Product sheet

SK-BR-3 growing culture | 330333

General information

Description	Ultra structural features include microvilli and desmosomes, glycogen granules, large lysosomes, bundles of cytoplasmic fibrils. No virus particles.
Organism	Human
Tissue	Breast, mammary gland
Disease	Invasive ductal carcinoma
Metastatic site	Pleural effusion
Synonyms	SK-Br-3, Sk-Br-3, SK BR 03, SKBR-3, SKBr-3, SK-BR3, SKBr3, SkBr3, SKBR3

Characteristics

Age	43 years
Gender	Female
Ethnicity	Caucasian
Morphology	Epithelial-like
Growth properties	Monolayer, adherent

Identifiers / Biosafety / Citation

Citation	SK-BR-3 (Cytion catalog number 300333)
Biosafety level	1

Expression / Mutation

Protein expression	p53 positive
Antigen expression	Blood Type A, Rh+, HLA A11, Bw22(+/-), B40, B18

Isoenzymes	PGM3, 1, PGM1, 1-2, ES-D, 1, AK-1, 1-2, GLO-1, 2, G6PD, B, Phenotype Frequency Product: 0.0044
Tumorigenic	Yes, in nude mice, forms poorly differentiated adenocarcinoma
Mutational profile	TP53 mut
Karyotype	(P9) hypertriploid to hypotetraploid (+A, +B, +C, +E, +F, +G, -D) with abnormalities including dicentrics, acrocentric fragments, rings, secondary constrictions, large metacentrics or polycentrics and large submetacentric marker

Handling

Culture Medium	DMEM, w: 4.5 g/L Glucose, w: 4 mM L-Glutamine, w: 1.5 g/L NaHCO3, w: 1.0 mM Sodium pyruvate (Cytion article number 820300a)
Medium supplements	Supplement the medium with 10% FBS
Passaging solution	Accutase
Doubling time	30 hours
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 with medium (10 ml), centrifuge for 3 min at 300 g, resuspend cells in fresh medium and dispense into new flasks which contain fresh medium.
Split ratio	A ratio of 1:2 to 1:4 is recommended
Seeding density	Start culture from cryovial at 3 x 10^4 cells/cm^2. Use 2 x 10^4 cells/cm^2 for continued subcultures
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)

SK-BR-3 growing culture | 330333

Handling of cryopreserved cultures	SK-BR-3 cells are shipped in a deep-frozen state on dry ice. Upon receipt, confirm that the vial remains frozen. For storage, place the cryovial immediately at temperatures below -150 degrees. If you plan to culture the cells immediately, swiftly thaw the vial by shaking it in a 37 degrees water bath with clean water and an antimicrobial agent for 40-60 seconds. Remove the vial once a small ice clump persists, ensuring it remains cold. Proceed with all subsequent steps under aseptic conditions. In a sterile flow hood, disinfect the cryovial with 70% ethanol. Then, gently open the vial and transfer the cell suspension into a 15 ml centrifuge tube pre-filled with 8 ml of room temperature culture medium. Gently mix the cells. For cell separation, centrifuge at 300 x g for 3 minutes and dispose of the supernatant. Skipping centrifugation is optional, although any residual freezing medium should be removed after 24 hours. Resuspend the pellet gently in 10 ml of fresh culture medium and divide between two T25 culture flasks. Follow the subculture protocol for subsequent steps.
Handling of proliferating cultures	One or two cell culture flasks come filled with cell culture medium. Collect the entire medium in a 50 ml centrifuge tube. 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. Carefully add 5 ml of cell culture medium to each T25 cell culture flask. Examine cell morphology and confluency using a microscope. Finally, incubate the flasks at 37 degrees Celsius for at least 24 hours.

Quality control / Genetic profile / HLA

Sterility	Mycoplasma contamination is rigorously 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.
STR profile	**Amelogenin**: x,x **CSF1PO**: 12 **D13S317**: 11,12 **D16S539**: 9 **D5S818**: 9,12 **D7S820**: 9,12 **TH01**: 8,9 **TPOX**: 8,11 **vWA**: 17 **D3S1358**: 17 **D21S11**: 30,30.2 **D18S51**: 10,13 **Penta E**: 10,11 **Penta D**: 9,12 **D8S1179**: 11,12 **FGA**: 20

SK-BR-3 growing culture | 330333

HLA alleles	**A***: 02:01:01, 03:01:01 **B***: 14:02:01, 40:01:02 **C***: 03:04:01, 08:02:01 **DRB1***: 07:01:01, 13:02:01 **DQA1***: 01:02:01, 02:01:01 **DQB1***: 02:02:01, 06:04:01 **DPB1***: 03:01:01 **E**: 01:01, 01:03