



**Designation:** **J774A.1**

CLS order number: Cryovial: 400220  
Vital: 440220

Origin and General Characteristics	
Organism:	Mus musculus (mouse)
Strain:	BALB/c
Gender:	Female
Tissue:	Blood
Cell type:	Monocyte / macrophage
Growth Properties:	Semi-adherent
Description:	J774A.1 cells are active in antibody dependent phagocytosis. Their growth is inhibited by dextran sulfate, PPD and LPS.
References:	Ralph P et al. Reticulum cell sarcoma: an effector cell in antibody-dependent cell-mediated immunity. J Immunol 114: 898-905, 1975.
Culture Conditions and Handling	
Culture Medium:	DMEM medium supplemented with 4.5g/L glucose, 2 mM L-glutamine and 10% fetal bovine serum (MG-30, CLS order number 820300).
Subculturing:	Subcultures are to be performed before confluence is reached; otherwise, the cells will round up and detach. Cells can be either detached by scraping or via Accutase. Detachment is facilitated when the monolayer is washed once with PBS and incubated with Accutase for 10 to 15min at ambient temperature. As cells grow semi-adherent, collecting cells from old medium and PBS via centrifugation is recommended. Centrifuge the cell suspension, aspirate the old medium, resuspend the cells in fresh cell culture medium and dispense into new flasks. Using trypsin for detachment is not recommended.
Split Ratio:	A ratio of 1:3 to 1:6 is recommended
Seeding density:	1x10 <sup>4</sup> cells/cm <sup>2</sup>
Fluid Renewal:	2 to 3 times weekly
Freeze Medium:	CM-1 (CLS order number 800150, 50ml)
Sterility:	Mycoplasma specific PCR: negative; Bacteria control: negative
Biosafety Level:	1
Safety precautions:	If the cryovial is planned to be stored in liquid nitrogen and to be thawed in the future, special safety precautions should be followed: Protective gloves and clothing should be used and a facemask or safety goggles must be worn when transferring frozen samples into or removing from the liquid nitrogen tank. The removal of a cryovial from liquid nitrogen may result in the explosion of the frozen vial creating flying fragments. Caputo, J.L. Biosafety procedures in cell culture. J. Tissue Cult. Methods 11:223-227, 1988. ATCC Quality Control Methods for Cell Lines, 2nd edition, 1992.
Special Features of the Cell Line	
Viruses:	SMRV: Negative, as confirmed by Real-Time PCR
Receptors Expressed:	Immunoglobulin (Fc); complement (C3)
Products:	Interleukin-1 (interleukin 1, IL-1, LAF); lysozyme
Certificate of Analysis:	The Certificate of Analysis for each batch can be requested by e-mail at <a href="mailto:service@clsgmbh.de">service@clsgmbh.de</a> .

Recommendations for handling of adherent cell cultures following delivery	
Cryopreserved cells:	<p>If immediate culturing is not intended, the cryovial(s) must be stored in liquid nitrogen (-196°C) or at least at -80°C after arrival. Do not store at -80°C for more than 1-2 days.</p> <p>If immediate culturing is intended, please follow these instructions:</p> <p>Quickly thaw by rapid agitation in a 37°C water bath within 40-60 seconds. The water bath should have clean water containing an antimicrobial agent. As soon as the sample has thawed, remove the cryovial from the water bath. Note: A small ice clump should still remain and the vial should still be cold.</p> <p>From now on, all operations should be carried out under aseptic conditions.</p> <p>Transfer the cryovial to a sterile flow cabinet and wipe with 70% alcohol. Carefully open the vial and transfer the cell suspension into a 15 ml centrifuge tube containing 8 ml of culture medium (room temperature). Resuspend the cells carefully. Centrifuge at 300xg for 3 min and discard the supernatant. The centrifugation step may be omitted, but in this case the remains of the freeze medium have to be removed 24 hours later.</p> <p>Resuspend the cells carefully in 10ml fresh cell culture medium and transfer them into two T25 cell culture flasks. All further steps are described in the Subculture section.</p>
Proliferating Cultures:	<p>The cell culture flasks are completely filled with cell culture medium to prevent loss of cells during transit.</p> <p>Remove the entire medium except for a sufficient volume to cover the floor of the flask. Incubate at 37°C for 24 hrs.</p> <p>Sometimes the cultures are handled roughly during transit, and most of the cells detach and float in the culture medium. If this has occurred remove the entire content of the flask and centrifuge at 300x g for 3 minutes. Take off the supernatant, resuspend the cells in 10 ml of culture medium and transfer the entire cell suspension into cell culture flasks of suitable size (do not seed in more than 1T75 flask).</p>
Warranty:	<p>CLS warrants for a high cell viability and culture performance only if the product(s) is (are) stored and cultured according to the information described above. Using cell culture media and supplements other than the ones recommended in this product information may result in satisfactory proliferation and viabilities. CLS, however, does not warrant for cell recovery, proliferation and function if differing formulations are employed.</p>
Disclaimer:	<p>The customer shall not be entitled to employ this product for purposes other than research. Commercial utilization shall not be permitted; in particular, the cell line, its components or materials made therefrom shall not be sold or transferred to any third party. In addition, the term 'Commercial use' shall mean any activity by a party for consideration and may include, but is not limited to, use of the product or its components in manufacturing, for providing services, e.g. fee for service testing, in quality control or assurance processes within the manufacturing of products for sale, for therapeutic, diagnostic or prophylactic purposes, or for resale.</p>