

**SK-ES-1 Cells | 300435**

**General information**

<b>Description</b>	Antibodies to the sarcoma lines were detected in sera of patients with sarcomas after absorption with non-sarcoma lines. Sera from normal donors were also cytotoxic.
<b>Organism</b>	Human
<b>Tissue</b>	Bone
<b>Disease</b>	Ewing's Sarcoma
<b>Synonyms</b>	Sk-Es-1, Sk-ES-1, SK ES 01, SK-ES1, SKES-1, SKES1, SK-ES

**Characteristics**

<b>Age</b>	18 years
<b>Gender</b>	Male
<b>Ethnicity</b>	Caucasian
<b>Morphology</b>	Epithelial-like
<b>Growth properties</b>	Monolayer, adherent

**Identifiers / Biosafety / Citation**

<b>Citation</b>	SK-ES-1 (Cytion catalog number 300435)
<b>Biosafety level</b>	1

**Expression / Mutation**

<b>Antigen expression</b>	Blood Type A, Rh+
<b>Isoenzymes</b>	PGM3, 1-2, PGM1, 1, ES-D, 1, AK-1, 1, GLO-1, 2, G6PD, B, Phenotype Frequency Product: 0.0548
<b>Tumorigenic</b>	Yes, in nude mice, forms small cell malignant tumor consistent with Ewing's sarcoma

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**Handling**

<b>Culture Medium</b>	McCoy's 5a, w: 3.0 g/L Glucose, w: stable Glutamine, w: 2.0 mM Sodium pyruvate, w: 2.2 g/L NaHCO <sub>3</sub> (Cytion article number 820200a)
<b>Medium supplements</b>	Supplement the medium with 10% FBS
<b>Passaging solution</b>	Accutase
<b>Subculturing</b>	Remove the old medium from the adherent cells and wash them with PBS that lacks calcium and magnesium. For T25 flasks, use 3-5 ml of PBS, and for T75 flasks, use 5-10 ml. Then, cover the cells completely with Accutase, using 1-2 ml for T25 flasks and 2.5 ml for T75 flasks. Let the cells incubate at room temperature for 8-10 minutes to detach them. After incubation, gently mix the cells with 10 ml of medium to resuspend them, then centrifuge at 300xg for 3 minutes. Discard the supernatant, resuspend the cells in fresh medium, and transfer them into new flasks that already contain fresh medium.
<b>Split ratio</b>	A ratio of 1:2 to 1:5 is recommended
<b>Seeding density</b>	1 x 10 <sup>4</sup> cells/cm <sup>2</sup>
<b>Fluid renewal</b>	2 to 3 times per week
<b>Freezing recovery</b>	After thawing, plate the cells at 5 x 10 <sup>4</sup> cells/cm <sup>2</sup> and allow the cells to recover from the freezing process and to adhere for at least 24 hours.
<b>Freeze medium</b>	CM-1 (Cytion catalog number 800100) or CM-ACF (Cytion catalog number 806100)
<b>Handling of cryopreserved cultures</b>	SK-ES-1 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.

**Quality control / Genetic profile / HLA**

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### **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:** 11  
**D13S317:** 8,9  
**D16S539:** 11  
**D5S818:** 12  
**D7S820:** 10,11  
**TH01:** 6,9,3  
**TPOX:** 8  
**vWA:** 14,17  
**D3S1358:** 16,18  
**D21S11:** 30  
**D18S51:** 13,15  
**Penta E:** 11  
**Penta D:** 11,13  
**D8S1179:** 11,13  
**FGA:** 20,21