INTRODUCTION:
Recticulocytes (immature erythrocytes) are slightly larger than normal red cells, and by using a supravital staining technique basic dyes such as brilliant cresyl blue, are precipitated into a meshwork (called reticulum) within the cell. This meshwork appears deep blue against a relatively unstained background. The reticulum is considered to be remnants of basophilic ribonucleoprotein (normally found in the cytoplasm) and the more mature the cell the less reticulum found.

REAGNTS:
- Sodium citrate
- Sodium chloride
- Distilled water
- Brilliant cresyl blue

PROCEDURE:
1. Place 2-3 drops of the dye in glass test tube.
2. Add 2-4 drops of the patient’s heparinized blood and gently mix.
3. Incubate at 37°C for 15 – 20 min.
4. Gently re-suspend the cells.
5. Place one drop of the suspended cells on glass slide then put cover slide with gentle pressure.
6. Examine the unfixed uncounterstained cells using oil immersion lens.
7. Count at least 1000 red cells and calculate the percentage of reticulocytes present.

Result:
- Normal RBC: Greenish blue
- Reticulocytes: Greenish blue with deep blue intracellular precipitate network.

Normal range:
- Adults: 0.2 – 2 per cent.
- Cord blood: 2 – 6 per cent.

N.B
This procedure is only a guide and it is preferable if each laboratory established his own conditions.
**REAGENTS**

<table>
<thead>
<tr>
<th>Product</th>
<th>Description</th>
<th>Package Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brilliant cresyl blue</td>
<td></td>
<td>10 ml</td>
</tr>
</tbody>
</table>

**CONTACTS**

- **Tele:** 02-33385184
- **Mobil:** 0109 – 349 20 77
- **Fax:** 02-33385184 (102)
- **Email:** info@bio-diagnostic.com
- **Website:** www.bio-diagnostic.com
- **Address:** 29 Tahreer St., Dokki, Giza, Egypt