

# Introducing GIBCO® Human Mammary Epithelial Cells (HMEC)

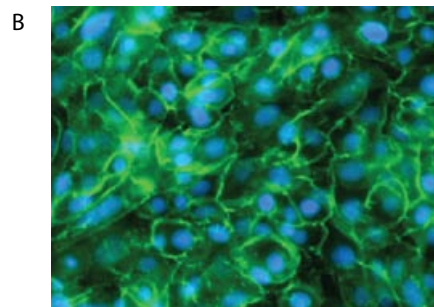
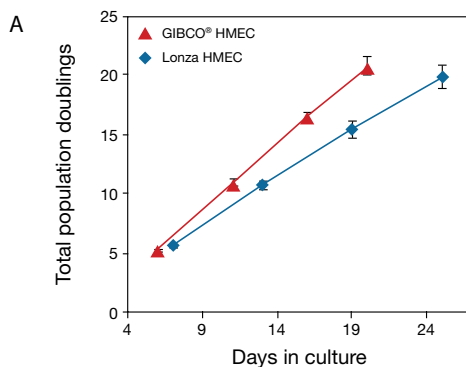
- Superior growth performance compared to the leading provider
- Each lot positive for cytokeratin 5/6, 8, and 18 and E-cadherin markers
- Cryopreserved at end of the sixth culture—two culture levels earlier than the leading provider
- For a limited time, get HuMEC Ready Medium free when you buy these cells

Primary HMEC are ideal for research into the causes of breast cancer and tumor progression because they mimic *in vivo* conditions better than cell lines do. These cells are the latest in our expanding offering of high-quality primary human cells and cell culture systems. We offer a complete culture system: cryopreserved cells derived from healthy mammary tissue, with over 500,000 viable cells per vial, validated to work with HuMEC Ready Medium. These cells are cryopreserved at the end of the sixth culture—two culture levels earlier than the leading provider—at

over 70% viability. As a result, they offer superior growth performance (Figure 1).

## High-efficiency gene delivery into HMEC using BacMam

The BacMam system uses recombinant baculovirus, an insect cell virus, to deliver genetic material to mammalian cells under control of a strong constitutive promoter. Invitrogen offers a variety of ready-to-use BacMam products, including fluorescent protein-

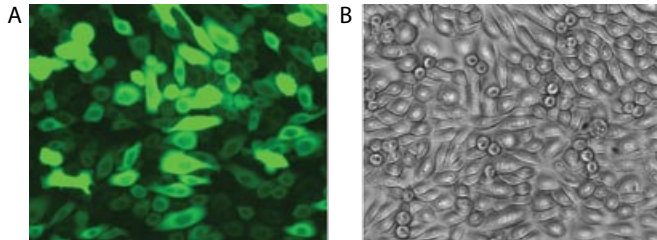


**Figure 1—Human mammary epithelial cells (HMEC) in culture.** (A) Total population doublings as a function of time. Each data point represents a passaging of triplicate T25 flasks. (B) Fluorescence micrograph of fixed HMEC staining positive for anti-human E-cadherin.

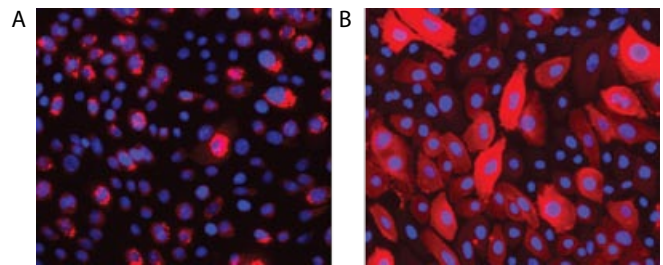


based biosensors, cell labeling tools, and ion channels. Organelle Lights™ and Cellular Lights™ fluorescent proteins are fused with signal peptides engineered for accurate and specific targeting to subcellular compartments and structures and are ideal for the study of dynamic cellular processes. With GIBCO® HMEC, we obtain >95% transduction efficiency of BacMam-encoded fluorescent proteins (Figures 2 and 3) using an optimized protocol (available online at [www.invitrogen.com/mammarycells](http://www.invitrogen.com/mammarycells)).

For more information or to place an order, visit [www.invitrogen.com/mammarycells](http://www.invitrogen.com/mammarycells). For a limited time, get HuMEC Ready Medium free with your purchase of a vial of GIBCO® HMEC. Offer expires December 31, 2008; use promotion code **MHMECX** when ordering.



**Figure 2—Live-cell images of human mammary epithelial cells transduced with Premo™ Cameleon Calcium Sensor.** (A) Fluorescent micrograph (100x); (B) phase-contrast micrograph (100x) of field shown in (A).



**Figure 3—Fixed-cell images of human mammary epithelial cells transduced with Organelle Lights™ and Cellular Lights™ intracellular targeted fluorescent proteins.** Fluorescent micrographs (200x) of (A) Organelle Lights™ Golgi-RFP and (B) Cellular Lights™ Actin-RFP. Fluorescent proteins are red; nuclei, stained with Hoechst dye, are blue.

## Ordering information

Product	Description	Quantity	Cat. no.
GIBCO® Human Mammary Epithelial Cells (HMEC)	Human mammary epithelial cells, cryopreserved at the end of the sixth culture (fifth passage)	>500,000 viable cells	A10565
HuMEC Basal Medium	A 1X liquid basal medium optimized for the culture of primary human mammary epithelial cells	500 ml	12753-018
HuMEC Supplement Kit	A serum-free growth supplement (5 ml) plus bovine pituitary extract (25 mg) validated for use with HuMEC Basal Medium	1 kit	12755-013
HuMEC Ready Medium	A combination medium containing HuMEC Basal Medium and contents of HuMEC Supplement Kit	500 ml	12752-010

GIBCO® supplies media, sera, and reagent technology that set the standard for reliability and productivity in cell culture systems.

