Brilliant Cresyl Blue

Intended use
Brilliant Cresy Blue is used for staining reticulocytes (immature red blood cells) and platelets.

Summary
Brilliant Cresyl Blue is a supravital stain used for staining reticulocytes and platelets. It is a staining solution that makes target structures (by staining) in hematological specimen materials valuable for diagnostic purposes.

Principle
Reticulocytes are juvenile red cells, which contain remnants of the ribosomal ribonucleic acid (RNA)that was present in larger amounts in the cytoplasm of the nucleated precursors from which they were derived. Ribosomes have the property of reacting with certain basic dyes such as Brilliant Cresyl Blue to form a blue or purple precipitate of granules or filaments. This reaction takes place only in vitally stained unfixed preparations.
Stages of maturation can be identified by their morphological features. The most immature reticulocytes have the largest amount of precipitable material. In the least immature only a few dots or short strands are seen. The
regenerative capacity of erythrocytes can be monitored with ratio of reticulocytes.

Reagents / Contents

Brilliant Cresyl Blue	1.0 g
Sodium Chloride	0.85 g
Distilled Water	100.0 mL

Appearance: Blue colour solution.

Storage and Stability
Store at 15°C - 25°C away from bright light. Use before expiry date on label.

Materials required but not provided
Clean grease-free glass slide, plastic Pasteur pipette, staining rack, blotting paper, immersion oil , and microscope.

Type of Specimen
Clinical specimen: Blood samples.

Procedure
1. Take 2 or 3 drops of the stain by means of a plastic Pasteur pipette.
2. Add 2–4 volumes of the patient's EDTA-anticoagulated blood to the solution and mix.
3. Keep the mixture at 37°C for 15–20 min.
4. Re-suspend the red cells by gently mixing and make films on glass slides in the usual way.
5. When dry, examine the films without fixing or counter staining.

Interpretation of results
Reticulocytes are identified as fine, deep blue filaments and granules arranged in network.

Warranty
This product is designed to perform as described on the label and pack insert. The manufacturer disclaims any implied warranty of use and sale for any other purpose.

Reference
Data on file: UltraCare Diagnostics .

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