Data Sheet

BCRJ Code:	0039
Cell Line:	AMJ2-C11
Species:	Mus musculus
Vulgar Name:	Mouse;C57Bl/6J
Tissue:	Lung
Cell Type:	Macrophage (Alveolar); Infected With J2 Virus
Morphology:	Macrophage
Growth Properties:	Suspension, With Some Loosely Adherent Cells
Sex:	Female
Age/Ethinicity:	10 Week /
Derivation:	This cells are cloned, continuous, alveolar macrophage (AM) cell lines generated from C57BL6J mice by in vitro infection with the J2 retrovirus carrying the v-raf and v-myc oncogenes.
Products:	interleukin-6 (interleukin 6, IL-6)
Biosafety:	2

Addtional Info:	Flow cytometry detected the product of the raf gene in the cytoplasm of these cell lines. Studies on the tumoricidal properties of these cell lines demonstrated differences in their response to a panel of known macrophage activators. AMJ2-C8 was activated following exposure to recombinant murine interferon gamma (rMuIFN-gamma) but not lipopolysaccharide (LPS) or muramyl dipeptide (MDP). AMJ2-C11 most closely resembled the response pattern of the parental AM, since it could be activated by either the combination of rMuIFN-gamma plus LPS or rMuIFN-gamma plus MDP. The cells retain many characteristics of alveolar macrophages. They are phagocytic, non-specific esterase positive and they express macrophage Mac-1 antigens and Fc receptors. Constitutive expression of MHC-class-II antigens was low on AMJ2-C11 but was increased following exposure to rMuIFN-gamma. The cell line did not secrete substantial amounts of IL-1 or TNF but did secrete large amounts of IL-6. The cells produce nitric oxide (NO) when stimulated with a mixture of rMuIFN-gamma and LPS
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:	Scrape off the attached cells and transfer along with the floating cells into new flasks.
Subculturing Medium Renewal:	Twice a week
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 strongly recommended to always wear protective gloves, clothing, and a full-face mask when handling frozen vials. Some vials may leak when submerged in liquid nitrogen, allowing nitrogen to slowly enter the vial. Upon thawing, the conversion of liquid nitrogen back to its gas phase may cause the vial to explode or eject its cap with significant force, creating flying debris. 1. Thaw the vial by gently agitating it in a 37°C water bath. To minimize 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 its contents are thawed and decontaminate it by dipping in or spraying with 70% ethanol. From this point, all operations must be performed under strict aseptic conditions. 3. For cells sensitive to DMSO, it is recommended to remove the cryoprotective agent immediately. Transfer the vial contents to a centrifuge tube containing 9.0 mL of complete culture medium and centrifuge at approximately 125 × g for 5 to 7 minutes. 4. Discard the supernatant and resuspend the cell pellet in the recommended complete medium (see specific batch information for the appropriate dilution ratio). 5. Incubate the culture under appropriate atmospheric and temperature conditions (see "Culture Conditions" for this cell line). NOTE: It is important to avoid excessive alkalinity of the medium during cell recovery. To minimize this risk, it is recommended to place the culture vessel containing the growth medium in the incubator for at least 15 minutes before adding the vial contents. This allows the medium to stabilize at its normal pH (7.0 to 7.6).
References:	48933: Palleroni AV , et al. Tumoricidal alveolar macrophage and tumor infiltrating macrophage cell lines. Int. J. Cancer 49: 296-302, 1991. PubMed: 1879973 48934: Palleroni AV , et al. Nitric oxide synthase induction in lines of macrophages from differen
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