

SUDAN BLACK B STAIN

Histochemical Method

100 Tests

PRINCIPLE :

Sudan Black B was used to stain the granules of neutrophils, many of which appear to contain phospholipids. The close parallelism observed between sudanophilia and myeloperoxidase activity relates to the fact that both cytochemical reactions are positive in the azurophil granules of neutrophils and monocytes and in the specific eosinophil granules. The biochemical basis for the sudanophilia in these cells is poorly understood. One possible view is that Sudan Black B stains the lipid membrane of the granules which contain the enzyme myeloperoxidase. Another is that the dye stains through an enzymatic mechanism. Perhaps linked to myeloperoxidase, and not just by physical solution in the lipids. Both reactions are positive in mature and immature myeloid cells and thus are useful in the differential diagnosis and classification of the acute leukaemias. The simplicity of the Sudan Black B reaction makes its use mandatory in routine haematology laboratories.

REAGENTS :

| | | |
|----|--------|-------|
| 1. | Dye | 60 ml |
| 2. | Buffer | 40 ml |

ADDITIONAL REAGENTS:

Fixative : Available on request .

- Formaldehyde Fixative . or
- Formaline – ethanol fixative

Counterstain : Methyl green or Giemsa

STABILITY :

Reagents are stable up to the expiration date given when stored at 4 °C

PROCEDURE:

Fixation:

1. Fix air – dried films of blood or bone marrow for 10 min in formalin vapour, formaldehyde fixative or formaline – ethanol fixative .
2. Wash gently in water for 5 – 10 min ;

Staining:

Working Reagent:

Mix Reagent R1 and Reagent R2 in ratio of 1. 5 : 1, Filter before use.

1. Incubate the fixed film in 20 drops working reagent for 10 min. in closed area to avoid evaporation.
2. Wash in 70 % ethanol by waving the slides in the alcohol for 3 - 5 min .
3. Wash with water for 2 min, dry .
4. Counterstain for 5 min and mount .

RESULT :

The reaction product in the cytoplasm is black; the nuclei stain blue or red depending on the counterstain used. (Giemsa, safranin or methyl green.)

REFERENCE :

Sheehan , H .L . and Story , G . W . (1977)
J . Path . and Bacter . 59 , 336 .

SUDAN BLACK B STAIN

Histochemical Method

+4 to +8°C

100 Tests

In vitro diagnostic use

CAT. No.

SB 26 14

REAGENTS

| | | |
|----|--------|-------|
| R1 | Dye | 60 ml |
| R2 | Buffer | 40 ml |

CONTACTS

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