Designation: **U-373 MG**

CLS order number: Cryovial: 300366
Vital: 330366

Origin and General Characteristics	
Depositor:	Ponten
Organism:	Homo sapiens (human)
Ethnicity:	Caucasian
Age/Stage:	61 years old
Gender:	male
Tissue:	Brain
Morphology:	epithelial
Celltype:	glioblastoma (grade III / grade IV)
Growth Properties:	monolayer, adherent
Description:	This is one of a number of cell lines derived from malignant gliomas by J. Ponten and associates from 1966 to 1969. According to authentication studies performed at ATCC and by others, the U-373 MG cell line has been questioned. The U-373 MG cell line may be identical with the SNB-19 and/or U-251 cell line.
References:	Ponten J et al. Long term culture of normal and neoplastic human glia. Acta Pathol Microbiol Scand 74: 465-86, 1968.
Culture Conditions and Handling	
Culture Medium:	Minimum essential medium Eagle supplemented with 2 mM L-glutamine, 0.1 mM non-essential amino acids, 1.0 mM sodium pyruvate and 10% fetal bovine serum.
Subculturing:	Remove medium and wash the cells with PBS. Add fresh 0.025% trypsin/0.025% EDTA (versene) solution and let the culture sit at 37°C (the cells may detach at room temperature as well). Stop the trypsin action by adding fresh cell culture medium, resuspend the cells and dispense into new flasks. Subculture every 6 to 8 days.
Split Ratio:	A ratio of 1:3 to 1:6 is recommended
Fluid Renewal:	2 to 3 times weekly
Freeze Medium:	CM-1 (CLS · Cell Lines Service)
Sterility:	Tests for mycoplasma, bacteria and fungi were negative
Biosafety Level:	1
Safety precautions:	If the cryovial is planned to be stored in liquid nitrogen and to be thawed in the future, special safety precautions should be followed: Protective gloves and clothing should be used and a facemask or safety goggles must be worn when transferring frozen samples into or removing from the liquid nitrogen tank. The removal of a cryovial from liquid nitrogen may result in the explosion of the frozen vial creating flying fragments. Caputo, J.L. Biosafety procedures in cell culture. J. Tissue Cult. Methods 11:223-227, 1988. ATCC Quality Control Methods for Cell Lines, 2nd edition, 1992.
Special Features of the Cell Line	
Tumorigenic:	yes, in nude mice; Grade III astrocytomas are formed
Karyotype:	The stemline chromosome number is hypotriploid (S = 67) with the 2S component occurring at 12.8%. Five marker chromosomes are found in most metaphases. They are present in single copy per cell and designated as follows: t(8q;14q), 11p+, 16p-, M4 and

	M5 (a metacentric smaller than the G group chromosome).11p+ has the chromosome length of a No. 2, and M4 has two distinct terminal bands on the long arm. Both chromosomes 7 and 17 are generally tetrasomic, and one Y chromosome is found in every cell.	
DNA Profile (STR):	Amelogenin: X/Y CSF1PO: 11,12 D13S317: 10,11 D16S539: 12 D5S818: 11,12 D7S820: 10,12 THO1: 9,3 TPOX: 8 CLS · Cell Lines Service, 2010.	vWA: 16,18 D3S1358: 16,17 D21S11: 29/30 D18S51: 13 Penta E: 7,10 Penta D: 10/12 D8S1179: 13/15 FGA: 21/25
Antigen Expression:	Blood Type A; Rh+	
Isoenzymes:	PGM3, 1; PGM1, 1; ES-D, 1; G6PD, B; AK-1, 1; GLO-1, 1; Phenotype Frequency Product: 0.0426	

Certificate of Analysis:	The Certificate of Analysis for each batch can be requested by e-mail at service@clsgmbh.de.

Recommendations for handling of adherent cell cultures following delivery	
Cryopreserved cells	The cells come deep-frozen shipped on dry ice. Please make sure that the vial is still frozen. If immediate culturing is not intended, the cryovial(s) must be stored below -150°C after arrival. If immediate culturing is intended, please follow these instructions: Quickly thaw by rapid agitation in a 37°C water bath within 40-60 seconds. The water bath should have clean water containing an antimicrobial agent. As soon as the sample has thawed, remove the cryovial from the water bath. Note: A small ice clump should still remain and the vial should still be cold. From now on, all operations should be carried out under aseptic conditions. Transfer the cryovial to a sterile flow cabinet and wipe with 70% alcohol. Carefully open the vial and transfer the cell suspension into a 15 ml centrifuge tube containing 8 ml of culture medium (room temperature). Resuspend the cells carefully. Centrifuge at 300xg for 3 min and discard the supernatant. The centrifugation step may be omitted, but in this case the remains of the freeze medium have to be removed 24 hours later. Resuspend the cells carefully in 10ml fresh cell culture medium and transfer them into two T25 cell culture flasks. All further steps are described in the Subculture section.
Proliferating Cultures	The cell culture flasks, 2xT25, come filled with cell culture medium. Collect the entire medium in 2x 50 ml centrifuge tubes. Carefully add 5 ml of cell culture medium to each of the two T25 cell culture flasks. Control the cell morphology and confluency under the microscope. Incubate at 37°C for a minimum of 24 hrs. Spin down the collected medium at 300x g for 3 minutes to collect the cells which may have detached during transit. If a cell pellet is visible, resuspend the cells in 5 ml of cell culture medium and transfer to 1xT25 cell culture. Incubate at 37°C for a minimum of 24 hrs.

Warranty:	CLS warrants for a high cell viability and culture performance only if the product(s) is (are) stored and cultured according to the information described above. Using cell culture media and supplements other than the ones recommended in this product information may result in satisfactory proliferation and viabilities. CLS, however, does not warrant for cell recovery, proliferation and function if differing formulations are employed.

Disclaimer:	The customer shall not be entitled to employ this product for purposes other than research. Commercial utilization shall not be permitted; in particular, the cell line, its components or materials made therefrom shall not be sold or transferred to any third party. In addition, the term 'Commercial use' shall mean any activity by a party for consideration and may include, but is not limited to, use of the product or its components in manufacturing, for providing services, e.g. fee for service testing, in quality control or assurance processes within the manufacturing of products for sale, for therapeutic, diagnostic or prophylactic purposes, or for resale.