

Data Sheet

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BCRJ Code:	0174
Cell Line:	MIA PaCa-2
Species:	Homo sapiens
Vulgar Name:	Human
Tissue:	Pancreas
Cell Type:	Epithelial Cell (Kras Crm)
Morphology:	Attached Epithelial With Floating Rounded Cells
Disease:	Carcinoma
Growth Properties:	Adherent, Single Cells And Loosely Attached Clusters
Sex:	Male
Age/Ethnicity:	65 Year / Caucasian
Derivation:	The MIA PaCa-2 cell line was established from tumor tissue of the pancreas obtained from a 65-year-old Caucasian male.
DNA Profile:	Amelogenin: X CSF1PO: 10 D5S818: 12,13 D13S317: 12,13 D7S820: 12,13 D16S539: 10,13 vWA: 15 TH01: 9,10 TPOX: 9
Products:	human colony stimulating factor, subclass I (CSF-I); plasminogen activator
Biosafety:	1
Additional Info:	The cells are large with abundant cytoplasm, exhibit a high degree of aneuploidy, have a tendency to grow on top of other cells, eventually growing free in suspension. Sensitive to L-Asparaginase.

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Culture Medium:

Dulbecco's modified Eagle's medium with 2 mM L-glutamine, 4.5 g/L glucose, 10% of fetal bovine serum and 2.5% of horse serum.

Subculturing:

Remove medium, and rinse with PBS without calcium and magnesium. Remove the solution and add an additional 1 to 2 mL of trypsin-EDTA solution. Allow the flask to sit at room temperature (or at 37°C) until the cells detach. Add fresh culture medium, aspirate and dispense into new culture flasks. T-75 flasks are recommended for subculturing this product. NOTE: For more information on enzymatic dissociation and subculturing of cell lines consult Chapter 12 in Culture of Animal Cells, a manual of Basic Technique by R. Ian Freshney, 6th edition, published by Alan R. Liss, N.Y., 2010.

Subculturing Medium Renewal:

2 to 3 times per week

Subculturing Subcultivation Ratio:

1:3 to 1:8

Culture Conditions:

Atmosphere: air, 95%; carbon dioxide (CO₂), 5% Temperature: 37°C

Cryopreservation:

95% FBS + 5% DMSO (Dimethyl sulfoxide)

Thawing Frozen Cells:

SAFETY PRECAUTION: Is highly recommend 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 Oring and cap out of the 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. For cells that are sensitive to DMSO is recommended that the cryoprotective agent be removed immediately. Transfer the vial contents to a centrifuge tube containing 9.0 mL complete culture medium and spin at approximately 125 x g for 5 to 7 minutes. 4. Discard the supernatant and Resuspend cell pellet with the recommended complete medium (see the specific batch information for the culture recommended dilution ratio). 5. Incubate the culture in a appropriate atmosphere and temperature (see "Culture Conditions" for this cell line). NOTE: 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 growth medium be placed into the incubator for at least 15 minutes to allow the medium to reach its normal pH (7.0 to 7.6).

References:

1057: Wu M , et al. Purification and characterization of a plasminogen activator secreted by cultured human pancreatic carcinoma cells. Biochemistry 16: 1908-1913, 1977. PubMed: 15590 22291: Fountzilias G , et al. Comparative effects of selected drug combi

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ATCC:

CRL-1420