Code:	0039
Cell Line:	AMJ2-C11
Species:	Mus musculus **Vulgar Name:** Mouse;C57Bl/6J
Tissue:	Lung
Morphology:	Macrophage
Growth Properties:	Suspension, With Some Loosely Adherent Cells
Sex:	Female
Age Ethinicy:	10 weeks old
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)
Biosafey:	2
Additional 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 1500 mg/L sodium bicarbonate 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. **Medium Renewal:** Twice per week **Subcultivation ratio:**
Culture Conditions:	Atmosphere: air, 95%; carbon dioxide (CO2), 5% Temperature: 37°C
Cryopreservation:	95% FBS + 5% DMSO (Dimethyl sulfoxide)
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:	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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