

Data Sheet

BCRJ Code:	0140
Cell Line:	L5178Y TK+/- clone (3.7.2C) [TK+/- (clone 3.7.2C)]
Species:	Mus musculus
Vulgar Name:	Mouse; Dbal/2
Tissue:	Thymus
Morphology:	Lymphoblast
Disease:	Lymphoma
Growth Properties:	Suspension
Derivation:	The transplantable murine leukemia L5178 was derived from a thymic tumor induced in a DBA/2 mouse by methylcolanthrene. The tumor was adapted in culture in 1958, and established as cell line growing in suspension, designated L5178y.
Applications:	The cell line can be used in genotoxicity tests including gene mutation assays at the tk and other loci and micronucleus induction.
Tumor Formation::	in DBA/2 mice
Biosafety:	1
Culture Medium:	Dulbecco's modified Eagle's medium with 4 mM L-glutamin, 4.5 g/L glucose, 0.1% Pluronic and 10% fetal bovine serum.
Subculturing:	Cultures can be maintained by the addition of fresh medium or replacement of medium. Alternatively, cultures can be established by centrifugation with subsequent resuspension. Maintain cultures from 1x10 ⁵ to 1x10 ⁶ cells/mL.
Subculturing Medium Renewal:	Every 3 to 4 days

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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:

Sawyer JR, Binz RL, Wang J, Moore MM. 2006 Multicolor spectral karyotyping of the L5178Y Tk⁺/ -3.7.2C mouse lymphoma cell line. *Environ Mol Mutagen.*47(2):127-31.PMID: 16247762 *Chem. Mutagens* 3: pp. 79-103, 1973.

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ATCC: CRL-9518

Cellosaurus: [CVCL_6665](#)

