

MDA-MB-468 Cell Line

Catalog No.: AMS.EP-CL-0290

Origin and General Characteristics

Cell NameMDA-MB-468 Cell LineOrganismHomo sapiens, Human

Age 51 years

Tissue Mammary gland/breast, derived from metastatic site: pleural effusion

Morphology Epithelial
Growth Properties Adherent

Descriptions Although the tissue donor was heterozygous for the G6PD alleles, the cell line

consistently showed only the G6PD A phenotype. There is a G-2 A mutation in codon 273 of the p53 gene resulting in an Arg-2 His substitution. EGF receptor is

present at 1×10⁶ per cell.

Biosafety Level 1

Culture Conditions and Handling

Complete Growth Medium DMEM +10% FBS +1% P/S

Subculturing Remove and discard culture medium. Briefly rinse the cell layer with DPBS

solution to remove all traces of serum that contains trypsin inhibitor. Add 1.0 to 2.0 mL of Trypsin-EDTA solution to flask and observe cells under an inverted microscope until cell layer is dispersed (usually within 2 to 3 minutes). Cells that are difficult to detach may be placed at 37°C to facilitate dispersal. Add 4.0 to 6.0 mL of complete growth medium and aspirate cells by gently pipetting. Add

appropriate aliquots of the cell suspension to new culture vessels.

Subcultivation Ratio 1:2-1:4

Medium Renewal Every 2 to 3 days

Cryopreservation Freeze medium: 60% Basal medium+30% FBS+10% DMSO

Storage temperature: Liquid nitrogen vapor phase

Culture Conditions Atmosphere: Air, 95%; CO2, 5%

Temperature: 37°C

Special Features of the Cell Line

Tumorigenic Yes

Effects Yes, in nude mice inoculated subcutaneously with 10[^]7

cells. Tumors developed within 21 days at 100%

frequency (5/5).

Receptor Expression Epidermal growth factor(EGF); transforming growth

factor alpha(TGF alpha)

Antigen Expression Blood Type AB; HLA Aw23, Aw30, B27, Bw35, Cw2,

Cw4(patient)

Applications Transfection host.



Recommendations for handling of cryopreserved cells

- 1. The cell is packaged by dry ice. When receiving the cell, please make sure that the vial is still frozen. If there is cell thawing in the tube, please take photo before experiment or storage.
- 2. If immediate culturing is not intended, the cryovial(s) must be stored in liquid nitrogen (-196°C) or at least at -80°C after arrival.
 - If immediate culturing is intended, please follow these instructions:
- 3. Quickly thaw by rapid agitation in a 37°C water bath within 45-90 seconds. The water bath should have clean water containing an antimicrobial agent. As soon as the sample has thawed, remove the cryovial from the water bath.
 - Note: A small ice clump should still remain and the vial should still be cold.
 - From now on, all operations should be carried out under aseptic conditions.
- 4. Transfer the cryovial to a sterile flow cabinet and wipe with 70% alcohol. Carefully open the vial and transfer the cell suspension into a 15 ml centrifuge tube containing 9 ml of cell complete medium (room temperature or 37°C).
- 5. In order to reduce cell damage, add 1ml of cell complete medium into cryovial, slightly pipette, then use a pipettor to add 1 ml of suspension into the centrifuge tube. Resuspend the cells carefully. Centrifuge at 300×g for 3 min and discard the supernatant. The centrifugation step may be omitted, but in this case the remains of the freeze medium have to be removed 24 hours later.
- 6. Resuspend the cells carefully in 10ml fresh cell culture medium and transfer them into one or two T25 cell culture flasks.