

Product sheet

MDA-MB-453 | 305042

General Information

Description	MDA-MB-453 is a cell line derived from a 48-year-old female patient with metastatic breast cancer. It is a highly metastatic, hormone-independent, and HER2-overexpressing cell line. MDA-MB-453 is characterized by its ability to form mammary xenografts in immunodeficient mice, which exhibit a high degree of metastatic potential, including lung, liver, and bone metastases. The cell line is maintained in DMEM/F12 medium supplemented with 10% fetal bovine serum (FBS) and 100 ng/ml insulin-like growth factor 1 (IGF1). MDA-MB-453 is a highly metastatic, hormone-independent, and HER2-overexpressing cell line. It is characterized by its ability to form mammary xenografts in immunodeficient mice, which exhibit a high degree of metastatic potential, including lung, liver, and bone metastases. The cell line is maintained in DMEM/F12 medium supplemented with 10% fetal bovine serum (FBS) and 100 ng/ml insulin-like growth factor 1 (IGF1).
Organism	Human
Tissue	Breast, Metastatic
Disease	Metastatic Breast Cancer
Metastatic site	Metastatic
Synonyms	MDA-MB 453, MDA MB 453, MDA-MB453, MDAMB453, MDA-453, MDA453, MD Anderson-Metastatic Breast-453

Cell Line Characteristics

Age	48 years
Gender	Female
Ethnicity	White
Morphology	Epithelial
Growth properties	Adherent

Identification and Safety

Citation	MDA-MB-453 (ATCC CCL-221) Cytion 305042
Biosafety level	1
NCBI_TaxID	9606
CellosaurusAccession	CVCL_0418

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Thawing and Culturing Cells

1. Thaw the cells in a water bath at 37°C. Transfer the cells to a pre-warmed medium.
2. Centrifuge the cells at 300 x g for 3 minutes. Resuspend the cells in 15 ml of pre-warmed medium.
3. Seed the cells into a 25 cm² flask containing 15 ml of pre-warmed medium.
4. Incubate the cells at 37°C with 5% CO₂ until they reach 70% confluency.
5. Harvest the cells by trypsinization and centrifugation at 300 x g for 3 minutes.
6. Resuspend the cells in 10 ml of pre-warmed medium.
7. Seed the cells into a 25 cm² flask containing 10 ml of pre-warmed medium.
8. Incubate the cells at 37°C with 5% CO₂ until they reach 70% confluency.

Incubation Atmosphere 37°C, 5% CO₂, humidified air

Flask Coating None

Shipping Conditions Dry ice, -78°C

Storage Conditions Dry ice, -150 to 196 °C

MDA-MB-453 / MDA-MB-453 / HLA

Sterility Sterile, PCR negative