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EosTIC® 1:32 (plus)

Single Tests for Microscopic Counting of Eosinophilic Leukocytes (eosinophilic Granulozytes).

Product information for quantitative visual microscopic counting of eosinophilic leukocytes (eosinophilic granulocytes). Reagent and product information refer to the available literature.

Principle

Microscopic counting of eosinophilic leukocytes in the Fuchs-Rosenthal counting chamber. The tube contains 620 µL of EosCount® solution. 20 µL of blood are used (Dilution 1:32).

Reagents

Eos-TIC® is ready to use with a shelf life at room temperature (+15 ... +25 °C) until the printed expiry date.

Remove individual vials only for use. Store vials in the dark (closed box) and upright in their original package. Sachets reclose with a clip.

Do not use if reagent is not clear and free of particles.

Risks and Safety

Please observe the necessary precautions for use of laboratory reagents and body fluids. Applications should be performed by expert personnel only. Follow the national and laboratory internal guidelines for work safety and infection control. Wear suitable protective clothing and disposable gloves while handling.

It is important to ensure effective protection against infection according to laboratory guidelines

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For additional safety information please refer to the information on the label and the corresponding Safety Data Sheet (SDS).

Download by QR code or link: www.sds-id.com/100120-7

Contents / Main Components

004019-4620	Cont.	EosCount Reagent Solution C.I. 45380 0,1 %.
004019-6100	**KIT**	**Eos-TIC® 1:32 plus • Single tests with capillaries**
004019-4620	1.	100× 620 µl Eos-TIC® 1:32 plus Packed in styrofoam racks.
ETE020	2.	100× 20 µL End-to-end volume capillaries
KFK	3.	100× Chamber filling capillaries
004019-6010	**SET**	**Eos-TIC® 1:32 • Einzelteste ohne Kapillaren**
004019-4620	1.	10× 620 µl Eos-TIC® 1:32 plus Packed in aluminium foil sachet.

Replacement pack optional

TIC-CP20	**SET**	**TIC 20 µl Capillary pack**
ETE020	1.	100× 20 µL End-to-end volume capillaries
KFK	2.	100× Chamber filling capillaries

Do not use other capillaries that are not intended for this TIC test kit.

Additional required or recommended materials and equipment:

099920-0001 *	Capillary Holder *
CC-FURO *	Counting chamber Fuchs-Rosenthal *
	Microskope for laboratory use

* Available from Bioanalytic GmbH.

Sample Material

Preferably, K_2- or K_3-EDTA blood; capillary blood only as an exception (process immediately). Li-Heparin is suitable, other Heparinized blood is possibly unsuitable as the salts form precipitates.

Count samples diluted with Eos-TIC® within 90 minutes. Resuspend the cells before counting.

For sample collection, storage and labeling follow the standards of technology procedures and the corresponding instructions.

Reference Ranges

EDTA-blood	[/µl]	%
Human [1]	< 300	< 4,4 %

Procedure

Using capillary pipettes

Discard the first drop of capillary blood before filling the 20 µL end-to-end volume capillary.

Fill volume capillary bubble-free with blood from end to end. We recommend using a capillary holder for this (see: Ordering Information / Additionally Required or Recommended Materials). Remove blood on the outside with a lint-free tissue without sucking blood from the capillary. Place filled volume capillary into the opened TIC-tube, close and shake thoroughly until all blood is flushed from the capillary. Leave capillary in the vial.

Incubate for 10 ... 30 minutes at room temperature (18 ... 25 °C). Shake the tube once more before loading the counting chamber!

Fill the chamber filling capillary about a quarter to half its length by capillary action and seal the upper end with your finger. Touch the tilted capillary (narrow angle) against the edge of the cover slip and load the counting chamber.

Wait for about 2 minutes for complete sedimentation of the cells.

Using automatic micropipette

Only appropriately trained laboratory staff should use this method!

Instead of end-to-end and chamber filling capillaries use an adequate automatic micropipette (only when working with EDTA blood). Proceed as outlined above for the capillaries. Flush pipette tip sufficiently with the reagent solution. Shake the tube once more before loading the counting chamber. Wait for about 2 minutes for complete sedimentation of the cells.

Alternative Operation:

Incubation for 10 ... 30 minutes at room temperature (18 ... 25 °C) is also possible with the filled counting chamber inside a humidity chamber (moisted tissue inside a Petri Dish).

Analysis / Calculation

For microscopic counting, use phase-contrast optics or bright field (lowered condenser) at 100× to **400×** magnification. (10× to **40×** Objective).

Each of the 16 large squares, each consisting of 16 small squares is counted in meandering manner.

Fuchs-Rosenthal counting chamber

Total = 16 × 1 mm² = 16 mm². Depth = 0.200 mm. Volume = 3.2 µL.

Count the entire grid of the Fuchs-Rosenthal counting chamber to determine the number of eosinophilic leukocytes.

Total Cells Count × Dilution	/ Counting volume	= Cells/µl
Total Eos count × 32	/ 3.2	= Eos/µl Blood.
Total Eos count × 10		= Eos/µl Blood.

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Capability Characteristics

The method is an absolute (counting) method. It is traceable to the dilution and volume of the counting chamber.

Quality Controls and Proficiency Test

Exceptions to the quality assurance obligation

Unit-use reagents are portioned for single determination and are consumed with single determination. Such unit-use reagents are usually exempt from the requirements of internal and external quality control. This is subject to the condition that the reagent is used exactly in accordance with the manufacturer's instructions.

Please observe the national quality assurance guidelines.

Quality controls

A suitable control material can be used to check precision and accuracy. All common control blood samples (or interlaboratory samples) can be used that

- are suitable or designated for visual microscopic counting of leukocytes.

Pay attention to the corresponding data of the control blood manufacturer.

Control bloods intended only for automatic counting devices may not be suitable.

Specific features

Control blood cells mostly contain stabilized cells with denatured cell membranes or they contain replacement cells (e.g. nucleated avian erythrocytes instead of mammalian leukocytes). This may cause the microscopic appearance to differ from that of fresh human or mammalian blood.

Note:

Resuspend control blood very carefully before each opening. Please note the information for the control blood. Use a cell-friendly mixing device (e.g. roller mixer).

Notes

This product information exclusively relates to the product described in this leaflet. In particular, this product information cannot be applied to similar reagents from other manufacturers.

Classifications

Not for human diagnostics.

Instruction for Use

For professional use only.

To avoid errors, the use of qualified personnel is carried out. National guidelines for work safety and quality assurance must be followed.

The used equipment must comply with the state of technology and the laboratory requirements.

All samples and used tubes/vials must be marked clearly identifiable to exclude any confusion.

Support / Information service

For methodological and technical support, please contact us by E-Mail at support@bioanalytic.de.

Periodically check for updates of this product information on our website.

Feedback

Information from users can be reported to support@bioanalytic.de.

Suggestions for further developments will be considered.

Waste Management

Please observe your national laws and regulations.

Used and expired solutions must be disposed of in accordance with your local regulations.

Inside the EU, national regulations apply that are based on the current, amended version of Council Directive 67/548/EEG on the approximation of the laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances.

Decontaminated packaging can disposed of as household waste or recycled, unless otherwise specified.

Unused Remains

These are usually hazardous wastes that must be recycled or disposed of. After consultation we take back such residual materials in the original container.

Literature & Footnotes

Legends for the graphic symbols and tags used follow relevant norms or are available on our internet pages.

[1] Wintrobe`s Clinical Hematology, 10th Edition

[2] WHO - Report Lab/88.3