Data Sheet

BCRJ Code:	0311
Cell Line:	AGS
Species:	Homo sapiens
Vulgar Name:	Human
Tissue:	Stomach
Cell Type:	Epithelial
Morphology:	Epithelial
Disease:	Gastric Adenocarcinoma
Growth Properties:	Adherent
Sex:	Female
Age/Ethinicity:	54 Year / Caucasian
Derivation:	THE AGS CELL LINE WAS DERIVED FROM FRAGMENTS OF A BIOPSY SPECIMEN OF NA UNTREATED HUMAN ADENOCARCINOMA OF STOMACH.
Applications:	This cell line is a suitable transfection host.
Tumor Formation::	YES, IN ATHYMIC BALB/C MICE
Biosafety:	2
Addtional Info:	THIS CELL LINE MAY RELEASE PARAINFLUENZAVIRUS TYPE 5 (FORMELY KNOWN AS SIMIAN VIRUS 5). THE VIRUS INTERFERES WITH INTERFERON-SIGNALLING WITHIN THE CELL LINE BY DEGRADATION OF STAT1.

Culture Medium:	Dulbecco's Modified Eagle's Medium (DMEM) modified to contain 2mM L-glutamine, 4500 mg/L glucose and fetal bovine serum to a final concentration of 10%.
Subculturing:	Volumes are given for a 75 cm2 flask. Increase or decrease the amount of dissociation medium needed proportionally for culture vessels of other sizes. Remove and discard culture medium. Briefly rinse the adherent cells using PBS without calcium and magnesium (3-5 ml PBS for T25, 5-10ml for T75 cell culture flasks) to remove all traces of serum that 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 (usually within 5 to 15 minutes). Note: To avoid clumping do not agitate the cells by hitting or shaking the flask while waiting for the cells to detach. Cells that are difficult to detach may be placed at 37°C to facilitate dispersal. Add 6.0 to 8.0 mL of complete growth medium and aspirate cells by gently pipetting. Add appropriate aliquots of the cell suspension to new culture vessels. Incubate cultures at 37°C. Population Doubling Time: 20 hrs 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:	A ratio of 1:2 to 1:6 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:	BARRANCO SC ET AL. ESTABLISHMENT AND CHARACTERIZATION OF NA IN VIVO MODEL SYSTEM FOR HUMAM ADENOCARCINOMA OF THE STOMACH. CANCER RES 43:1703-9, 1982
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