Data Sheet

BCRJ Code:	0227
Cell Line:	Sp2/0-Ag14
Species:	Mus musculus (B cell); Mus musculus (myeloma), mouse (B cell); mouse (myeloma)
Vulgar Name:	Mouse; Balb/C
Tissue:	Spleen
Cell Type:	Hybridoma: B Lymphocyte
Morphology:	Lymphoblast-Like
Growth Properties:	Suspension
Derivation:	The line was formed by fusing BALB/c spleen cells (from mouse immunized with sheep RBCs) with the P3X63Ag8 myeloma.
Applications:	This cell line is a fusion partner for production of somatic cell hybrids.
Products:	Antigen expression: H-2d
Biosafety:	1
Addtional Info:	The cells do not secrete immunoglobulin, are resistant to 8-azaguanine at 20 µg/ml and are HAT sensitive.
Culture Medium:	Dulbecco's Modified Eagle's Medium (DMEM) modified to contain 2 mM L-glutamine, 4500 mg/L glucose, 1 mM sodium pyruvate and 10% of fetal bovine serum.
Subculturing:	Cultures can be maintained by the addition of fresh medium or replacement of medium. Maintain cell density between 5 X 104and 5 X 105 viable cells/mL. Some cells can attach and be transferred by shaking them loose.

Subculturing Medium Renewal:	Add fresh medium every 2 to 4 days (depending on cell density)
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: 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:	Ozato K, Sachs DH. Monoclonal antibodies to mouse MHC antigens. III. Hybridoma antibodies reacting to antigens of the H-2b haplotype reveal genetic control of isotype expression. J. Immunol. 126: 317-321, 1981. PubMed: 6935293 Shulman M, et al. A better cell line for making hybridomas secreting specific antibodies. Nature 276: 269-270, 1978. PubMed: 714156 Goodrum FD, et al. Adenovirus early region 4 34-kilodalton protein directs the nuclear localization of the early region 1B 55-kilodalton protein in primate cells. J. Virol. 70: 6323-6335, 1996. PubMed: 8709260 Chen H, et al. Octamer binding factors and their coactivator can activate the murine PU.1 (spi-1) promoter. J. Biol. Chem. 271: 15743-15752, 1996. PubMed: 8663022 Cross References Nucleotide (GenBank) : NC_001702 Murine type C retrovirus, complete genome. Nucleotide (GenBank) : X94150 Retroviridae complete genome (murine type C retrovirus).

Depositors:	Instituto Oswaldo Cruz, Rio de Janeiro.
ATCC:	CRL-1581