

Human Fibroblast Expansion Medium (formerly "Medium 106")

Catalog Number M-106-500

Pub. No. MAN0001624 Rev. 3.0

 **WARNING!** Read the Safety Data Sheets (SDSs) and follow the handling instructions. Wear appropriate protective eyewear, clothing, and gloves. Safety Data Sheets (SDSs) are available from [thermofisher.com/support](https://www.thermofisher.com/support).

Product description

Human Fibroblast Expansion Medium (formerly "Medium 106") is a sterile-filtered, liquid tissue culture medium intended for use as one component in a complete culture environment for the growth of normal human dermal fibroblasts. Human Fibroblast Expansion Medium is a basal culture medium containing essential and non-essential amino acids, vitamins, other organic compounds, trace minerals, and inorganic salts. Human Fibroblast Expansion 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 long-term proliferation of human dermal fibroblasts, Human Fibroblast Expansion Medium must be supplemented with Low Serum Growth Supplement (LSGS, Cat. No. [S-003-10](#)), or Low Serum Growth Supplement Kit (LSGS Kit, Cat. No. [S-003-K](#)).

Contents and storage

| Contents | Cat. No. | Amount | Storage ^[1] |
|-----------------------------------|---------------------------|--------|--|
| Human Fibroblast Expansion Medium | M-106-500 | 500 mL | 4°C; protect from light; do not freeze |

^[1] When stored at 4°C, the product is stable until the expiration date on the label.

Note: If the medium is warmed prior to use, do not exceed 37°C.

Intended use

Human Fibroblast Expansion Medium is intended for use in the routine culture of normal human dermal fibroblasts. When supplemented with LSGS or LSGS Kit, Human Fibroblast Expansion Medium will support the plating and proliferation of fibroblasts at densities between 1×10^2 cells/cm² and 1×10^5 cells/cm². Additional applications for use may include primary isolation of fibroblasts from dermal tissue. 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.

Prepare Human Fibroblast Expansion Medium supplemented with LSGS

Note: For information on LSGS (Cat. No. [S-003-10](#)), refer to the LSGS product sheet.

1. Thaw one bottle of LSGS. Take one bottle of medium 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.
5. Tightly cap the bottle of supplemented medium and swirl the contents to ensure a homogeneous solution. Avoid causing the medium to foam.

Once Medium 106 has been supplemented with LSGS, 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.

For Research Use Only. Not for use in diagnostic procedures.

Prepare Human Fibroblast Expansion Medium supplemented with the LSGS Kit

For information on LSGS Kit (Cat. No. S-003-K), refer to the LSGS Kit product sheet.

1. Thaw the frozen components of the LSGS Kit. Take one bottle of medium from cold storage. Make sure the caps of the vessels are tight.
2. Gently swirl each component of the LSGS Kit. Avoid splashing the components into the caps of the bottles or causing any of the components 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 desired amount of each component of the LSGS Kit to the bottle of medium in the following order:
 - a. Fetal bovine serum
 - b. Recombinant human basic fibroblast growth factor/heparin
 - c. Hydrocortisone, recombinant human epidermal growth factor

Note: The addition of less than the entire amount of any component may affect the performance of the supplemented medium.

5. If antibiotics/antimycotics are desired, add the antibiotic/antimycotic solution included in LSGS Kit using the same technique as above.
6. Tightly cap the bottle of supplemented medium and swirl the contents to ensure a homogeneous solution. Avoid causing the medium to foam.

Once Human Fibroblast Expansion Medium has been supplemented with LSGS Kit, 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.



Life Technologies Corporation | 3175 Staley Road | Grand Island, New York 14072 USA

For descriptions of symbols on product labels or product documents, go to [thermofisher.com/symbols-definition](https://www.thermofisher.com/symbols-definition).

The information in this guide is subject to change without notice.

DISCLAIMER: TO THE EXTENT ALLOWED BY LAW, THERMO FISHER SCIENTIFIC INC. AND/OR ITS AFFILIATE(S) WILL NOT BE LIABLE FOR SPECIAL, INCIDENTAL, INDIRECT, PUNITIVE, MULTIPLE, OR CONSEQUENTIAL DAMAGES IN CONNECTION WITH OR ARISING FROM THIS DOCUMENT, INCLUDING YOUR USE OF IT.

Important Licensing Information: This product may be covered by one or more Limited Use Label Licenses. By use of this product, you accept the terms and conditions of all applicable Limited Use Label Licenses.

©2021 Thermo Fisher Scientific Inc. All rights reserved. All trademarks are the property of Thermo Fisher Scientific and its subsidiaries unless otherwise specified.