

Data Sheet

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BCRJ Code:	0209
Cell Line:	R4-6A2
Species:	Rattus norvegicus (B cell); Mus musculus (myeloma), rat (B cell); mouse (myeloma)
Vulgar Name:	Rat; Da Atrud Institute
Cell Type:	Hybridoma: B Lymphocyte
Morphology:	Lymphoblast
Growth Properties:	Suspension
Derivation:	Animals were immunized with partially purified murine gamma interferon. Spleen cells were fused with P3U-1 myeloma cells.
Products:	Immunoglobulin; monoclonal antibody; gamma interferon: ab against; IgG1
Biosafety:	1
Additional Info:	The antibody neutralizes the ability of lymphokine preparations to induce tumoricidal activity in murine macrophages. The antibody neutralizes the antiviral effect of gamma interferon but does not affect the activities of murine alpha and beta interferon or rat or human gamma interferon. 30 ng of R4-6A2 antibody neutralizes the antiviral activity of 10 units of murine gamma interferon.
Culture Medium:	Dulbecco's Modified Eagle's Medium (DMEM) modified to contain 2 mM L-glutamine, 4500 mg/L glucose and 10% of fetal bovine serum.
Subculturing:	Cultures can be maintained by addition of fresh medium. Alternatively, cultures can be established by centrifugation with subsequent resuspension at 5 x 10 ⁴ viable cells/mL. Maintain cultures at a cell concentration between 6 x 10 ⁴ and 6 x 10 ⁵ cells/mL. NOTE: Do not allow the cell concentration to reach 1 x 10 ⁶ cells/mL.

**Subculturing Medium
Renewal:**

Every 2 to 3 days

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:

J. Exp. Med. 159: 1560-65, 1984.

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ATCC:

HB-170