Data Sheet

BCRJ Code:	0159
Cell Line:	McA-RH7777
Species:	*Rattus norvegicus*
Vulgar Name:	Rat
Tissue:	Liver
Morphology:	Epithelial
Disease:	Hepatoma; Morris Hepatoma 7777
Growth Properties:	Loosely Adherent
Sex:	Female
Applications:	This line is suitable as a transfection host.
Tumor Formation::	HEPATOMA, MORRIS HEPATOMA
Products:	alpha-fetoprotein (AFP, alpha fetoprotein)
Biosafety:	1
Addtional Info:	Addition of glucocorticoids (dexamethasone) to the medium accelerates cell proliferation and reduces alpha fetoprotein production. The cells tend to shed from the growth surface before becoming confluent.
Culture Medium:	Dulbecco's Modified Eagle's Medium (DMEM) modified to contain 4 mM L-glutamine, 4500 mg/L glucose and fetal bovine serum to a final concentration of 10%.

Subculturing:	Heavy monolayer sloughs off; subculture before 70% confluency. Volumes used in this protocol are for 75 cm2 flask; proportionally reduce or increase amount of dissociation medium for culture vessels of other sizes. Remove culture medium with floating cells to a centrifuge tube. If any cells are attached, tap flask gently or if necessary add 2.0 to 3.0 mL of 0.25% Trypsin-0.53 mM EDTA solution to flask and observe cells under an inverted microscope until cell layer is dispersed. Add 2.0 to 3.0 mL of complete growth medium and aspirate cells by gently pipetting. To remove trypsin-EDTA solution, transfer cell suspension to the centrifuge tube with the medium and cells from step #1 and spin at approximately 125 x g for 5 to 10 minutes. Discard supernatant and resuspend cells in fresh growth medium. Add appropriate aliquots of cell suspension to new culture vessels. Place culture vessels in incubators at 37°C. NOTE: For more information on enzymatic dissociation and subculturing of cell lines consult Chapter 12 in Culture of Animal Cells, a manual of Basic Technique by R. Ian Freshney, 6th edition, published by Alan R. Liss, N.Y., 2010.
Subculturing Medium Renewal:	Every 2 to 3 days
Subculturing Subcultivation Ratio:	1:4 to 1:6 weekly is recommended
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:	Recent Results Cancer Res. 44: 103-114, 1974. Kulas DT , et al. The transmembrane protein-tyrosine phosphatase LAR modulates signaling by multiple receptor tyrosine kinases. J. Biol. Chem. 271: 748-754, 1996. Schock D , et al. An auxiliary factor containi
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