Data Sheet

BCRJ Code:	0200
Cell Line:	P815
Species:	Mus musculus
Vulgar Name:	Mouse; Dba/2
Tissue:	Mast Cell
Disease:	Mastocytoma
Growth Properties:	Suspension (Some Adherent Cells)
Derivation:	established from the mastocytoma tumor of a DBA/2 mouse treated with methylcolanthrene; used as target cells for cytotoxic T cell assays; as reported cells exhibit no effector activity in an antibody-dependent cell mediated cytotoxic system
Applications:	This cell line is a suitable transfection host.
Products:	Lysozyme
Biosafety:	1
Addtional Info:	P815 cells phagocytose latex beads but not zymosan or BCG. They do not function in antibody dependent cell mediated cytotoxicity. Growth of the cells is not inhibited by dextran sulfate, LPS or PPD.
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 or replacement of fresh medium. Start cultures at 2 X 10e5 cells/mL and maintain between 1 X 10e5 and 1 X 10e6 cells/mL. Adherent cells can be recovered by scraping. NOTE: Maximum cell density at > 1 x 10e6 cells/ml Population Doubling Time: 18-22 hrs

Subculturing Medium Renewal:	Every 2 to 3 days
Culture Conditions:	Atmosphere: air, 95%; carbon dioxide (CO_2), 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:

Ralph P, et al. Lysozyme synthesis by established human and murine histiocytic lymphoma cell lines. J. Exp. Med. 143: 1528-1533, 1976. PubMed: 1083890 Ralph P, Nakoinz I. Antibody-dependent killing of erythrocyte and tumor targets by macrophage-related cell lines: enhancement by PPD and LPS. J. Immunol. 119: 950-954, 1977. PubMed: 894031 Ralph P, Nakoinz I. Direct toxic effects of immunopotentiators on monocytic myelomonocytic, and histiocytic or macrophage tumor cells in culture. Cancer Res. 37: 546-550, 1977. PubMed: 318922 Ralph P, Nakoinz I. Lipopolysaccharides inhibit lymphosarcoma cells of bone marrow origin. Nature 249: 49-51, 1974. PubMed: 4208429 Ralph P, et al. Lymphosarcoma cell growth is selectively inhibited by B lymphocyte mitogens: LPS, dextran sulfate and PPD. Biochem. Biophys. Res. Commun. 61: 1268-1275, 1974. PubMed: 4616699 Lundak RL, Raidt DJ. Cellular immune response against tumor cells. I. In vitro immunization of allogeneic and syngeneic mouse spleen cell suspensions against DBA mastocytoma cells. Cell. Immunol. 9: 60-66, 1973. PubMed: 4270287 Plaut M, et al. Studies on the mechanism of lymphocyte-mediated cytolysis. IV. Specificity of the histamine receptor on effector T cells. J. Immunol. 111: 389-394, 1973. PubMed: 4123976 Schmidt W, et al. Cell-free tumor antigen peptide-based cancer vaccines. Proc. Natl. Acad. Sci. USA 94: 3262-3267, 1997. PubMed: 9096381 Gonzalez Armas JC, et al. DNA immunization confers protection against murine cytomegalovirus infection. J. Virol. 70: 7921-7928, 1996. PubMed: 8892915

Depositors: Dr. T. kipnis, Universidade de São Paulo.

Cellosaurus: CVCL_2154