

Data Sheet

PAGE 1/3

BCRJ Code:	0212
Cell Line:	RAW 264.7
Species:	Mus musculus
Vulgar Name:	Mouse
Tissue:	Blood
Cell Type:	Macrophage; Abelson Murine Leukemia Virus Transformed
Morphology:	Macrophage
Disease:	Abelson Murine Leukemia Virus-Induced Tumor
Growth Properties:	Adherent
Sex:	Male
Derivation:	Established from an ascites of a tumour induced in a male mouse by intraperitoneal injection of Abelson Leukaemia Virus (A-MuLV)
Applications:	This cell line is a suitable transfection host. The cells will pinocytose neutral red and will phagocytose latex beads and zymosan. They are capable of antibody dependent lysis of sheep erythrocytes and tumor cell targets. LPS or PPD treatment for 2 days stimulates lysis of erythrocytes but not tumor cell targets.
Products:	lysozyme [1207]
Biosafety:	2

Data Sheet

PAGE 2/3

Additional Info:

This cell line is negative for surface immunoglobulin (slg-), Ia (Ia-) and Thy-1.2 (Thy-1.2) This line does not secrete detectable virus particles and is negative in the XC plaque formation assay. Data communicated in Feb. 2007 by Dr Janet W. Hartley, indicates the expression of infectious ecotropic MuLV closely related, if not identical, to the Moloney MuLV helper virus used in the original virus inoculum. The cells also express polytropic MuLV, unsurprisingly based on the mouse passage history of the virus stocks

Culture Medium:

Dulbecco's Modified Eagle's Medium (DMEM) modified to contain 4 mM L-glutamine, 4500 mg/L glucose, 1 mM sodium pyruvate with 10% of fetal bovine serum.

Subculturing:

Subcultures are prepared by scraping. For a 75 cm² flask, remove all but 10 mL culture medium (adjust amount accordingly for other culture vessels). Dislodge cells from the flask substrate with a cell scraper; aspirate and add appropriate aliquots of the cell suspension into new culture vessels.

Subculturing Medium Renewal:

Every 2 to 3 days

Subculturing Subcultivation Ratio:

1:3 to 1:6

Culture Conditions:

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

Cryopreservation:

95% FBS + 5% DMSO (Dimethyl sulfoxide)

Data Sheet

PAGE 3/3

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:

1135: Ralph P, Nakoinz I. Antibody-dependent killing of erythrocyte and tumor targets by macrophage-related cell lines: enhancement by PPD and LPS. J. Immunol. 119: 950-954, 1977. PubMed: 894031 1207: Raschke WC, et al. Functional macrophage cell lines tr

Depositors:

Patrícia Dias Fernandes & Sonia Rosental - Universidade Federal do Rio de Janeiro.

ATCC:

TIB-71