

MDA-MB-453 | 305042

General information

Description	MDA-MB-453 is a cell line derived from a primary mammary carcinoma of a 48-year-old female patient. The cell line is characterized by its high tumorigenicity and ability to form mammary tumors in nude mice. It is a highly metastatic cell line, capable of spreading to various organs, including the lungs, liver, and bone. The cell line is maintained in DMEM/F12 medium supplemented with 10% fetal bovine serum (FBS) and 10 ng/ml insulin-like growth factor-1 (IGF-1). MDA-MB-453 is a cell line derived from a primary mammary carcinoma of a 48-year-old female patient. The cell line is characterized by its high tumorigenicity and ability to form mammary tumors in nude mice. It is a highly metastatic cell line, capable of spreading to various organs, including the lungs, liver, and bone. The cell line is maintained in DMEM/F12 medium supplemented with 10% fetal bovine serum (FBS) and 10 ng/ml insulin-like growth factor-1 (IGF-1).
Organism	Human
Tissue	Mammary gland, Tumor
Disease	Breast cancer
Metastatic site	Lung, Liver, Bone
Synonyms	MDA-MB 453, MDA MB 453, MDA-MB453, MDAMB453, MDA-453, MDA453, MD Anderson-Metastatic Breast-453

Cell characteristics

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

Cell authentication and quality control

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

Product sheet

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MDA-MB-453-1

Receptors expressed	EGFR, HER2, FGFR3, IGF1R
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Tumorigenic	Yes
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MDA-MB-453

Culture Medium	DMEM:Ham's F12 (1:1), w: 3.1 g/L D-glucose, w: 2.5 mM L-glutamine, w: 15 mM HEPES, w: 0.5 mM $\text{Na}_2\text{S}_2\text{O}_8$, w: 1.2 g/L NaHCO_3 (820400a)
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Supplements	Insulin, Transferrin 10% FBS
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Dissociation Reagent	Trypsin
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Subculturing	Cells are grown in 25 cm ² flasks in DMEM:Ham's F12 (1:1) supplemented with 3.1 g/L D-glucose, 2.5 mM L-glutamine, 15 mM HEPES, 0.5 mM $\text{Na}_2\text{S}_2\text{O}_8$, 1.2 g/L NaHCO_3 (820400a), and 10% FBS. Cells are passaged when they reach 80-90% confluency. Cells are detached using trypsin and resuspended in DMEM:Ham's F12 (1:1) supplemented with 3.1 g/L D-glucose, 2.5 mM L-glutamine, 15 mM HEPES, 0.5 mM $\text{Na}_2\text{S}_2\text{O}_8$, 1.2 g/L NaHCO_3 (820400a), and 10% FBS.
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Fluid renewal	2-3 times per week
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Freeze medium	DMEM:Ham's F12 (1:1), w: 3.1 g/L D-glucose, w: 2.5 mM L-glutamine, w: 15 mM HEPES, w: 0.5 mM $\text{Na}_2\text{S}_2\text{O}_8$, w: 1.2 g/L NaHCO_3 (820400a), (10% FBS) + 10% DMSO
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Thawing and
Culturing Cells

1. 将细胞冻存管放入 37°C 水浴中快速解冻，解冻后将细胞悬液转移到含有 1 mL 培养基的离心管中，离心（1500 rpm，5 min），弃去上清液。
2. 将细胞重悬于 1 mL 培养基中，将细胞悬液转移到含有 10 mL 培养基的离心管中，离心（1500 rpm，5 min），弃去上清液。
3. 将细胞重悬于 1 mL 培养基中，将细胞悬液转移到含有 10 mL 培养基的离心管中，离心（1500 rpm，5 min），弃去上清液。
4. 将细胞重悬于 1 mL 培养基中，将细胞悬液转移到含有 10 mL 培养基的离心管中，离心（1500 rpm，5 min），弃去上清液。
5. 将细胞重悬于 1 mL 培养基中，将细胞悬液转移到含有 10 mL 培养基的离心管中，离心（1500 rpm，5 min），弃去上清液。
6. 将细胞重悬于 1 mL 培养基中，将细胞悬液转移到含有 10 mL 培养基的离心管中，离心（1500 rpm，5 min），弃去上清液。
7. 将细胞重悬于 1 mL 培养基中，将细胞悬液转移到含有 10 mL 培养基的离心管中，离心（1500 rpm，5 min），弃去上清液。
8. 将细胞重悬于 1 mL 培养基中，将细胞悬液转移到含有 10 mL 培养基的离心管中，离心（1500 rpm，5 min），弃去上清液。

Incubation
Atmosphere

37°C, 5% CO₂, 饱和湿度

Flask Coating

无涂层

Shipping
Conditions

细胞冻存管应储存在 -80°C 以下，运输过程中应保持在 -78°C 以下。

Storage
Conditions

细胞冻存管应储存在 -80°C 以下，运输过程中应保持在 -78°C 以下。

细胞冻存管 细胞冻存液 细胞冻存液

Sterility

细胞冻存管应储存在 -80°C 以下，运输过程中应保持在 -78°C 以下。