



Medium 231 and SMGS

Instructions for storage and use

Medium 231

Catalog Number: M-231-500
500 ml

Product Description

Medium 231 is a sterile, liquid culture medium intended for use as one component in a complete culture environment for the growth of normal human vascular smooth muscle cells. Medium 231 is a basal medium containing essential and non-essential amino acids, vitamins, other organic compounds, trace minerals, and inorganic salts. This medium does not contain antibiotics, antimycotics, hormones, growth factors, or proteins. This medium is HEPES and bicarbonate buffered and is designed for use in an incubator with an atmosphere of 5% CO₂/95% air. To support the plating and proliferation of normal human vascular smooth muscle cells, Medium 231 must be supplemented with Smooth Muscle Growth Supplement (SMGS, cat.# S-007-25). To induce differentiation of normal human vascular smooth muscle cells, Medium 231 must be supplemented with Smooth Muscle Differentiation Supplement (SMDS, cat.# S-008-5). *Note: For more information on SMDS, please refer to our catalog or to the instructions for storage and use that accompany SMDS.*

Intended Use

Medium 231 is intended for use in the routine culture of normal human smooth muscle cells. When supplemented with SMGS, Medium 231 will support the plating and proliferation of smooth muscle cells at densities between 2.5 x 10³ cells/cm² and 1 x 10⁵ cells/cm². Additional applications for use may include primary isolation of human smooth muscle cells. ***This product is for research use only. Not for use in animals, humans, or diagnostic procedures.***

Caution: If handled improperly, some components of this product may present a health hazard. Take appropriate precautions when handling this product, including the wearing of protective clothing and eyewear. Dispose of properly.

Storage and Stability

Medium 231 is stored at 4° C in our facility and is shipped at ambient temperature. Upon receipt, Medium 231 should be stored at 4° C and should not be frozen. **Protect from light.** Several components of this tissue culture medium are light-labile, and we recommend that the medium not be exposed to light for lengthy periods of time. If the medium is warmed prior to use, do not exceed 37° C. When stored in the dark at 4° C, the product is stable until the expiration date shown on the label.

Preparation of Supplemented Medium 231

1. Thaw one bottle of SMGS. Take one bottle of Medium 231 from cold storage. Make sure that the caps of the vessels are tight.
2. Gently swirl the bottle of supplement. Avoid splashing the supplement into the cap of the bottle or causing the supplement to foam.
3. Wipe the outside of the containers with a disinfecting solution such as 70% ethanol or isopropanol.
4. Using sterile technique in a laminar flow culture hood, transfer the entire contents of the bottle of supplement to the bottle of Medium 231.
5. Tightly cap the bottle of supplemented medium and swirl the contents to ensure a homogeneous solution. Avoid causing the medium to foam.

Storage and Stability of Supplemented Medium 231

Once Medium 231 has been supplemented with SMGS, the supplemented medium should be stored in the dark at 4° C and should not be frozen. When stored in the dark at 4° C, the supplemented medium is stable for 1 month.



SMGS

Smooth Muscle Growth Supplement

Catalog Number: S-007-25
25 ml

Product Description

Smooth Muscle Growth Supplement (SMGS) is a sterile, concentrated (20X) solution intended for use as one component in a complete culture environment for the growth of normal human vascular smooth muscle cells. Each 25 ml bottle of SMGS contains all of the growth factors, hormones, and tissue extracts necessary for the culture of these cells, and is the correct amount of supplement for a 500 ml bottle of basal Medium 231. SMGS contains fetal bovine serum (5% v/v final concentration), recombinant human basic fibroblast growth factor, recombinant human epidermal growth factor, and insulin.

Intended Use

SMGS is intended for use in conjunction with Medium 231 for the routine culture of normal human vascular smooth muscle cells. Additional applications for use may include primary isolation of human smooth muscle cells. ***This product is for research use only. Not for use in animals, humans, or diagnostic procedures.***

Caution: If handled improperly, some components of this product may present a health hazard. Take appropriate precautions when handling this product, including the wearing of protective clothing and eyewear. Dispose of properly.

Storage and Stability of SMGS

SMGS is stored at -20° C at our facility and is shipped on dry ice. Upon receipt, the product should be stored at -20° C in a freezer that is not self-defrosting. When stored at -20° C, the product is stable until the expiration date shown on the label.

After long-term storage at -20° C, SMGS may contain a small amount of precipitate. This precipitate is formed from cold-insoluble material in the serum component of the SMGS and will not affect the performance of the product.

Thawing

To thaw, place the product in a 37° C water bath or overnight at 4° C. If thawed in a water bath, do not leave the product at 37° C after the product has thawed. For instructions on adding SMGS to Medium 231, please refer to the instructions that accompany the basal medium.

Terms and Conditions of Sale

Cascade Biologics, Inc. (hereinafter, CBI) warrants that its products will perform according to the information provided in various publications that it distributes, and as described herein for the intended shelf life of the product when stored under the conditions prescribed by CBI. If any product does not perform according to the published information provided by us, CBI will replace the product free of charge to the original customer. The remedy of product replacement shall be the customers' sole and exclusive remedy for defective product, unless CBI is unable to deliver replacement product, in which case CBI shall reimburse the customer for the purchase price of the defective product. Customer understands that the foregoing limited warranty is in lieu of all other warranties and CBI hereby disclaims all other warranties including, but not limited to, implied warranty of merchantability or fitness for adequacy for any particular purpose or use. CBI shall not be liable to customer or to any party claiming through customer for any incidental or consequential damages, including, but not limited to any lost profits, lost savings, or lost business, whether arising out of contract, tort, or otherwise. Customer acknowledges that products are intended for research use only and are not to be used in animals, humans, or diagnostic procedures.