**Safe**
Complete single-use tests for easy, quick, safe, and highly precise microscopic counting of erythrocyte, leukocyte, thrombocyte and reticulocytes. Tests are packed in useful rack-boxes made from CFC-free polystyrene.

**Simple**
Bioanalytic manufactures ready-to-use, high-quality reagent kits that allow simple and safe handling. No cumbersome handling of expensive equipment (graduated pipettes, shakers) necessary. Also, neither laborious, expensive cleaning and drying of blood mixing pipettes nor siliconization of pipettes to prevent platelet-glass-aggregation (falsely low values!) are required. Microscopic cell counting is performed as usual.

**Inexpensive**
Save high costs of pipettes, cleaning agents, working time as well as contaminated reagents.

**Accurate**
The dilutions correspond to the recommendations of the German Industry Norm 58932 (DIN 58932) and the WHO (World Health Organization), and can be accurately reproduced. Freshly prepared samples can be counted up to 48 hours (RBC, WBC) and 12 hours (PLT) respectively.

**Hygienic**
"TIC" systems of Bioanalytic are conform to the regulations issued by the Employers’ Liability Insurance Association not to pipet by mouth. No contact with blood or blood-reagent mixture if used as recommended.

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**Notes**

**WHO**
Already in 1988, the WHO (World Health Organisation) declared the use of Thoma pipettes as *obsolete*[^1], i.e. no longer state-of-the-art and outdated, because Thoma pipettes are *inaccurate*[^1] and break easily (risk of infection). Instead, use of separate pipettes for mixing blood into pre-filled reaction tubes was recommended. The single-use "TIC" systems of Bioanalytic are completely in line with these recommendations. Ery-TIC®, Leuko-TIC® and Thrombo-TIC® had already been introduced into the market 10 years earlier (in 1978).

**Ordering Information**
The capillary holder (re-usable) is not included in the "TIC" system. We recommend ordering the capillary holder together with your first order of any "TIC" system. The capillary holder prevents risk of specimen contact if used correctly, and simplifies handling as well.

Products, ordering numbers and further details see www.bioanalytic.de.

**Support**
Do not hesitate to contact us with your questions by phone (German), e-mail or fax (German, English).

**Literature & Footnotes**

*[^1]: As the inaccuracy not only relates to the volume of the Thoma pipettes but also to the procedure involved, the inaccuracy also applies to official calibrated or CE marked pipettes.
Overview of the intended use

General Information
For hygienic use of all "TIC" systems, we recommend our useful capillary holder.

and labelled products are medicine products according to the IVD guideline 98/79/EC, and only those may be used for human diagnostics in the EU. Conversely, they may also be used for veterinary in vitro diagnostics.

Eos-TIC 1 : 32 (plus)
Dilution 1 : 32. Sample volume 20 µl.
K3-EDTA-, Li-Heparin-, or capillary blood.
Complete incl. end-to-end volume capillaries and chamber filling capillaries available.

Human medicine
Counting of eosinophilic leukocytes (eosinophilic granulocytes).

Veterinary medicine
Counting of eosinophilic leukocytes (Eosinophilic granulocytes).
Special instructions for counting leukocytes in birds, reptiles and fish available.

Verified by customers
Little corella, Galah, African grey parrot, Northern bald ibis, Corvus, Golden eagle, Golden-collared macaw.

Ery-TIC 1 : 200 (plus)
Dilution 1 : 200. Sample volume 5 µl.
K3-EDTA- or capillary blood.
Complete incl. end-to-end volume capillaries and chamber filling capillaries available.

Human medicine
Counting of erythrocytes.

Transfusion medicine
Counting the remaining cells from platelet concentrates and plasmas. Special instructions (dilutions 1 : 51, 1 : 21, 1 : 11) available.

Veterinary medicine
Counting of erythrocytes.

Leuko-TIC 1 : 20 blue (plus)
K3-EDTA- or capillary blood.
No NH4-Heparin blood, no synovial fluid (see Leuko-TIC SF).
Complete incl. end-to-end volume capillaries and chamber filling capillaries available.

Human medicine
Counting of leukocytes without disturbing background shading by erythrocyte membranes. Clear image, blue-colored leukocyte cell nuclei.
The method is prescribed by the provincial chamber for the training of medical professionals.

Transfusion medicine
Special instructions for counting low leukocyte values available.

Veterinary medicine
As human medicine, but only usable for mammals.

Sperm-TIC 1 : 20 (plus)
Sample material: fresh sperm fluid.

Human medicine
Counting of sperms.

Veterinary medicine
As human medicine, but only verified for mammals.

Leuko-TIC SF (plus)
Dilution 1 : 100 and 1 : 21 possible.
Complete incl. end-to-end volume capillaries and chamber filling capillaries available.

Human medicine
Counting of leukocytes from synovial fluid.

Veterinary medicine
As human medicine, but only verified for mammals.

Leuko-TIC VT
K3-EDTA- or capillary blood.
Complete incl. end-to-end volume capillaries and chamber filling capillaries available.

Human medicine
Viability counting of leukocytes (WBC) based on trypan blue staining in a specific dilution solution.

Veterinary medicine
As human medicine, but only verified for mammals.

Thrombo-TIC 1 : 100 (plus)
Dilution 1 : 200. Sample volume 10 µl.
Sample material: K3-EDTA- or fresh capillary blood. Citrate blood and CITRISO blood can also be used (for details see working instructions).

Human medicine
Counting of thrombocytes.

Transfusion medicine
Special instructions for counting in platelet-rich plasma (PRP) available.

Veterinary medicine
As human medicine, but only verified for mammals.

Reti-TIC
Dilution 1 : 2 (1 + 1). Sample volume 100 µl.
Sample material: preferred K3-EDTA blood or exceptionally fresh capillary blood.
Supravital staining of reticulocytes.

Human medicine
Relative counting of reticulocytes.

Veterinary medicine
As human medicine, but only usable for mammals.

Ejaculate-TIC 1 : 20 (plus)
Sample material: fresh sperm fluid.

Human medicine
Counting of leukocytes in the ejaculate and spermatozoa according to the regulation of the WHO.

Veterinary medicine
As human medicine, but only verified for mammals.

Ejaculate-TIC VT
K3-EDTA- or capillary blood.
Complete incl. end-to-end volume capillaries and chamber filling capillaries available.

Human medicine
Viability counting of leukocytes (WBC) based on trypan blue staining in a specific dilution solution.

Veterinary medicine
As human medicine, but only verified for mammals.
**Natt-Herricks-TIC 1 : 200 (plus)**

Dilution 1 : 200. Sample volume only 5 µl.
Sample material: Li-Heparin, K3-EDTA- or fresh capillary blood. For turtles and some reptiles, EDTA can cause hemolysis. For fish, Na3-citrate or CITRISO is particularly suitable.
Complete incl. end-to-end volume capillaries and chamber filling capillaries available.

*Human medicine*
Not applicable.

*Veterinary medicine*
Counting of erythrocytes and leukocytes from blood of birds, reptiles and fish.

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**Marcano-TIC 1 : 200 (plus)**

Dilution 1 : 200. Sample volume only 5 µl.
Sample material: see literature.
Complete incl. end-to-end volume capillaries and chamber filling capillaries available. Piston pipettes are not required.

*Human medicine*
Not allowed in the EU. Other countries not verified.

*Veterinary medicine*
Counting of erythrocytes from blood of lizards, especially iguanas.

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**Viability-TIC**

Dilution 1 : 20. Sample volume only 20 µl.
Sample material: cell suspension.
Complete incl. end-to-end volume capillaries and chamber filling capillaries available. Piston pipettes are not required.

*Microbiology, Life Science, Research*
Viability cell counting based on trypan blue staining in a specific dilution solution.
Counting of viable cells (aCells) and dead cells (dCells) from cell suspensions. The calculation gives the total number (tCells), aCells, dCells and the percentage distribution.

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**Symbols and Documents**

- **CE**
  Mark of conformity for conformity of the product with a European directive. Required for the authorisation / use in human in vitro diagnostics.

- **IVD**
  In vitro diagnostic.
  The product is approved for human in vitro diagnostics. The notes in the operating instructions must be observed.

- **BIO LSc**
  Veterinary medical in vitro diagnostic.
  The product is approved for the in vitro diagnostic use in veterinary medicine. Please note the instructions in the manual and if necessary the special instructions in the manual for veterinary medicine.

- **1**
  Please note the usage information!
  The usage information is available at [www.bioanalytic.de](http://www.bioanalytic.de) without registration for free download on the product page on documents tab.

- **COC**
  Certificate of Conformity are available at [www.bioanalytic.de](http://www.bioanalytic.de) on the product page on the documents tab.

For safety data sheets, enter the unique SDS-ID on the label at [www.sds-id.com](http://www.sds-id.com).
Alternatively, you can obtain safety data sheets as described above on the website on safety data sheets tab.