Thrombocount reagent

R083

Intended use

Thrombocount Reagent is recommended for manual counting of thrombocyte (platelets).

Composition**

Ingredients

Ammonium oxalate,monohydrate	10.0 gm
Mercuric chloride	0.01 gm
Distilled water	990.0 ml

**Formula adjusted, standardized to suit performance parameters

Directions

1. Draw blood into a leukocyte pipette up to the 0.5 mark, then aspirate Thrombo-Count reagent (R083) up to the 11 mark. The dilution is 1:20. (A dilution of 1:100 can also be prepared, draw blood to the 1.0 mark of an erythrocyte pipette and thrombocount reagent (R083) up to the 101 mark).
2. Mix blood and Thrombo-Count carefully, leave for 5 min, mix again briefly.
3. Discard the first 5 drops and fill the neubauer counting chamber, leave to sediment for approximately 15 min.
4. Counting is performed with a 40x objective. Count the thrombocytess in the 5 medium-sized group square from the center of the chamber (each of which is composed of 16 basic squares = 80 of the smallest squares with a chamber volume of 1/4000µl).

Principle And Interpretation

Thrombocyte counting is a routine method in haematological analysis. Dilution and preparation of a blood sample of known volume is the basis of thrombocyte counting method. The blood is hemolyzed by the reaction solution. The required cell type in a defined volume is counted and the number of cells per microliter of blood is then calculated.

Type of specimen

Clinical specimen: Anticoagulated venous blood.

Specimen Collection and Handling

For clinical samples follow appropriate techniques for handling specimens as per established guidelines.

Warning and Precautions

In Vitro diagnostic use only. Read the label before opening the container. Wear protective gloves/protective clothing/ eye protection/face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations

Focus to recognize the silken shine of the spherical thrombocytes. All the erythrocytes are ideally destroyed. However, many membrane ghost or reticulocytes can be seen as shadow on the bottom of the chamber. A phase contrast microscope with green filter facilitates identification and counting of the thrombocytes.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature

Quality Control

- **Appearance :** Colourless solution
- **Clarity :** Clear without any insoluble particles.
- **Calculation:** Thrombocyte count $= \frac{NxDx4000}{80} = Nx1000$ cells/µl (D=20)

  D= Dilution factor (20 or 100)

  N= number of thrombocytes in the group 5 square (= 80 of the smallest squares)

  Result:

  Under high power magnification, count the cells in the five center squares of neubauer counting chamber.

  When leukocyte pipette is used : count from 5 group squares x 1000

  When erythrocyte pipette is used : count from 5 group squares x 5000

  Normal range: 150,000-300,000 thrombocytes/µl

Storage and Shelf Life

Store between10- 30°C in tightly closed container and away from bright light. Use before expiry date on label. On opening, product should be properly stored in dry ventilated area protected from extremes of temperature and sources of ignition. Seal the container tightly after use

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques.

Reference

1. Bauer J.D., Ackermann P.G. and Toro G. (Eds.),1974, Clinical Laboratory Methods, 8th ed, The C.V. Mosby Co., St. Louis.
2. Isenberg, H.D. Clinical Microbiology Procedures Handbook. 2nd Edition.
3. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.
4. Reneke, J et al. Prolonged prothrombin time and activated partial thromboplastin time due to underfilled specimen tubes with 109 mmol/L (3.2%) citrate anticoagulant. Am J Clin Pathol. 1998; 109:754-757.
5. Romeis, Mikroskopische Technik, 17. Neubearbeitete Auflage, Urban und Schwarzenberg, 1989.
6. G. Zeile, M. Baake, G. Henrici, Kompedium der praktischen Hämatologie, 2. Auflage, GIT-Verlag, Darmstadt 1983

Storage temperature

Do not use if package is damaged

IVD

In vitro diagnostic medical device

CE Marking

HiMedia Laboratories Pvt Limited
C-40,21/Y, MIDC, Wagle Ind Area,
Thane(W)–400604,Maharashtra,India

EC REP

CEpartner4U,ESDOORNLAAN 13,3951
DB MAARN,The Netherlands,
www.cepartner4u.eu

Revision : 01/2022

Disclaimer :

User must ensure suitability of the product(s) in their application prior to use. Products conform solely to the information contained in this and other related HiMedia™ publications.The information contained in this publication is based on our research and development work and is to the best of our knowledge true and accurate. HiMedia™ Laboratories Pvt Ltd reserves the right to make changes to specifications and information related to the products at any time. Products are not intended for human or animal or therapeutic use but for laboratory,diagnostic, research or further manufacturing use only, unless otherwise specified.Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents.