Product sheet

Colo-205 growing culture | 330380

General information

Description	COLO-205 cells express a 36,000 Dalton cell surface glycoprotein related to the GA733-2 tumor associated antigen.
Organism	Human
Tissue	Colon, Dukes' type D
Disease	Colorectal adenocarcinoma
Metastatic site	Ascites
Synonyms	Colo 205, CoLo 205, COLO-205, COLO 205, COLO.205, Colo205, COLO205, Co 205, Colorado 205

Characteristics

Age	70 years
Gender	Male
Morphology	Epithelial-like
Growth properties	Adherent/suspension, loosely attached

Identifiers / Biosafety / Citation

Citation	Colo-205 (Cytion catalog number 300380)
Biosafety level	1

Expression / Mutation

Protein expression	CSAp- (Centriole and Spindle–Associated protein)
Antigen expression	The cells are positive for keratin by immunoperoxidase staining.
Isoenzymes	G6PD, B, PGM1, 1-2, PGM3, 1-2, 6PGD, A, ES-D, 1-2, PEP-D, 1

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Tumorigenic	Yes, in nude mice
Reverse transcriptase	Negative
Products	Carcinoembryonic antigen (CEA) 1.5 to 4.1 ng/106 cells/10 days, keratin, interleukin 10 (IL-10, interleukin-10)
Ploidy status	Aneuploid

Handling

Culture Medium	RPMI 1640
Medium supplements	10% FBS, w: 2.1 mM stable Glutamine, w: 2.0 g/L NaHCO3
Passaging solution	The utilization of a passaging solution is not necessary when passaging cells that are cultured in suspension. The appropriate procedure is to dilute the cells in accordance with the indicated guidelines.
Doubling time	20 to 25 hours
Subculturing	Collect suspension cells in a 15 ml tube and carefully 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, then centrifuge the cells growing in suspension and the adherent cells together. Carefully resuspend the cells and dispense into new flasks which contain fresh medium.
Split ratio	Subcultivation ratios of 1:2 to 1:10 are possible when all cells are pooled (suspended cells plus cells recovered after using Accutase)
Seeding density	1 x 10^4 cells/cm^2
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)

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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	**Amelogenin**: x,x **CSF1PO**: 11,12 **D13S317**: 10,12 **D16S539**: 12,13 **D5S818**: 10,13 **D7S820**: 9,10 **TH01**: 8,9 **TPOX**: 11 **vWA**: 15 **D3S1358**: 16 **D21S11**: 30.2,33.2 **D18S51**: 18 **Penta E**: 13,15 **Penta D**: 9,11 **D8S1179**: 9,14 **FGA**: 21,23

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HLA alleles	**A***: 01:01:01, 02:01:01 **B***: 07:02:01, 08:01:01 **C***: 07:01:01, 07:02:01 **DRB1***: 04:01:01, 13:01:01 **DQA1***: 01:03:01 **DQB1***: 06:03:01 **DPB1***: 04:01:01 **E**: 01:01:01, 01:03