

Data Sheet

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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
Additional 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 10 ⁴ and 5 X 10 ⁵ viable cells/mL. Some cells can attach and be transferred by shaking them loose.

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Subculturing Medium Renewal:

Add fresh medium every 2 to 4 days (depending on cell density)

Culture Conditions:

Atmosphere: air, 95%; carbon dioxide (CO₂), 5% Temperature: 37°C

Cryopreservation:

95% FBS + 5% DMSO (Dimethyl sulfoxide)

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).

Thawing Frozen Cells:

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).

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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:

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