

Product Information Sheet

Human HaCaT Keratinocyte Growth Media
Catalog Number: MR1013

Product Overview	
Product Name	Human HaCaT Keratinocyte Growth Media
Catalog #s	MR1013
Quantity	450 mL
Product Form	Liquid
Cell Type	Human HaCaT Keratinocytes
Reagents Needed	Customer choice of high-grade or fully defined Fetal Bovine Serum (FBS) (not included) Penicillin/Streptomycin/Amphotericin B solution or Penicillin/Streptomycin solution, 100X (not included) ¹

Product Description
<p>Human HaCaT Keratinocyte Growth Media</p> <p>Human HaCaT Keratinocyte Growth Media is a high-performance formulation designed to support the robust proliferation of keratinocytes while maintaining their physiological characteristics. This optimized media provides the essential nutrients, growth factors, and metabolic support required for efficient keratinocyte expansion. When cultured in this media, keratinocyte cells retain their cuboidal morphology and exhibit a consistent 48-hour doubling time, ensuring reproducibility across experiments.</p> <p>Our Human Keratinocyte Growth Media promotes strong cell adhesion, high viability, and sustained proliferation across multiple passages. It is ideal for research applications in regenerative medicine, skin biology, wound healing, and epithelial cell function. The media is compatible with both primary human keratinocytes and immortalized keratinocyte cell lines, offering versatility for a wide range of experimental setups.</p> <p>Engineered for superior performance, this media minimizes variability, enabling researchers to generate reliable, high-quality data. It works seamlessly in serum-containing and serum-free culture conditions, providing flexibility for researchers to tailor their protocols based on experimental requirements.</p> <p>By delivering a stable and defined environment for keratinocyte expansion, our media accelerates workflows and improves cell culture outcomes. Researchers can confidently use this media for applications such as keratinocyte differentiation, epithelial tissue modeling, and advanced cell therapy development.</p> <p>Recommended Uses:</p> <ul style="list-style-type: none"> For use with the following cell types: <ul style="list-style-type: none"> Human HaCaT Keratinocyte Cells (CR1017-500) <p>Shipping & Storage:</p> <ul style="list-style-type: none"> Media is shipped with gel packs to maintain stability and preserve critical components. Store at the recommended temperature upon arrival for maximum shelf life and performance. <p><small>Note: This product is designed and tested to function with Cellular Engineering Technologies Inc. ("CET") product CR1017-500 Human HaCaT Keratinocyte Cells (not included). Although investigators are welcome to use this product with other hepatocellular carcinoma cells, CET cannot and will not guarantee this product's performance. Additionally, using third-party cell lines with this product will void CET's warranty should they not function as indicated. Please refer to CET's Terms & Conditions, available on www.celleng-tech.com.</small></p>



FOR RESEARCH APPLICATIONS ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

Media Formulation Instructions	
Defrosting / Preparation	Defrost 50mL of FBS (not included) and 5mL of antibiotic/antimycotic solution (not included) in a 37°C water bath until ice in the tubes is no longer visible. Immediately disinfect the tubes and the bottle containing this base media with 70% isopropanol (not included).
Mixing	Working in a laminar flow hood, remove 5mL of the base media from the bottle and discard. This and all other procedures must be done in a sterile manner. Add 50mL of FBS to the base media. Add 5mL of the antibiotic/antimycotic solution to the base media ¹ . Cap the bottle containing the mixed liquid solution and gently swirl a few times. This formulated media is now considered complete media and ready to use with cells.

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Cell Thawing and Plating Instructions (for CR1017-500 Human HaCaT Keratinocyte Cells <u>not included</u>)	
Thawing	Remove the vial of Human HaCaT Keratinocyte Cells (CR1017-500) (not included) from dry ice. Defrost the vial of cells in a 37°C water bath with constant, moderate agitation until ice in the ampoule is barely visible. DO NOT OVERTHAW. Immediately disinfect the vial with 70% isopropanol (not included), ensuring no isopropanol enters the vial.
Plating	Working in a laminar flow hood, open the vial and transfer the contents to a sterile 15 mL tube. Very slowly, add approximately 10 mL of complete media (see Media Formulation Instructions), pre-warmed to 37°C before use. Centrifuge suspended cells at 200 x g for 10 minutes. Decant the medium and gently resuspend the pellet in the appropriate amount of complete media necessary to achieve a plating density of 20,000 cells/cm ² of surface area. After 24 hours, aspirate media from the flask or dish, rinse with 1X Dulbecco's Phosphate Buffered Saline (not included), and replenish with fresh complete media, pre-warmed to 37°C before use.
Observation/ Expansion	It is normal for HaCaT Keratinocyte cells to grow slowly initially for a period of one-week post-thaw. It is also normal for some cells to be shed during media changes. Subculture cells at a 1:3 split ratio using 0.25% Trypsin/EDTA (not included).

Storage and Stability		
	Storage Temperature	Storage Time
Human HaCaT Keratinocyte Growth Media	4°C	3 months
complete media (see Media Formulation Instructions)	2-8°C	Not applicable
<i>Avoid repeated exposure to room temperature and light.</i>		

¹ These solutions should be portioned in 5mL aliquots, stored at -20C and never frozen/thawed. Although antimycotics are not necessary, CET highly recommends their usage for long-term cell culture. Antibiotics and antimycotics should not be used as an alternative to proper aseptic techniques.