

# Reastain Quick-Diff Kit

REF 102164 

Instructions for use  
Ver 2.0 ENG



## INTENDED USE

Reastain Quick-Diff Kit is an optimised colour and fixative composition for the differential staining of cellular elements in peripheral blood smears. The result is in differential staining of the white cells upon their cytochemical features. For professional use only.

## TEST PRINCIPLE

The fast 3-minute staining procedure and the ready-to-use solutions of the Reastain Quick-Diff Kit make this method ideal for use in emergency departments. The reagents can be applied on manual staining procedures.

## COMPONENTS

Reagent	Size and product code	Contents	
Reastain Quick-Diff Blue	500 ml (172035)	Azur II Glycerol Sodiumazide	0,09 %
	3 L (102035)		5 % <0,1 %
Reastain Quick-Diff Red	500 ml (172034)	Eosin Y Sodiumazide	0,12 %
	3 L (102034)		<0,1 %
Reastain Quick-Diff Fix	500 ml (172033)	Methanol Methyleneblue	100 %
	3 L (102033)		<0,01 %

## ADDITIONAL REQUIRED MATERIALS

Phosphate buffer 67,0 mmol/l pH 6,8 (Reagena, product codes 170105 (500 ml) and 110105 (10 L)).

## STORAGE AND TEST CONDITIONS

Reastain Quick-Diff Kit: protected from light at 2...25 °C. Unopened reagents may be used until the expiry date on the label.

If the Red and Blue solutions have accidentally frozen or being kept under 0 °C, let them be in room temperature, and mix well before use.

## WARNINGS AND PRECAUTIONS

All human samples must be treated as potentially infectious. Use protective gloves. Follow biosafety precautions at each step and discard waste according to national safety guidelines.

Do not use expired kits.

Reastain Quick-Diff Fix: Toxic if swallowed, in contact with skin or if inhaled. Highly flammable liquid and vapour. Causes damage to organs. Wear protective gloves/protective clothing/eye protection/face protection. IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing. In case of fire: Use ABC powder extinguisher to extinguish.

## SAMPLES

Use EDTA blood or skin puncture sample. Preparation of applicable and good quality specimens requires special attention. See Dacie and Lewis (1995).

## REAGENT PREPARATION

### Preparation of buffered water

Dilution ratio 1:20, e.g. 10 ml phosphate buffer + 190 ml deionised or distilled water.

## STAINING INSTRUCTIONS

1. Pour the solutions into the separated staining chambers.
2. Dip the air-dried slides into the Reastain Quick-Diff Fix solution (1sec) 5 - 10 times.
3. Dip the slides into the Reastain Quick-Diff Red solution (1sec) 3 – 15 times.
4. Dip the slides into the Reastain Quick-Diff Blue solution (1sec) 3 - 15 times.
5. Rinse the slides in the buffered water solution, and air-dry.
6. Mount the slides with a coverslip if longer storage is required.

The staining result can be modified by the dipping procedures. For example, dipping the slides into the Reastain Quick-Diff Red solution more frequently than into the Reastain Quick-Diff Blue solution can increase staining intensity of the eosinophilic cells. The user should establish the most appropriate procedure for the different purposes by altering the dipping procedure.

One possible dipping procedure established by us is as follows:

1. Reastain Quick-Diff Fix 10 times 1 second each
2. Reastain Quick-Diff Red 6 times 1 second each
3. Reastain Quick-Diff Blue 10 times 1 second each

### Attention!

Use fresh and non-expired solutions. The staining solutions in staining chambers should be changed periodically to ensure optimal staining. Prevent Reastain Quick-Diff Fix from evaporation. Contains methanol.

## INTERPRETATION OF THE TEST RESULT

### Reference intervals

Microscopic differential count of blood white cells (adults):

Parameter	% fraction
Neutrophils	40-75
Eosinophils	1-6
Basophils	<1
Monocytes	1-10
Lymphocyte	20-45

## TEST PERFORMANCE

When stained correctly all relevant cell types are stained individually and are identifiable by the professional.

## INTERFERING SUBSTANCES

Irregular distribution of the blood smear on a glass slide may result in an erroneous cell counts. Alcohols used for wiping the skin may cause hemolysis and artifacts. Do not let the specimens dry at any stage of the staining procedure. Wash properly to avoid dye artifacts. Buffered water is strongly recommended for washing. Staining result is dependent on pH. Alkaline pH increases blue and acidic pH pink or reddish tinge in the stained specimen.

## LITERATURE

Dacie J. and Lewis S. Practical haematology. Churchill Livingstone, London, 1995.

## MANUFACTURER

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