



## HEK293T - ACTL6B (KO) Cell Line

Cat. No.: NTV-1225-YJ801

This product is for research use only and is not intended for diagnostic use.

### Summary

<b>Description</b>	This HEK293T cell line features a CRISPR/Cas9-mediated knockout (KO) of the ACTL6B gene. It is designed as an ideal model for investigating the functional roles of ACTL6B.
<b>Species</b>	Human
<b>Size</b>	1×10 <sup>6</sup> cells
<b>Growth Conditions</b>	37°C with 5% CO <sub>2</sub>
<b>Related Disease</b>	Epileptic encephalopathy
<b>Synonyms</b>	ACTL6B knockout HEK293T cells; ACTL6B-deficient 293 line; HEK293T ACTL6B-null cells; BAF5 3b KO in HEK293T cells; 293 cells lacking ACTL6B
<b>Parental cells</b>	HEK293T
<b>Format</b>	Frozen
<b>Shipping</b>	Dry Ice
<b>Storage</b>	Store in liquid nitrogen.

### Specifications

<b>Mycoplasma Testing</b>	Negative
<b>Recovery of Frozen Cells</b>	Cell Reception: * Upon receipt of cryopreserved cells, immediately transfer them to liquid nitrogen for storage, or briefly store them in a -80°C freezer. * Alternatively, you may proceed immediately to cell thawing. * Notice: Please take photos of the package upon receipt (including dry ice and tubes). If any abnormalities are found (e.g., dry ice has run out, vial cap is dislodged, broken, or cell contamination), c

contact the supplier within 24 hours.

#### Cell Thawing:

1. Preparation: Warm the complete culture medium in a 37°C water bath for 30 minutes. Pipet 6-7 ml of the warmed medium into a 15 ml centrifuge tube.
2. Thaw: Retrieve the cryopreserved vial. Quickly thaw cells in the 37°C water bath by gently swirling the vial. (Note: Keep the cap out of the water.) Thawing should be complete in about 1 minute.
3. Centrifuge: In an ultra-clean bench, sterilize the vial's outer surface with an alcohol cotton pellet. Transfer the thawed cells to the prepared 15 ml centrifuge tube. Centrifuge at 1100 rpm for 4 minutes at room temperature.
4. Resuspend: Carefully remove and discard the supernatant. Resuspend the cell pellet with 1 ml of fresh complete medium.
5. Plate: Transfer the cell suspension into a T25 flask containing 4 ml of complete medium. Label the flask (cell name, date, passage no.) and incubate in a 37°C, 5% CO<sub>2</sub> incubator.
6. Note: Do not expand cells directly into a T75 flask or 10 cm culture dish upon thawing. After thawing, count the cell number and check cell viability.

---

#### Subculturing Procedure

\* Confluency: Passage cells when they are 80%-90% confluent.

\* Ratio: The recommended passage ratio is 1:2 to 1:4. For the first passage, use a 1:3 ratio.

\* Steps:

1. Remove and discard the medium. Briefly rinse the cell layer 1-2 times with 1x PBS (2-3 ml for T25, 4-5 ml for T75).
2. Add trypsin solution (1 mL for T25, 2-3 mL for T75) and incubate for 1-2 minutes.
3. When cells become round and detach, add complete medium (2 times the volume of trypsin) to stop digestion.
4. Gently pipet to detach all cells and transfer the cell suspension to a 50 ml centrifuge tube.
5. Centrifuge at 1100 rpm for 4 minutes at room temperature.
6. Remove and discard the supernatant. Resuspend the cells with 2 ml of complete medium.
7. Plate the cells at the appropriate ratio.

\* Ratio Adjustment: Increase the ratio if cells reach confluence within two days; decrease the ratio if they are not confluent after 3-4 days.

---

**Cryopreservation Medium** Can be customized

---

**Research Use Only** For Research Use Only. Not For Clinical Use.

---