Product sheet

Colo-205 Cells | 300380

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

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, w: 2.1 mM stable Glutamine, w: 2.0 g/L NaHCO3 (Cytion article number 820700a)
Medium supplements	Supplement the medium with 10% FBS
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)

Handling of cryopreserved cultures

1. Confirm that the vial remains deeply frozen upon delivery, as cells are shipped on dry ice to maintain optimal temperatures during transit.
2. Upon receipt, either store the cryovial immediately at temperatures below -150°C to ensure the preservation of cellular integrity, or proceed to step 3 if immediate culturing is required.
3. For immediate culturing, swiftly thaw the vial by immersing it in a 37°C water bath with clean water and an antimicrobial agent, agitating gently for 40-60 seconds until a small ice clump remains.
4. Perform all subsequent steps under sterile conditions in a flow hood, disinfecting the cryovial with 70% ethanol before opening.
5. Carefully open the disinfected vial and transfer the cell suspension into a 15 ml centrifuge tube containing 8 ml of room-temperature culture medium, mixing gently.
6. Centrifuge the mixture at 300 x g for 3 minutes to separate the cells and carefully discard the supernatant containing residual freezing medium. Optionally, skip centrifugation but remove any remaining freezing medium after 24 hours.
7. Gently resuspend the cell pellet in 10 ml of fresh culture medium. For adherent cells, divide the suspension between two T25 culture flasks; for suspension cultures, transfer all the medium into one T25 flask to promote effective cell interaction and growth.
8. Adhere to established subculture protocols for continued growth and maintenance of the cell line, ensuring reliable experimental outcomes.

Quality control / Genetic profile / HLA

Sterility

Mycoplasma contamination is excluded using both PCR-based assays and luminescence-based mycoplasma detection methods.

To ensure there is no bacterial, fungal, or yeast contamination, cell cultures are subjected to daily visual inspections.

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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
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