Cascade Biologics™
invitrogen cell culture

GIBCO®
invitrogen cell culture

Medium 254

Cat. no. M-254-500

500 ml

Product Description

Medium 254 is a sterile, liquid tissue culture medium prepared with 200 µM calcium chloride for the culture of normal human epidermal melanocytes. This medium is intended for use as one component in a complete culture environment. Medium 254 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% CO_2/95% air. To support plating and long-term proliferation of normal human melanocytes, Medium 254 must be supplemented with Human Melanocyte Growth Supplement (HMGS, cat. no. S-002-5) or PMA-Free Human Melanocyte Growth Supplement-2 (HMGS-2, cat. no. S-016-5). Each of these supplements contains all of the growth factors, hormones, and tissue extracts necessary for growth of melanocytes in Medium 254.

Intended Use

Medium 254 is intended for use in the routine culture of normal human epidermal melanocytes. When supplemented with HMGS or HMGS-2, Medium 254 will support the plating and proliferation of melanocytes at varying culture densities from 5 x 10^3 cells/cm^2 to 1 x 10^5 cells/cm^2. Additional applications for use may include primary isolation of melanocytes from skin.

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 254 is stored at 4° C in our facility and is shipped at ambient temperature. Upon receipt, the medium 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 on the label.

Follow the supplementation instructions below to prepare the medium for use.

Preparation of Supplemented Medium 254

***Note**: For information on HMGS or HMGS-2, please refer to the product sheets that accompany those products.*

1. Thaw one bottle of HMGS or one bottle of HMGS-2 according to the instructions provided with those products. Make sure that the cap of the bottle is tight. Gently swirl the bottle of supplement. Avoid splashing the supplement into the cap of the bottle or causing the supplement to foam.
2. Wipe the outside of the containers with a disinfecting solution such as 70% ethanol or isopropanol.
3. To add the HMGS or HMGS-2, transfer the entire contents of the bottle of supplement to the bottle of medium using sterile technique in a laminar flow culture hood.
4. 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 254

Once Medium 254 has been supplemented with HMGS or HMGS-2, 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.

Limited Use Label License No. 5: Invitrogen Technology

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