Transparent Radiation-Resistant Blood Separation Gel

Cat. No.: R1520189 | Pack size: 500 g | Storage: Protected from light, Room temperature

Overview

It can be used in conjunction with various blood coagulation accelerators or anticoagulants. It is widely used in clinical biochemistry and immunology testing projects (such as RIA, FIA) that use serum as the test object, as well as in the storage and transfer of serum samples.

Main Components	High molecular polymers, Silicon dioxide, etc.
Properties	This product is a colorless transparent gel with no visible foreign matter. It has good thixotropic properties and isolation effect, and is physiologically inert.
Specific Gravity	1.050～1.060 g/cm^3
Viscosity	(15～20)×10^4 mPa•s

Instructions for Use

- Use a gel filling machine to add the gel into test tubes. The addition amount is 0.8 - 1.0 g per tube (In principle, the optimal gel thickness after the tube is inverted is 4 mm - 5 mm).
- The maximum allowable temperature for the product is 80°C. When filling, heating can be done using a water bath or other suitable methods. The recommended heating temperature is 60-70°C. The heating time should be sufficient to ensure the gel temperature is basically uniform. Prolonged heating at high temperatures may cause the separation gel to yellow, and in severe cases, may lead to structural aging, affecting product quality.
- After filling, the test tubes should be left standing for at least 24 hours before centrifugation. Centrifuge at a relative centrifugal force of 1800-2000 g for 3-5 minutes. Production processes may vary depending on the equipment used.
- For blood tests, after the blood has completely coagulated and serum begins to separate, let it stand for 25-30 minutes.
- Then, centrifuge at an RCF of 1500-2000 g for 8-10 minutes to separate the serum/plasma from the blood cells.
- This product has radiation resistance and can withstand Co-60 irradiation sterilization at doses not exceeding 25 kGy.

Precautions

- The recommended operating temperature range for the separation gel is -20 to +80°C. The viscosity of this product can change significantly with ambient temperature. Ambient temperatures that are too low may make gel filling difficult. It is recommended that when the ambient temperature is below 15°C, heat the gel in a water bath to 60-70°C to reduce viscosity and improve filling efficiency.
- If "stringing" occurs during gel filling at room temperature, the filling temperature can be appropriately increased, or vibration can be used to break the strings.
- This product has been treated under high vacuum, so the gel contains essentially no trapped air. It is generally not recommended to stir the gel during transfer or filling, as stirring can easily introduce a large amount of air into the gel.
- After the gel is added to the test tube, inverted tests under vacuum at 60°C for over 20 consecutive days show a gel flow distance of ≤ 3 mm. This ensures that container transport at 60°C for 20 consecutive days will not cause flow exceeding 3 mm, thereby not affecting the normal use of the blood collection tube. Even so, we still recommend that blood collection tubes containing separation gel should not be stored inverted during long-distance transport, as this may activate the gel's thixotropic properties and potentially cause the separation gel to flow.
- Cleaning the separation gel filling hopper: When switching to a different manufacturer's separation gel, or if the filling hopper has been exposed to air and unused for a long time, it must be cleaned before being put back into use. Cleaning method: First, use a stainless steel spatula to remove the gel adhering to the surfaces inside the hopper. Then, clean with a brush dipped in solvents such as DMC or D4. Finally, wipe clean with a cloth dipped in solvent. The filling tubes should also be cleaned to prevent gel contamination.
- This product should not be mixed or used in contact with other salt solutions.
- Blood samples that have come into contact with this product are strictly prohibited from being re-injected into the human body or used on other individuals.
- Storage: Store in a sealed container, protected from light and moisture.

Specifications

Property	Value
Synonyms	Irradiation Resistant Serum Separation Gel (Transparent)
Specifications & Purity	BioReagent
Stability And Storage	Store at room temperature long term (36 months). Store in the dark. Desiccated.
Storage Conditions	Protected from light,Room temperature
Shipped In	Normal

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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.

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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 kit 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 kit 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 must be reviewed and reissued.