Product sheet

CLS-CD-3575 | 400146

General information

Description	CLS-CD-3575 cells, a remarkable biological tool derived from the sampling site of the kidney in Mus musculus (Mouse). These cells hold great potential for advancing our understanding of cancer, particularly in the context of mouse kidney carcinoma. The CLS-CD-3575 cells provide researchers with a valuable resource for studying the intricate mechanisms underlying cancer development and progression. Derived specifically from mouse kidney carcinoma, these cells offer a reliable model system to investigate the complex biological processes associated with this type of cancer. These cells are invaluable in cancer research, enabling scientists to explore various aspects of tumour biology, such as cell signalling, proliferation, migration, and invasion. By utilizing CLS-CD-3575 cells, researchers can gain valuable insights into the molecular pathways of mouse kidney carcinoma, shedding light on potential therapeutic targets and novel treatment strategies. Moreover, these cells are a robust platform for drug discovery and preclinical studies. Researchers can employ the CLS-CD-3575 cells to evaluate the efficacy of anti-cancer agents and assess their impact on tumour growth and viability. This empowers scientists to identify promising compounds with potential for future therapeutic interventions against mouse kidney carcinoma. With their origin from mouse kidney carcinoma, the CLS-CD-3575 cells closely resemble the characteristics and behaviour of cancer cells found in this specific type of cancer. This fidelity to the in vivo environment enables researchers to obtain reliable and representative results, enhancing the translational potential of their findings. The availability of CLS-CD-3575 cells opens up new avenues for studying mouse kidney carcinoma and contributes to our overall understanding of cancer biology. By harnessing the power of these cells, researchers can uncover novel insights into the underlying mechanisms driving tumour formation and progression. Ultimately, this knowledge can pave the way for developing targeted therapies and personalized medicine approaches, bringing us closer to effectively combating mouse kidney carcinoma and improving patient outcomes. The CLS-CD-3575 cells provide a robust and reliable experimental system for investigating mouse kidney carcinoma. Their close resemblance to the in vivo tumour environment allows researchers to delve into the intricacies of this cancer type, uncovering vital information for therapeutic advancements. By utilizing these cells, scientists can accelerate progress in cancer research, bringing us one step closer to conquering mouse kidney carcinoma and other related malignancies.
Organism	Mouse
Tissue	Kidney
Disease	Carcinoma
Synonyms	CLS-CD3575

Characteristics

Age	Unspecified
Gender	Unspecified
Growth properties	Adherent

Identifiers / Biosafety / Citation

Citation	CLS-CD-3575 (Cytion catalog number 400146)
Biosafety level	1

Expression / Mutation

Tumorigenic	Yes, in syngeneic mice

Handling

Culture Medium	DMEM
Medium supplements	10% FBS, w: 4.5 g/L Glucose, w: 4 mM L-Glutamine, w: 1.5 g/L NaHCO3, w: 1.0 mM Sodium pyruvate
Passaging solution	Accutase
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 1:8 is recommended
Seeding density	2 to 3 x 10^4 /cm2
Fluid renewal	2 to 3 times per week
Freezing recovery	After thawing, plate the cells at 5 x 10^4 cells/cm^2 and allow the cells to recover from the freezing process and to adhere for at least 24 hours.
Freeze medium	CM-1 (Cytion catalog number 800100) or CM-ACF (Cytion catalog number 806100)

Handling of cryopreserved cultures	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 must be stored below -150 degree Celsius after arrival. If immediate culturing is intended, please follow the below instructions: Quickly thaw by rapid agitation in a 37 degree Celsius 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. 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 300 x g 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 10 ml fresh cell culture medium and transfer them into two T25 cell culture flasks. All further steps are described in the subculture section.
Handling of proliferating cultures	One or two cell culture flasks come filled with cell culture medium. Collect the entire medium in 1 or 2 x 50 ml centrifuge tubes, respectively. Carefully add 5 ml of cell culture medium to each T25 cell culture flask. Control the cell morphology and confluency under the microscope. Incubate at 37 degree Celsius for a minimum of 24 hours. Spin down the collected medium at 300 x 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 a T25 cell culture flask. Incubate at 37 degree Celsius for a minimum of 24 hours.

Quality control / Genetic profile / HLA

Sterility	Mycoplasma contaminations are ruled out through PCR-based and luminescence-based mycoplasma assays. The absence of bacterial, fungal or yeast contamination is controlled through daily visual cell monitoring.
STR profile	**M_18-3**: 17 **M_4-2**: 21.3 **M_6-7**: 12 **M_3-2**: 14 **M_19-2**: 13 **M_7-1**: 25.2 **M_1-1**: 14 **M_Sex**: x **M_8-1**: 13 **M_2-1**: 16 **M_15-3**: 22.3 **M_6-4**: 17 **M_11-2**: 16,18 **M_1-2**: 17,20 **M_17-2**: 15 **M_12-1**: 16 **M_5-5**: 14 **M_X-1**: 24 **M_13-1**: 16.2 **Human D4/D8**: -