Data Sheet

BCRJ Code:	0313
Cell Line:	BGMK
Species:	Cercopithecus aethiops
Vulgar Name:	Monkey; African Green Monkey
Tissue:	Kidney
Growth Properties:	Adherent
Virus Succeptility::	CHLAMYDIA, HSV, COXSACKIE B, COXSACKIE A, ECHOVIRUS, POLIVIRUS
Biosafety:	1
Addtional Info:	BGMK cells are Buffalo green monkey kidney cells. BGMK cells are commonly used for the isolation of Chlamydia trachomatis and Enterovirus, with an enhanced sensitivity for Coxsackie B viruses. BGMK cells are actually kidney cells from African green monkeys; there is no species named Buffalo green monkey.
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:	NOTE: Subculture when 80% confluent or less. Remove and discard culture medium. Briefly rinse the cell layer with PBS without calcium and magnesium to remove all traces of serum which contains trypsin inhibitor. Add 2.0 to 3.0 mL of Trypsin-EDTA solution to flask and observe cells under an inverted microscope until cell layer is dispersed. Add 6.0 to 8.0 mL of complete growth medium and aspirate cells by gently pipetting. Add appropriate aliquots of the cell suspension into new culture vessels, seeding at 5x1,000 to 2x10,000 cells/cm². Incubate cultures 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

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:	Barron AL, Olshevsky C, Cohen MM. Characteristics of the BGM line of cells from African green monkey kidney. Brief report. Arch Gesamte Virusforsch. 1970;32(4):389-92. PMID: 4993582 [PubMed - indexed for MEDLINE]
Depositors:	Antonio Monteiro - Banco de Células do Rio de Janeiro
Cellosaurus:	CVCL_4125