

Data Sheet

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BCRJ Code:	0432
Cell Line:	MDA-MB-361
Species:	Homo sapiens
Vulgar Name:	Human
Tissue:	Breast; Mammary gland (brain metastasis)
Cell Type:	Epithelial
Morphology:	Epithelial
Disease:	Adenocarcinoma
Growth Properties:	Loosely Adherent
Sex:	Female
Age/Ethnicity:	40 Year / White
Applications:	3D cell culture; Neuroscience
Products:	Genes expressed: wnt7h+; Isoenzymes: AK-1, 1; ES-D, 1; G6PD, B; GLO-I, 2; Me-2, 1; PGM1, 1; PGM3, 1-2
Biosafety:	1

Additional Info:

This line differs from others of the series in karyology and in that it was isolated from a brain metastasis. The cell line is aneuploid human female, with chromosome counts in the hyperdiploid range. Normal chromosomes N11 and N17 are absent, chromosomes N1, N20, and N21 are weakly represented, and chromosomes N2, N8, N9, and N15 are single. The remainder of chromosomes are often paired. Eighteen marker chromosomes are found, of which 10 are consistently present. Some of these markers are found to be quite comparable to those described by K.L. Satya-Prakash, et al., in their report on this cell line.



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Culture Medium:	Leibovitz's L-15 Medium and fetal bovine serum to a final concentration of 20%.
Subculturing:	Remove and discard culture medium. Briefly rinse the cell layer with 0.25% (w/v) Trypsin- 0.53 mM EDTA solution to remove all traces of serum which contains trypsin inhibitor. Add 2.0 to 3.0 mL of Trypsin-EDTA solution to flask and observe cells under an inverted microscope until cell layer is dispersed (usually within 5 to 15 minutes). Note: To avoid clumping do not agitate the cells by hitting or shaking the flask while waiting for the cells to detach. Cells that are difficult to detach may be placed at 37°C to facilitate dispersal. Add 6.0 to 8.0 mL of complete growth medium and aspirate cells by gently pipetting. Add appropriate aliquots of the cell suspension to new culture vessels. Incubate cultures at 37°C.
Subculturing Medium Renewal:	2 to 3 times per week
Subculturing Subcultivation Ratio:	1:2 to 1:6. Split sub-confluent cultures (70-80%) or seeding at 3-6x10,000 cells/cm ² .
Culture Conditions:	Atmosphere: air, 100% Temperature: 37°C
Cryopreservation:	95% FBS + 5% DMSO (Dimethyl sulfoxide)

SAFETY PRECAUTION: It is strongly recommended to always wear protective gloves, clothing, and a full-face mask when handling frozen vials. Some vials may leak when submerged in liquid nitrogen, allowing nitrogen to slowly enter the vial. Upon thawing, the conversion of liquid nitrogen back to its gas phase may cause the vial to explode or eject its cap with significant force, creating flying debris.

1. Thaw the vial by gently agitating it in a 37°C water bath. To minimize contamination, keep the O-ring and cap out of the water. Thawing should be rapid (approximately 2 minutes).
2. Remove the vial from the water bath as soon as its contents are thawed and decontaminate it by dipping in or spraying with 70% ethanol. From this point, all operations must be performed under strict aseptic conditions.
3. For cells sensitive to DMSO, it is recommended to remove the cryoprotective agent immediately. Transfer the vial contents to a centrifuge tube containing 9.0 mL of complete culture medium and centrifuge at approximately 125 × g for 5 to 7 minutes.
4. Discard the supernatant and resuspend the cell pellet in the recommended complete medium (see specific batch information for the appropriate dilution ratio).
5. Incubate the culture under appropriate atmospheric and temperature conditions (see "Culture Conditions" for this cell line).

NOTE: It is important to avoid excessive alkalinity of the medium during cell recovery. To minimize this risk, it is recommended to place the culture vessel containing the growth medium in the incubator for at least 15 minutes before adding the vial contents. This allows the medium to stabilize at its normal pH (7.0 to 7.6).

Brinkley BR, et al. Variations in cell form and cytoskeleton in human breast carcinoma cells in vitro. *Cancer Res.* 40: 3118-3129, 1980. PubMed: 7000337
Cruciger Q, et al. Morphological, biochemical and chromosomal characterization of breast tumor lines from pleural effusions. *In Vitro* 12: 331, 1976. Siciliano MJ, et al. Mutually exclusive genetic signatures of human breast tumor cell lines with a common chromosomal marker. *Cancer Res.* 39: 919-922, 1979. PubMed: 427779
Cailleau R, et al. Breast tumor cell lines from pleural effusions. *J. Natl. Cancer Inst.* 53: 661-674, 1974. PubMed: 4412247
Fogh J, et al. Absence of HeLa cell contamination in 169 cell lines derived from human tumors. *J. Natl. Cancer Inst.* 58: 209-214, 1977. PubMed: 833871

Thawing Frozen Cells:

References:

Depositors:

Banco de Células do Rio de Janeiro

Cellosaurus:

[CVCL_0620](#)

