Data Sheet

BCRJ Code:	0006
Cell Line:	2.4G2
Species:	Rattus norvegicus (B cell); Mus musculus (myeloma), rat (B cell); mouse (myeloma)
Vulgar Name:	Rat/Mouse
Cell Type:	Hybridoma: B Lymphocyte
Morphology:	Lymphoblast
Growth Properties:	Suspension
Derivation:	Animals were immunized with the J774 mouse macrophage cell line. Spleen cells were fused with P3U1 myeloma cells.
Applications:	The antibody can be used to block non-specific binding to Fc gamma bearing cells.
Tumor Formation::	YES
Products:	immunoglobulin; monoclonal antibody; against the Fc gamma receptor (FcRII, CD32)
Biosafety:	1
Addtional Info:	The antibody reacts with and immunoprecipitates the 50000 dalton to 70000 dalton Fc gamma receptor on macrophages and Fc gamma bearing lymphoid cells.
Culture Medium:	Dulbecco's modified Eagle's medium with 4 mM L-glutamine, 4.5 g/L glucose and 5% of horse serum and 5% 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 1 x 10e5 viable cells/mL. Maintain cultures at a cell concentration between 1 x 10e5 and 1 x 10e6 cells/mL. NOTE: Do not allow the cell concentration to exceed 1 x 10e6 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: 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:	Unkeless JC. Characterization of a monoclonal antibody directed against mouse macrophage and lymphocyte Fc receptors. J. Exp. Med. 150: 580-596, 1979. PubMed: 90108 Mellman IS, Unkeless JC. Purification of a functional mouse Fc receptor through the use of a monoclonal antibody. J. Exp. Med. 152: 1048-1069, 1980. PubMed: 6158545 Nussenzweig MC, et al. Studies of the cell surface of mouse dendritic cells and other leukocytes. J. Exp. Med. 154: 168-187, 1981. PubMed: 7252426 Yoshikai Y, et al. Clonal expansion of superantigen-reactive T cells is resistant to FK506 in mice with AIDS. J. Virol. 71: 746-749, 1997. PubMed: 8985410 Wilson ME, et al. Local suppression of IFN-gamma in hepatic granulomas correlates with tissue-specific replication of Leishmania chagasi. J. Immunol. 156: 2231-2239, 1996. PubMed: 8690913 Hay, R. J., Caputo, J. L., and Macy, M. L., Eds. (1992), ATCC Quality Control Methods for Cell Lines. 2nd edition, Published by ATCC. Caputo, J. L., Biosafety procedures in cell culture. J. Tissue Culture Methods 11:223-227, 1988. Fleming, D.O., Richardson, J. H., Tulis, J.J. and Vesley, D., (1995) Laboratory Safety: Principles and Practice. Second edition, ASM press, Washington, DC.
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ATCC:	HB-197