

**SNU-81 | 305638**

**General Information**

**Description** SNU-81 is a cell line derived from a patient with acute myeloid leukemia (AML). It is characterized by a t(8;21)(q22;q22) translocation, resulting in a fusion of the FETC1 and RUNX1 genes. The cell line is maintained in suspension culture and is karyotypically stable. It is a myelomonocytic leukemia cell line, with a morphology of large blasts with a high nucleus-to-cytoplasm ratio. The cell line is sensitive to TP53 inhibitors and is used as a model for studying the pathogenesis and treatment of AML. It is a cell line derived from a patient with acute myeloid leukemia (AML) and is characterized by a t(8;21)(q22;q22) translocation, resulting in a fusion of the FETC1 and RUNX1 genes. The cell line is maintained in suspension culture and is karyotypically stable. It is a myelomonocytic leukemia cell line, with a morphology of large blasts with a high nucleus-to-cytoplasm ratio. The cell line is sensitive to TP53 inhibitors and is used as a model for studying the pathogenesis and treatment of AML.

**Organism** Human

**Tissue** Bone Marrow

**Disease** Acute Myeloid Leukemia

**Synonyms** SNU81, NCI-SNU-81

**Characteristics**

**Age** 53 years

**Gender** Male

**Ethnicity** Caucasian

**Morphology** Large blasts with a high nucleus-to-cytoplasm ratio

**Cell type** Myelomonocytic leukemia

**Growth properties** Suspension culture, adherent

**References and Safety**

**Citation** SNU-81 (ATCC CCL-222) | Cytion 305638

**Biosafety level** 1

**NCBI\_TaxID** 9606

**CellosaurusAccession** CVCL\_5098

**HEK293T SNU-81 | 305638**

HEK293T SNU-81-HEK293T SNU-81

**Mutational profile** APC, p.Ser1392Ter (c.4175C>A), APC, p.Arg1450Ter (c.4348C>T), FBXW7, p.Arg479Gln (c.1436G>A), KRAS, p.Ala146Thr (c.436G>A), p.Glu299Ter (c.895G>T), TBX3, p.Glu111Ter (c.331G>T), TP53, p.Arg213Ter (c.637C>T)

HEK293T

**Culture Medium** RPMI 1640, w: 2.0 mM  $\beta$ -mercaptoethanol, w: 2.0 g/L NaHCO<sub>3</sub> (Cytion 820700a)

**Supplements** 10% FBS

**Dissociation Reagent** Trypsin

**Doubling time** 30 hours

**Subculturing** 1:3 to 1:10, 0.25%  $\beta$ -EDTA 0.02%  $\beta$ -mercaptoethanol, 37°C

**Split ratio** 1:4

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

**Freeze medium** DMEM (10% FBS) + 10% DMSO

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**Thawing and Culturing Cells**

1. Thaw the vial quickly in a 37°C water bath, and transfer the cells to a pre-warmed medium.
2. Centrifuge the cells at 300 x g for 3 minutes at 4°C, and resuspend the cells in 1 ml of pre-warmed medium.
3. Seed the cells into a 24-well plate at a density of 15 x 10<sup>4</sup> cells per well in 0.5 ml of pre-warmed medium.
4. Incubate the cells in a humidified incubator at 37°C with 5% CO<sub>2</sub> for 24 hours.
5. After 24 hours, the cells should be at 70% confluency.
6. Harvest the cells by trypsinization and centrifugation at 300 x g for 3 minutes at 4°C.
7. Resuspend the cells in 100 µl of pre-warmed medium and seed them into a 96-well plate at a density of 1 x 10<sup>4</sup> cells per well.
8. Incubate the cells in a humidified incubator at 37°C with 5% CO<sub>2</sub> for 24 hours.

**Incubation Atmosphere**

37°C, 5% CO<sub>2</sub>, humidified

**Flask Coating**

None

**Shipping Conditions**

Store at -78°C

**Storage Conditions**

Store at -150 to 196 K

**HLA**

**Sterility**

PCR