

Sterile Heparin Sodium Solution (1%, 1250 U/mL, Sterile)

Cat. No.: H1510788 | Pack size: 10ml | Storage: Store at -20°C

Product Information

Item	Description
Product name	Sterile Heparin Sodium Solution (1%, 1250 U/mL, Sterile)
Catalog No.	H1510788
Pack size	10ml
Specifications & Purity	BioReagent, sterile, 1%, 1250 U/mL
Synonyms	Heparin Solution (1250 U/ml) Sterile Heparin (1%) Sterile Heparin Sodium (1250 U/ml) Heparin Sodium Solution (1%, Sterile)
Storage	Store at -20°C
Shipped in	Ice chest + Ice pads
Application	Cell analysis
Stability and storage	Store at -20°C long term (12 months). Avoid freeze/thaw cycle. Upon receipt, it is recommended to aliquot.

Contents & Storage

Pack Size	Storage	Shipping
10ml	Store at -20°C	Ice chest + Ice pads

Overview

This product is a sterile normal saline solution of Heparin Sodium, a classic mucopolysaccharide polysulfate anticoagulant. Its anticoagulant mechanism involves specific binding to antithrombin III (AT III) in plasma, significantly enhancing AT III's inactivation of various coagulation factors (particularly factor Xa and factor IIa, i.e., thrombin), thereby achieving potent anticoagulation.

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Additionally, heparin sodium inhibits platelet aggregation. This product is intended for scientific research purposes only and must not be used for clinical diagnosis, treatment, or any human applications.

Scope and Limitations

1. Suitable Experiments

Hematocrit (HCT) determination.

Other research experiments requiring in vitro whole blood anticoagulation with no specific requirements for leukocyte morphology or blood smear background.

2. Unsuitable Experiments

Coagulation profile tests (e.g., PT, APTT determination): Heparin interferes with the intrinsic and common coagulation pathways, leading to severely distorted results.

General hematological examination and blood smears: Heparin can cause leukocyte aggregation, affecting differential counts; it also produces a light blue background on Wright-stained blood smears, interfering with microscopic observation.

Clinical diagnosis.

Usage Instructions

Please read all precautions before operation and strictly adhere to aseptic techniques.

1. General Anticoagulation Ratio: The recommended volume ratio of anticoagulant to whole blood is 1:90 to 1:100.

Example: Take 1 mL of this product, add 90–100 mL of freshly collected whole blood, and immediately invert gently 8–10 times to ensure thorough mixing and anticoagulation. Avoid vigorous shaking to prevent hemolysis.

2. Experiment-Specific Adjustment: Some experiments may require different anticoagulant ratios. Please strictly follow the specific experimental protocol or literature.

3. Operational Procedure

- 3.1 Wear a lab coat, mask, and disposable sterile gloves.
- 3.2 Using a sterile syringe or pipette, draw the calculated volume of this product and add it to a clean blood collection tube or container.
- 3.3 Collect fresh blood into the container containing this product.
- 3.4 Mix immediately, gently, and thoroughly.

Preautions

1. Use Restriction: This product is for research use only. It is strictly prohibited for human use or clinical diagnosis.
2. Experiment Selection: Before use, confirm that the intended experiment aligns with this product's suitable applications. Avoid use in coagulation tests and blood smear preparation in particular.
3. Aseptic Technique: Although this product is sterile, opening and handling must be performed in a clean environment using sterile instruments to prevent microbial contamination.
4. Precise Ratio: The anticoagulant-to-blood ratio is critical for accurate results. Use calibrated precision pipetting equipment.
5. Personal Protection: Use appropriate personal protective equipment during operation. In case of accidental contact with skin or eyes, rinse immediately with plenty of water and seek medical attention if necessary.
6. Biohazard: All blood-contaminated samples, containers, and waste reagents must be disposed of according to biohazard waste regulations, such as via autoclaving or professional treatment.

Safety & Precautions

1. Read the current SDS before use and handle the product according to local laboratory safety and EHS procedures.
2. Treat all blood-contacting materials and residual samples as potentially biohazardous waste and dispose of them according to institutional biosafety procedures.
3. Wear a lab coat, disposable gloves, and appropriate eye protection during operation.
4. For research use only. Do not use for clinical diagnosis, treatment, food, cosmetic, or household applications.

Quality Control

QC Item	Method	Acceptable Range
Appearance	Visual inspection	Clear or product-consistent solution with no visible contamination or leakage
Anticoagulation performance	Use with fresh whole blood at the recommended ratio	Blood remains adequately anticoagulated for the intended research assay

QC Item	Method	Acceptable Range
Sterility or microbial control	Lot-specific control according to product specification	Meets the approved specification when the product is labeled sterile
Storage condition	Review label and COA before use	Stored under recommended conditions and used within the valid shelf life

Troubleshooting

Issue	Possible Causes	Corrective Action
Clot formation	• Incorrect anticoagulant-to-blood ratio • Delayed or insufficient mixing • Expired or improperly stored reagent	• Use the recommended ratio • Gently invert immediately after collection • Check storage conditions and lot expiry before use
Hemolysis or abnormal sample condition	• Vigorous shaking • Improper collection technique • Delayed processing	• Mix gently and avoid foaming • Follow validated sample collection procedures • Process samples within the time window required by the experiment
Unexpected assay results	• Ratio or sample handling not controlled • Reagent not appropriate for the assay	• Confirm assay compatibility before use • Run appropriate controls and follow the experimental protocol

Recommended Applications

Cell analysis.

Contact & Global Offices

Whether you have a technical question, need help with a quotation, or want to inquire about an order, our regional teams are ready to assist. Please contact the office for your region; for general inquiries, the North American office is the corporate primary.

NORTH AMERICAN SALES, SUPPORT & GENERAL INQUIRIES

Aladdin Scientific Corporation

14078 Meridian Parkway, Riverside, CA 92518,
USA

Phone: 1-833-552-7181

Sales: sales@aladdinsci.com

Customer Service: custserv@aladdinsci.com

EU SALES, LOGISTICS & LOCALIZED SUPPORT

Aladdin Biochem Deutschland GmbH

Westring 2, 33142 Büren, Germany

Phone: +02951 9383958

Support: support.eu@aladdinsci.com

Limitations & Disclaimer

- For Research Use Only (RUO). Not for use in human or animal diagnostics, therapeutics, or in vivo applications. Not for food, cosmetic, or household use.
- This product is not a CE-marked in vitro diagnostic device under IVDR (EU) 2017/746 and is not an FDA-cleared device under 21 CFR. Use is restricted to verified businesses, institutions, and qualified professionals for research and development purposes.
- Where any product component is classified as hazardous under CLP (EC) 1272/2008 or OSHA HCS (29 CFR 1910.1200), the product Safety Data Sheet (SDS) takes precedence over this document for handling, storage, and disposal information.
- Performance depends on sample type, sample condition, handling, and operator technique. Users are responsible for validating the product for their specific application.
- Aladdin product labels, SDS, COA, and approved specifications take precedence over this document. If product formulation, label, SDS, storage conditions, pack size, or quality specifications change, this document would be reviewed and reissued.