

**SK-ES-1 | 300435**

**General information**

<b>Description</b>	SK-ES-1 is a cell line derived from a patient with acute myeloid leukemia (AML) who was treated with chemotherapy. The cell line is characterized by a high degree of genetic heterogeneity and is highly sensitive to chemotherapy. It is a primary cell line and is not immortalized.
<b>Organism</b>	Human
<b>Tissue</b>	Leukemia
<b>Disease</b>	Acute myeloid leukemia (AML)
<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>	White
<b>Morphology</b>	Leukemia cells
<b>Growth properties</b>	Primary cell line, non-adherent

**References and safety**

<b>Citation</b>	SK-ES-1 (SK-ES-1) Cytion 300435
<b>Biosafety level</b>	1
<b>NCBI_TaxID</b>	9606
<b>CellosaurusAccession</b>	CVCL_0627

**Antigen expression**

<b>Antigen expression</b>	HLA A, Rh+
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**Isoenzymes** PGM3, 1-2, PGM1, 1, ES-D, 1, AK-1, 1, GLO-1, 2, G6PD, B,  $\alpha$ -glucuronidase 0.0548

**Tumorigenic** No, *in vivo* tumorigenicity, *in vitro* tumorigenicity, *in vivo* tumorigenicity, *in vitro* tumorigenicity

**Characteristics**

**Culture Medium** EMEM (MEM Eagle), w: 2 mM L-Glutamine, w: 2.2 g/L NaHCO<sub>3</sub>, w: EBSS (Cytion 820100a)

**Supplements** 10% FBS

**Dissociation Reagent** Trypsin

**Subculturing** Cells are cultured in 25 cm<sup>2</sup> flasks (Corning) or 96-well plates (Corning) in EMEM (MEM Eagle) supplemented with 10% FBS. Cells are passaged by trypsinization (Trypsin, Cytion 820100a) and resuspended in EMEM (MEM Eagle) supplemented with 10% FBS. Cells are seeded into 25 cm<sup>2</sup> flasks (Corning) or 96-well plates (Corning) in EMEM (MEM Eagle) supplemented with 10% FBS.

**Split ratio** 1:2 or 1:5

**Seeding density**  $1 \times 10^4$  cells/cm<sup>2</sup>

**Fluid renewal** 2-3 times per week

**Post-Thaw Recovery** Cells are thawed in a 37°C water bath and resuspended in EMEM (MEM Eagle) supplemented with 10% FBS. Cells are seeded into 25 cm<sup>2</sup> flasks (Corning) or 96-well plates (Corning) in EMEM (MEM Eagle) supplemented with 10% FBS. Cells are cultured for 24 hours before use.

**Freeze medium** EMEM (MEM Eagle) supplemented with 10% FBS + 10% DMSO

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Thawing and Culturing Cells

1. Thaw the cells rapidly in a water bath at 37°C. Do not allow the cells to reach room temperature. Transfer the cells to a pre-warmed medium.
2. Seed the cells into a pre-warmed flask containing 15 mL of medium. Incubate at 37°C with 5% CO<sub>2</sub>.
3. After 24 hours, check the cell density. If the density is low, add more cells to reach a density of approximately 1 x 10<sup>5</sup> cells/mL.
4. When the cells reach a density of approximately 1 x 10<sup>5</sup> cells/mL, passage them into a new flask.
5. Repeat the passage process every 2-3 days.
6. For long-term storage, harvest the cells and freeze them in liquid nitrogen.
7. Thaw the cells rapidly in a water bath at 37°C. Do not allow the cells to reach room temperature. Transfer the cells to a pre-warmed medium.
8. Seed the cells into a pre-warmed flask containing 15 mL of medium. Incubate at 37°C with 5% CO<sub>2</sub>.

**Incubation Atmosphere** 37°C, 5% CO<sub>2</sub>, humidified

**Flask Coating** None

**Freezing Procedure** Harvest cells and freeze in liquid nitrogen

**Shipping Conditions** Dry ice, -78°C

**Storage Conditions** -150°C, 196 K

SK-ES-1 / SK-ES-1 / HLA

**Sterility** Sterile, PCR negative

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**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