Designation: **DU-145**

CLS order number: Cryovial: 300168
Vital: 330168

Origin and General Characteristics		
Organism:	*Homo sapiens* (human)	
Ethnicity:	Caucasian	
Age:	69 years of age	
Gender:	Male	
Tissue:	Prostate	
Morphology:	Epithelial	
Cell type:	Carcinoma; from metastatic site: brain	
Growth Properties:	Monolayer, adherent	
Description:	DU 145 was isolated by K.R. Stone et al from a lesion in the brain of a patient with metastatic carcinoma of the prostate and a 3 year history of lymphocytic leukemia. The line is not detectably hormone sensitive, is only weakly positive for acid phosphatase and isolated cells form colonies in soft agar. Ultrastructural analyses of both the cell line and original tumor revealed microvilli, tonofilaments and desmosomes, many mitochondria, well developed Golgi and heterogenous lysosomes. The cells do not express prostate antigen.	
References:	Mickey DD, Stone KR, Wunderli H, Mickey GH, Vollmer RT, Paulson DF. Heterotransplantation of a human prostatic adenocarcinoma cell line in nude mice. Cancer Res. 37: 4049-4058, 1977.	
Culture Conditions and Handling		
Culture Medium:	EMEM supplemented with L-glutamine, 10% fetal bovine serum (MG-10, CLS order number 820100).	
Subculturing:	Remove medium and rinse the adherent cells using PBS without calcium and magnesium (3-5 ml PBS for T25, 5-10ml for T75 cell culture flasks). Add Accutase (1-2ml per T25, 2.5ml per T75 cell culture flask), the cell sheet must be covered completely. Incubate at ambient temperature for 10 minutes. Carefully resuspend the cells, the addition of medium is optional but not necessary, and dispense into new flasks which contain fresh medium.	
Split Ratio:	A ratio of 1:4 to 1:6 is recommended	
Seeding density:	$2x10^4$ cells/cm^2 will yield a confluent layer in about 4 days	
Fluid Renewal:	2 to 3 times weekly	
Doubling time:	About 28 to 38 hrs	
Freeze Medium:	CM-ACF (CLS order number: 800625, 25ml, 800650, 50ml)	
Freezing recovery:	Following thawing, the cells will need roughly 24 hrs to recover.	
Sterility:	Fluorescence (DAPI) test: negative; Mycoplasma specific PCR: 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; forms adenocarcinoma (grade II) consistent with prostatic primary	
Viruses:	SMRV: Negative, as confirmed by Real-Time PCR	
DNA Profile (STR):	Amelogenin: X,Y	vWA: 17,18,19

	CSF1PO: 10,11 D13S317: 12,13,14 D16S539: 11,13 D5S818: 10,13 D7S820: 7,10,11,12 THO1: 7 TPOX: 11	D3S1358: 16 D21S11: 30,33,34 D18S51: 12,13 Penta E: 12,14 Penta D: 9,13 D8S1179: 13,14 FGA: 22,23
Karyotype:	(P75) hypotriploid to tetraploid with abnormalities including breaks, dicentrics, minutes and large telocentric marker	
Antigen Expression:	Blood Type O; Rh+	
Isoenzymes:	Me-2, 1-2; PGM3, 2; PGM1, 1; ES-D, 1; AK-1, 1; G6PD, B; GLO-1, 2; Phenotype Frequency Product: 0.0041	

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	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. 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 are completely filled with cell culture medium to prevent loss of cells during transit. Remove the entire medium except for a sufficient volume to cover the floor of the flask. Incubate at 37°C for 24 hrs. Sometimes the cultures are handled roughly during transit, and most of the cells detach and float in the culture medium. If this has occurred collect the entire contents of the flask and centrifuge at 300x g for 5 minutes. Take off the supernatant, resuspend the cells in 10 ml of culture medium and transfer the entire cell suspension into cell culture flasks of suitable size (do not seed in more than 1T75 flask).

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.