# **Cell Use Instruction - HK-1 Cell Line**

## **Product Info**

Catalog	YC-C095	UBIC			
Cell line	НК-1			BIGEN	
Morphology	Epithelial-like,?adherent	Passage ratio	1:2~1:4		
Culture method	90%RPMI-1640+10% FBS Ubigene didn't use P/S. But client could use P/S after cells grow in good condition after thawing.				
Cryopreservation solution	50%RPMI-1640+40% FBS+10%DMSO				
Special Note	0	)		GEN	
STR Authentic	ation			JBIO	

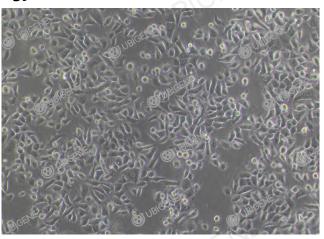
#### **STR Authentication**

	STR Info (Sample Cell) Sample Cell Line: HK-1			STR Info (Cell bank) Cell Line: NPC/HK1			
Loci	Allele1						
	Allele	Allelez	Alleles	Allele I	Allelez	Allele3	
D5S818	11	13	alGF	11.0	13.0		
D13S317	11	11	JUD'	11.0	11.0		
D7S820	8	11		8.0	11.0	GEN	
D16S539	9	11		9.0	11.0	UBI	
VWA	18	19		18.0	19.0		
TH01	F7	9		7.0	9.0		
AMEL	х	Х					
ТРОХ	8	11		8.0	11.0		
CSF1PO	11	12	G	11.0	12.0		

Gene-editing cell lines | CRISPR Library Microorganisms | EZ-editor™ series products

\* STR authentication data of this cell line matches with that of cell lines sourced from ATCC, DSMZ, JCRB, and RIKEN databases.

Cultured cell morphology



## **Cell Reception**

Cryopreserved cells:

In the case of cryopreserved cells transported with dry ice, upon received, immediately transfer to liquid nitrogen for storage or store briefly at -80°C freezer, or proceed directly to cell thawing. Upon cell thawing, please count the cell number and cell viability and take some photos of the cells under different magnification (e.g. at 100x and 40x) as the records.

Notice: Upon received, please ensure to takes photos of the package, including dry ice and the tubes, and contact us within 24 hrs if any abnormalities such as dry ice has ran out, the cap of the cryovial is dislodged, broken and the cell is contaminated.

## Cell Thawing

1) Preparation: warm up the complete culture medium in 37°C water bath for 30 mins. Transfer the

cryopreserved vial from liquid nitrogen to - 80°C freezer, and leave for several minutes to volatilize

residual liquid nitrogen;

- 2) Inside the ultra-clean bench, pipet 6-7 mL of complete medium into a 15 mL centrifuge tube;
- 3) Take out the cryopreserved vial from 80°C freezer and leave in dry ice temporarily, shake slightly before thawing to remove residual dry ice and liquid nitrogen. Then hold the cap with forceps, quickly thaw cells in a 37°C water bath by gently swirling the vial (Note: keep the cap out of the water). In about 1 minute, it would completely thaw;
- 4) Inside the ultra-clean bench, sterilize the outer surface of the vial by wiping with an alcohol cotton pellet and leave it to dry. Transfer the thawed cells to the prepared centrifuge tube (step 2) by pipette, close the lid, and centrifuge at 1100 rpm for 4 mins at room temp to collect the cells;
- 5) Inside the ultra-clean bench, carefully remove and discard the supernatant. Resuspend cell pellet with 1mL of fresh complete medium and then transfer to a T25 flask (or 6 cm culture dish) containing 4 mL of complete medium, label the flask with cell name, date and passage no., incubate the flask in a 37°C, 5%CO2 incubator.

Note: Please do not thaw the cells directly to a T75 flask or 10 cm culture dish.

#### **Cell Passaging**

- As long as the cells are 80%-90% confluent, it is ready to passage. Inside the ultra-clean bench, remove and discard the medium from the flask and briefly rinse the cell 1-2 times with 1×PBS (2-3 mL for T25 flask, 4-5 mL for T75) to remove residual medium and serum;
- 2) Add the corresponding volume of trypsin solution (see below table 1 for details) and allow trypsin completely cover the cells, place the flask into the incubator and incubate for 1-2 mins (If cells are hard to digest, allow appropriate extension of incubation), until the majority of the cells become

round and non-adherent as observed under the microscope, a large number of cells detached from

each side when gently shaking and tapping the flask, terminate trypsin digestion immediately;

- Add complete medium to stop digestion, the volume is 2 times of trypsin. Then gently pipet the cells several times to allow all cells to be completely detached from the flask;
- 4) Transfer the cell suspension with a 10 mL pipette into a 50 mL centrifuge tube, rinse the residual cells from the flask using appropriate volume of PBS, then collect and put them together to the centrifuge tube;
- 5) Centrifuge at 1100 rpm for 4 mins at room temp. After centrifugation, remove and discard the supernatant and resuspend the cells with 2 mL of complete medium;
- 6) Cells need to be passaged at appropriate passage ratio, 1:3 for the first passage, increasing the passaging ratio if the cells are grown to confluence within two days, or decreasing the passaging ratio if the cells are not grown to confluence in 3-4 days.

Table 1. Volume of Trypsin solution added to different size of culture plates/flasks

Size of culture plates/flasks	Trypsin Volume added		
6-well plate	0.5 mL		
T25	1 mL		
Т75	2-3 mL		
T175	3-4 mL		

#### **Cell cryopreservation**

1) Same as procedures of cell passaging, inside the ultra-clean bench, digest the cells to a single-cell

suspension, and terminate digestion by adding complete medium. All liquid is transferred to a 50

mL centrifuge tube;

- 2) Mix well by pipetting and take 20 µL for cell counting;
- 3) Centrifuge at 1100 rpm for 4 mins at room temp. After centrifugation, remove and discard the supernatant, and resuspend the cells with 1-2 mL of 4°C pre-cooled cryopreservation medium (use the one you usually use in lab, or any commercial cryopreservation solutions are fine), then add cryopreservation medium to adjust to the required density (1x10<sup>6</sup>-1x10<sup>7</sup> cells/mL);
- 4) Aliquot the cell suspension to cryovials as 1 mL/tube, close the lid tightly, and the cryovials should be labeled with the cell name, source, cell passage number, and date of cryopreservation in advance;
- (3) UBIGEN 5) Place the cryovials in 4°C pre-cooled Freezing Container, then put the container in -80°C freezers within 15 mins after cell cryopreservation;
- 6) Stay overnight, transfer the cryovials to liquid nitrogen for long-term storage.