

Data Sheet

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BCRJ Code:	0045
Cell Line:	B16-F1
Species:	Mus musculus
Vulgar Name:	Mouse; C57Bl/6J
Tissue:	Skin
Morphology:	Mixture Of Spindle-Shaped And Epithelial-Like Cells
Disease:	Melanoma
Growth Properties:	Adherent
Applications:	This cell line is a suitable transfection host.
Tumor Formation::	Yes, in syngeneic mice
Products:	MELANIN
Biosafety:	1
Culture Medium:	Dulbecco's Modified Eagle's Medium (DMEM) modified to contain 4 mM L-glutamine, 4500 mg/L glucose, 1 mM sodium pyruvate and fetal bovine serum to a final concentration of 10%.
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. 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:**

Every 2 to 3 days

**Subculturing
Subcultivation Ratio:**

1:10

Culture Conditions:

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

Cryopreservation:

95% FBS + 5% DMSO (Dimethyl sulfoxide)

Thawing Frozen Cells:

SAFETY PRECAUTION: It is highly recommended 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 submerged 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 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 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 it 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 an 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:

Fidler IJ. Biological behavior of malignant melanoma cells correlated to their survival in vivo. *Cancer Res.* 35: 218-224, 1975. PubMed: 1109790 Fidler IJ, et al. Tumoricidal properties of mouse macrophages activated with mediators from rat lymphocytes stimulated with concanavalin A. *Cancer Res.* 36: 3608-3615, 1976. PubMed: 953987 Fidler IJ, Bucana C. Mechanism of tumor cell resistance to lysis by syngeneic lymphocytes. *Cancer Res.* 37: 3945-3956, 1977. PubMed: 908034 Fidler IJ, Kripke ML. Metastasis results from preexisting variant cells within a malignant tumor. *Science* 197: 893-895, 1977. PubMed: 887927 Briles EB, Kornfeld S. Isolation and metastatic properties of detachment variants of B16 melanoma cells. *J. Natl. Cancer Inst.* 60: 1217-1222, 1978. PubMed: 418183 Fidler IJ. Selection of successive tumour lines for metastasis. *Nat. New Biol.* 242: 148-149, 1973. PubMed: 4512654

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ATCC:

CRL-6323