

## **Cell Line Designation: BT-20**

# Catalog No. C0006014 (formerly C0016014)

### **Cell Line Description:**

Disease: Carcinoma

**Origin:** This breast tumor line was established in 1958 by isolation and cultivation of cells spilling out of the tumor when it was cut in thin slices.

**Species:** Homo sapiens, human

Tissue: Breast, mammary gland

**Properties:** Epithelial, adherent

**Complete Medium:** Formulated EMEM (C0005-01)[compare formulation before culturing if not using our medium C0005-01, please see remarks below] + 10% FBS

**Subculture Procedure:** 1:2 -1:4 using trypsin/EDTA; culture at 5% CO<sub>2</sub>, 37°C

Medium Renewal: Two to three times weekly.

Freezing Medium: Complete culture medium supplemented with 5% (v/v) DMSO

#### **Biosafety Level: 1**

Appropriate safety procedures should always be used with this material. laboratory safety is discussed in the following publication: Biosafety in Microbiological and Biomedical Laboratories, 5th ed. HHS Publication No. (CDC) 93-8395. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. Washington DC: U.S. Government Printing Office; 2007. The entire text is also available online at www.cdc.gov/od/ohs/biosafty/bmbl4/bmbl4toc.htm

**Use Restrictions: These cells are distributed for research purposes only.** Gentaur does not recommend third party distribution of this cell line, as this practice has resulted in the unintentional spreading of contaminated cell lines.

### Handling Procedure for Frozen Cells:

To insure the highest level of viability, thaw the vial and initiate the culture as soon as possible upon receipt. If upon arrival, continued storage of the frozen culture is necessary, it should be stored in liquid nitrogen vapor phase and not at -70°C. Storage at -70°C will result in loss of viability.

#### **Safety Precaution:**

Gentaur highly recommends that protective gloves and clothing always be used and a full face mask always be worn when handling frozen vials. It is important to note that some vials leak when submersed in liquid nitrogen and will slowly fill with liquid nitrogen. Upon thawing, the conversion of the liquid nitrogen back to its gas phase may result in the vessel exploding or blowing off its cap with dangerous force creating flying debris.

- 1. Thaw the vial by gentle agitation in a 37°C water bath. To reduce the possibility of contamination, keep the O-ring and cap out of water. Thawing should be rapid (approximately 2 minutes).
- 2. Remove the vial from the water bath as soon as the contents are thawed, and decontaminate by dipping in or spraying with 70% ethanol. All of the operations from this point on should be carried out under strict aseptic conditions.
- 3. Transfer the vial contents to the centrifuge tube containing 9.0 mL complete culture medium and spin at approximately 125xg for 5 to 7 minutes.
- 4. Resuspend cell pellet with the recommended complete medium and dispense into a new culture flask. It is important to avoid excessive alkalinity of the medium during recovery of the cells. It is suggested that, prior to the addition of the vial contents, the culture vessel containing the complete growth medium be placed into the incubator for at least 15 minutes to allow the medium to reach its normal pH (7.0-7.6).
- 5. Incubate the culture at  $37^{\circ}$ C in a suitable incubator. A 5% CO<sub>2</sub> in air atmosphere is recommended.

#### **References for BT-20 cells:**

1. LASFARGUES EY, OZZELLO L. Cultivation of human breast carcinomas. J Natl Cancer Inst. 1958;21(6):1131-1147.

#### Lot Specific Information Sheet for Cat #: C0006014

Lot Number: 0195873

Designation: BT-20 CELLS

Total Cells/mL: >1.3x10<sup>6</sup>

Expected Viability: 80.0-85.0%

Ampule Passage #: 16

Dilute Ampule Content: 1:10 (T-25) or 1:15 (T-75)

Volume/Ampule: 1 mL

A T-25 setup at a dilution of 1:10, using culture medium as described in the product information sheet, reaches approximately 50-60% confluence within 24 to 48 hours.

#### **Remarks:**

- This cell line grows slowly especially when using a medium that has a different formulation.
- Do not culture this cells with anti-fungal reagents that will slow down the growth.
- If cell growth is extremely slow, try another lot or vendor of FBS, or you may increase the FBS to 15%-20%. A correct medium should be looked at first.
- Our EMEM (C0005-01) contains the correct concentrations of L-glutamine, sodium bicarbonate, sodium pyruvate, and nonessential amino acids needed to successfully culture this cell line. You have to make sure the formulation from other vendors is equivalent to ours before use.