

**WEIGERT - VAN GIESON**  
**for elastic fibers and connectivum (quick method)**  
**04 – 053812**

**IVD** In-vitro diagnostic medical device **CE**

**CND Code: W01030799**

number of tests ..... 100  
 procedure time ..... 1 hour 20 minutes  
 product validity ..... 2 years  
 storage temperature ..... 15-25 °C  
 complementary equipment ..... graduated pipette

<b>Expected aim</b>	Product for the preparation of cyto-histological samples for optical microscopy.
<b>Application</b>	To show elastic fibers, connective tissue and nuclei at the same time. Recommended for vascular pathology.
<b>Principle</b>	The method is based on the affinity towards elastic fibers displayed by the dye resulting from a reaction between resorcin and basic fuchsin in the presence of ferric chloride. Since this is not absolutely specific method, other structures such as collagen and basal membranes might be stained. Therefore it is essential to differentiate carefully in order to obtain a selective marked staining of elastic fibers. Counterstaining with Van Gieson trichromic stain makes it possible to differentiate collagen from connectivum showing nuclei at the same time.
<b>Method</b>	<ol style="list-style-type: none"> <li>1) Bring section to distilled water.</li> <li>2) Put on the section 5 drops of reagent A: leave to act 5 minutes.</li> <li>3) Rinse in distilled water.</li> <li>4) Prepare the incubation box: put on the bottom of the incubation box 20 drops of reagent B; introduce the slide and put on the section 10 drops of reagent C, close the incubation box and incubate 30 minutes.</li> <li>5) Rinse in distilled water.</li> <li>6) Put on the section 10 drops of reagent D: leave to act 2 minutes.</li> <li>7) Wash the slide in tap water 5 minutes.</li> <li>8) Rinse in distilled water.</li> <li>9) Put on the section 5 drops of reagent E and add 5 drops of reagent F: leave to act 10 minutes.</li> <li>10) Blue in running tap water 10 minutes.</li> <li>11) Put on the section 10 drops of reagent G: leave to act 10 minutes.</li> <li>12) Rinse quickly (2-3 seconds) in distilled water and dehydrate rapidly through ascending alcohols; stop 1 minute in the last absolute ethanol; clear in xylene and mount.</li> </ol>
<b>Results</b>	Elastic fibers ..... from purplish red to brown Nuclei ..... black Collagen ..... various shades of red Connectivum, erythrocytes ..... yellow
<b>Reagents</b>	A) Periodic acid solution ..... 30 ml B) Alcoholic solution for incubation box ..... 2 x 30 ml C) Weigert's fuchsin-resorcin ..... 30 ml D) Acid differentiation buffer ..... 30 ml E) Weigert's iron hematoxylin - solution A ..... 18 ml F) Weigert's iron hematoxylin - solution B ..... 18 ml G) Van Gieson's picrofuchsin ..... 30 ml

**Warning and precaution**

The product must be used exclusively by specialized technical operators.  
The product is classified as hazardous.  
Read with attention the information written on the label (dangerous symbols, risks and safety phrases).  
Consult always the safety data sheet where the information about the risks of the preparation, precautionary measures during use, first aid and disposal are available. Do not use if primary packaging is damaged.

**Storage**

Store the preparation at room temperature. Keep the containers tightly closed.

**Stability**

After the first opening, the product is usable until the expiry date, if correctly stored.

**Disposal**

Hazardous preparation: observe all state and local environmental regulations regarding waste disposal.

**References**

- Humberstone, G.C.W. e Humberstone, F. D.: An elastic tissue stain. J. Med. Lab. Technol., 26, 99, 1969
- Moore, G.W.: An improved elastic stain. Bull. Inst. Med. Lab. Technol., 9, 9, 1943
- Van Gieson, I: Laboratory notes of technical methods for nervous system. New York, Med. J., 50:57-60; 1889
- Verrhoeff, F. H.: Some new staining methods of wide applicability. Including a rapid differential stain for elastic tissue. J. Amer. Med. Ass., 50, 876, 1908
- Weigert, C.: Ueber einer Methode zur Färbung elastischer Fasern. Zbl. allg. Path. Anat., 9, 289, 1898

053812L The kit is available with components in size of 1000 ml on request

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