray some acetone on the sample's surface, dry lightly and apply tissue marking dyes in the usual manner. The same applies to frozen sections and permanent staining, and it is especially effective with breast tissue and subcuticular tissue.

Note: After use, close the bottle in order to avoid the dye drying. The dye must not be diluted.

Tissue marking using several dyes is highly practical because it enables processing more than one sample in a single cassette. That technique should be used with samples with a low possibility of malignancy. The dye selection depends on the person working with the samples.

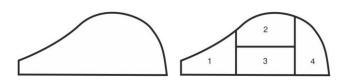
#### Note

Every histologist has his or hers unique method of tissue marking.

#### Methods of tissue marking

#### Example nr. 1

• Cut the sample into slices and outline the sample.



· Mark the sample edges with dye. Mark the outline according to the legend.

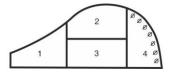
 BLACK
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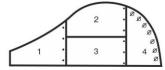
 BLUE
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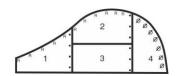
 GREEN
 × × ×

 RED
 R R R

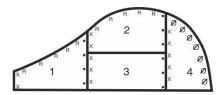
 YELLOW
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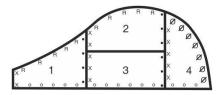




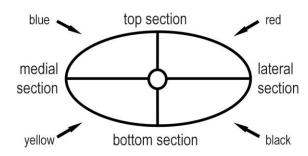
 Mark all the edges of cuts and mark them on the outline. All upper edges are marked with the same color, all left, right and lower edges are marked with a different color.



• Sample processing can begin when all the edges are marked both on the sample and the outline.



#### Example nr. 2



#### 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 tissue marking dyes in a tightly closed original package at room temperature. Do not keep in cold places, do not freeze and avoid exposing to direct sunlight. Expiry date is stated on the product's label.

