
Eosinophil Diluent (Counting Solution)

Cat. No.: E1511111 | Pack size: 100 mL | Storage: Store at 2-8°C

Overview

Eosinophils (E) are a type of leukocyte, accounting for 0.5%-5% of the total leukocyte count. The working principle of Eosinophil Dilution is as follows: blood is diluted with an appropriate volume of Eosinophil Dilution, and eosinophils are stained red in the presence of Phloxine B, while red blood cells and other leukocytes rupture or lyse. Occasionally, a small number of them remain intact but will not be stained by eosin. The diluted blood is loaded into the counting chamber, and the number of eosinophils in a defined volume is counted under a microscope to calculate the eosinophil concentration per liter of blood. This Eosinophil Dilution is for research use only and not intended for clinical diagnosis.

Operating Procedures (For Reference Only):

1. Take a small test tube and add Eosinophil Dilution to it.
2. Use a clean, dry micropipette to draw peripheral blood, add it to the Eosinophil Dilution, and mix thoroughly.
3. After the red blood cells have lysed, load the diluted blood into both sides of the counting chamber, taking care to avoid bubble formation or overflow. Allow to stand at room temperature for 3-5 minutes to let eosinophils sediment.
4. Place the counting chamber under a low-power microscope (a high-power microscope may be used if necessary) and count the number of eosinophils in 10 large squares across the two counting chambers in sequence.

Calculation:

Eosinophil count/L = Number of eosinophils in 10 medium squares $\times 20 \times 10^6/L$.

Safety & Precautions

- 1. Counting should be completed within 1 hour after blood dilution; otherwise, eosinophils will be gradually damaged.
- 2. Mix the diluted blood thoroughly before loading it into the counting chamber, and avoid applying excessive force during the loading process.
- 3. Distinguish eosinophils from neutrophils; the latter are generally unstained or occasionally pale red with smaller granules.

- 4. If the number of eosinophils is low, the counting area can be increased.
- 5. For your safety and health, wear a lab coat and disposable gloves during operation.
- 6. Wear a lab coat, disposable gloves and eye protection during handling.
- 7. Use only under an approved research protocol and in accordance with applicable institutional guidelines.

Key Features

- Supplied as BioReagent grade material for research workflows.
- Designed for use in Cell Staining applications.
- Available pack size: 100 mL.
- Storage condition: Store at 2-8°C.
- Related name(s): Eosinophil Counting Solution.
- For research use only; not intended for clinical diagnosis, treatment, food, or household applications.

Product Information

Item	Description
Cat. No.	E1511111
Product Name	Eosinophil Diluent (Counting Solution)
Specifications & Purity	BioReagent
Synonyms	Eosinophil Counting Solution
Pack Size	100 mL
Storage	Store at 2-8°C
Stability & Storage	Store at 2-8°C long term (12 months).
Shipped In	Wet ice. This product requires cold chain shipping. Ground and other economy services are not available.
Recommended Application	Cell Staining

Materials Required But Not Supplied

Item	Recommended Specification	Purpose
Personal protective equipment	Lab coat, disposable gloves, eye protection	Safe handling and contamination control
Microscope or imaging system	Configured for the intended staining or observation workflow	Signal observation and documentation
Pipettes and tips	Clean disposable tips	Reagent and sample handling
PBS, distilled water or normal saline	As required by the source procedure	Washing, dilution or sample preparation

Quality Control

QC Item	Method	Acceptance Criteria
Visual inspection on receipt	Confirm that the container is intact and the label, lot number, pack size and expiry information are legible.	No leakage, visible damage or labeling inconsistency.
Product identity and specification	Check the product label and lot-specific COA against the product information in this manual.	Product name, Cat. No., grade/purity and storage condition match the ordered product.
Appearance / usability	Inspect before use according to the source precautions and applicable laboratory SOPs.	No abnormal precipitation, discoloration, contamination or degradation that would interfere with the intended assay.

Troubleshooting

Issue	Possible Causes	Corrective Action
Weak or uneven staining / signal	Insufficient staining time, incomplete sample coverage, quenching, expired or improperly stored reagent	Ensure complete sample coverage, follow the source procedure, protect fluorescent dyes from light, and use fresh or properly stored reagent.
High background	Excess staining solution, inadequate washing, overly long staining time	Optimize staining duration, wash as recommended, and avoid over-staining.

Issue	Possible Causes	Corrective Action
Signal fades quickly	Photobleaching or repeated freeze-thaw cycles	Protect from light, minimize exposure during observation, and avoid repeated freeze-thaw cycles where applicable.

Recommended Applications

Cell Staining.

Contact & Global Offices

Whether you have a technical question, need help with a quotation, or want to inquire about an order, please contact Aladdin Scientific through the offices below.

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Limitations & Disclaimer

- For Research Use Only (RUO). Not for use in human or animal diagnostics, therapeutics, food, cosmetic, or household applications unless specifically authorized by applicable documentation.
- This product is not a CE-marked in vitro diagnostic device under IVDR (EU) 2017/746 and is not an FDA-cleared or FDA-approved diagnostic product.
- Where any product or component is classified as hazardous under CLP (EC) 1272/2008 or OSHA HCS (29 CFR 1910.1200), users must follow the current SDS, product label and local regulations.
- Performance depends on sample type, sample condition, storage, handling, and operator technique. Users are responsible for validating suitability for their intended research application.
- Aladdin product labels, SDS, COA, and approved specifications take precedence over this document. If any discrepancy is identified, contact Aladdin Scientific before use.