

Product sheet

SK-NEP-1 | 300341

SK-NEP-1

Description SK-NEP-1 is a neuroendocrine tumor cell line derived from a 25-year-old male patient with a paraganglioma. The tumor was resected and the cells were cultured in RPMI 1640 medium supplemented with 10% fetal bovine serum (FBS) and 1% penicillin-streptomycin. SK-NEP-1 cells are characterized by their ability to produce catecholamines and are highly sensitive to phorbol myristate acetate (PMA). The cell line is maintained in a serum-dependent manner and is used for studying the biology of neuroendocrine tumors and for drug screening.

Organism Homo sapiens

Tissue Tumor

Disease Paraganglioma

Metastatic site Metastatic

Synonyms SK-NEP-1, SK-NEP-1, SK-NEP-1

SK-NEP-1

Age 25 years

Gender Male

Ethnicity Caucasian

Morphology Epithelial

Growth properties Serum dependent

SK-NEP-1

Citation SK-NEP-1 (SK-NEP-1 | 300341)

Biosafety level 1

NCBI_TaxID 9606

CellosaurusAccession CVCL_0631

SK-NEP-1 | 300341

Cell Line Information

Isoenzymes PGM3 1 PGM1 1-2 ES-D 1 Me-2 2 AK-1 1 GLO-1 2 G6PD B 0.0029

Tumorigenic

Mutational profile P53

Karyotype (P12) (+A1 +A2 +C +D +E +F +G)

Culture Conditions

Culture Medium 5 3.0 / 2.0 NaHCO3

Supplements 10 FBS

Subculturing 5 5 6 5 x 10

Split ratio 1:2 1:4

Fluid renewal 2 3

Freeze medium (FBS) + 10% DMSO

SK-NEP-1 | 300341

Thawing and Culturing Cells

1. Thaw the vial quickly in a 37°C water bath. Do not vortex. Transfer the cells to a 15 mL centrifuge tube containing 10 mL of pre-warmed complete medium. Centrifuge at 300 x g for 3 minutes. Remove the supernatant and resuspend the cells in 10 mL of complete medium. Seed the cells into a T75 flask containing 50 mL of complete medium. Incubate at 37°C in 5% CO2.
2. After 24 hours, check the cell density. If the cells are not attached, repeat the thawing and seeding process.
3. Once the cells are attached, replace the medium with fresh complete medium. After 24 hours, the cells should be at 70% confluency.
4. Harvest the cells by trypsinization. Add 2 mL of trypsin to the flask and incubate for 10 minutes at 37°C. Add 10 mL of complete medium to stop the reaction. Harvest the cells into a 15 mL centrifuge tube and centrifuge at 300 x g for 3 minutes. Resuspend the cells in 1 mL of complete medium.
5. Seed the cells into a 96-well plate (8 wells per condition) at a density of 1 x 10^5 cells per well. Incubate at 37°C in 5% CO2.
6. After 24 hours, harvest the cells by trypsinization. Add 2 mL of trypsin to the plate and incubate for 10 minutes at 37°C. Add 10 mL of complete medium to stop the reaction. Harvest the cells into a 15 mL centrifuge tube and centrifuge at 300 x g for 3 minutes. Resuspend the cells in 1 mL of complete medium.
7. Seed the cells into a 96-well plate (8 wells per condition) at a density of 1 x 10^5 cells per well. Incubate at 37°C in 5% CO2.
8. After 24 hours, harvest the cells by trypsinization. Add 2 mL of trypsin to the plate and incubate for 10 minutes at 37°C. Add 10 mL of complete medium to stop the reaction. Harvest the cells into a 15 mL centrifuge tube and centrifuge at 300 x g for 3 minutes. Resuspend the cells in 1 mL of complete medium.

Incubation Atmosphere

37°C, 5% CO2

Flask Coating

None

Freezing Procedure

Resuspend cells in 1 mL of complete medium. Add 10% DMSO and freeze at -80°C.

Shipping Conditions

Store at -80°C. Ship on dry ice.

Storage Conditions

Store at -150°C to -196°C in liquid nitrogen.

SK-NEP-1 / SK-NEP-1 / HLA

Sterility

Cells are tested for mycoplasma contamination using PCR. Cells are free of mycoplasma. Cells are tested for endotoxin contamination. Cells are free of endotoxin.

XXXXXXXX SK-NEP-1 | 300341

XXXXXXXX XXXXXXXXXXXX STRCSF1PO: 10
D13S317: 11
D16S539: 11
D5S818: 13
D7S820: 8,1
TH01: 8~~9~~.3
TPOX: 8~~11~~
vWA: 15~~19~~
D3S1358: 14~~15~~
D21S11: 29~~31~~
D18S51: 15~~17~~
Penta E: 7,18
Penta D: 11~~12~~
D8S1179: 12
FGA: 24

XXXXXXXX HLA
A*: '25:01:01, '31:01:02
B*: '51:01:01, '55:01:01
C*: '03:03:01, '15:02:01
DRB1*: '14:54:01, '15:01:01G
DQA1*: '01:02:01, '01:04:01
DQB1*: '05:03:01, '06:02:01
DPB1*: '03:01:01, '04:01:01
E: '01:01:01, '01:03:01