

# Human PTK6 knockout HCT116 cell line ab289199

## Overview

Product name	Human PTK6 knockout HCT116 cell line
Parental Cell Line	HCT116
Organism	Human
Passage number	<20
Biosafety level	1
General notes	<p>Although we aim to provide customers with a homozygous clone, feasibility will be dependent on the biology of the protein. Should only heterozygous edits be achieved, you will be notified of the outcome and be asked to confirm whether the cell line is acceptable. All clones will be accompanied with DNA sequencing data, and the mutation description.</p> <p>Recommended control: Human wild-type HCT116 cell line (<a href="#">ab288559</a>). Please note a wild-type cell line is not automatically included with a knockout cell line order, if required please add recommended wild-type cell line at no additional cost using the code WILDTYPE-TMTK1.</p> <p>Cryopreservation cell medium: Cell Freezing Medium-DMSO Serum free media, contains 8.7% DMSO in MEM supplemented with methyl cellulose.</p> <p>Culture medium: McCoY5a + 10% FBS</p> <p>Initial handling guidelines: Upon arrival, the vial should be stored in liquid nitrogen vapor phase and not at -80°C. Storage at -80°C may result in loss of viability.</p> <ol style="list-style-type: none"> <li>1. Thaw the vial in 37°C water bath for approximately 1-2 minutes.</li> <li>2. Transfer the cell suspension (0.8 mL) to a 15 mL/50 mL conical sterile polypropylene centrifuge tube containing 8.4 mL pre-warmed culture medium, wash vial with an additional 0.8 mL culture medium (total volume 10 mL) to collect remaining cells, and centrifuge at 201 x g (rcf) for 5 minutes at room temperature. 10 mL represents minimum recommended dilution. 20 mL represents maximum recommended dilution.</li> <li>3. Resuspend the cell pellet in 5 mL pre-warmed culture medium and count using a haemocytometer or alternative cell counting method. Based on cell count, seed cells in an appropriate cell culture flask at a density of <math>2 \times 10^4</math> cells/cm<sup>2</sup>. Seeding density is given as a guide only and should be scaled to align with individual lab schedules.</li> <li>4. Incubate the culture at 37°C incubator with 5% CO<sub>2</sub>. Cultures should be monitored daily.</li> </ol> <p>Subculture guidelines:</p> <ul style="list-style-type: none"> <li>• All seeding densities should be based on cell counts gained by established methods.</li> <li>• A guide seeding density of <math>2 \times 10^4</math> cells/cm<sup>2</sup> is recommended.</li> <li>• A partial media change 24 hours prior to subculture may be helpful to encourage growth, if required.</li> <li>• Cells should be passaged when they have achieved 80-90% confluence.</li> </ul>

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We will provide viable cells that proliferate on revival.

## Properties

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<b>Number of cells</b>	1000000 cells/vial, 1 mL
<b>Adherent /Suspension</b>	Adherent
<b>Tissue</b>	Colon
<b>Cell type</b>	epithelial
<b>Disease</b>	Carcinoma
<b>Gender</b>	Male
<b>Mycoplasma free</b>	Yes
<b>Storage instructions</b>	Shipped on Dry Ice. Store in liquid nitrogen.
<b>Storage buffer</b>	Constituents: 8.7% Dimethylsulfoxide, 2% Cellulose, methyl ether

## Target

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<b>Function</b>	Phosphorylates KHDRBS1, KHDRBS2, KHDRBS3 and STAP2/BKS. May function as an intracellular signal transducer in epithelial tissues. Overexpression in mammary cells leads to mitogenically sensitization to EGF, and results in a partially transformed phenotype. Its presence in the nucleus appears to be linked to suppression of tumor progression.
<b>Tissue specificity</b>	Epithelia-specific. Very high level in colon and high levels in small intestine and prostate, and low levels in some fetal tissues. Expressed at low level in some breast tumors, but not in normal breast. Also found in melanocytes. Not expressed in heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas.
<b>Sequence similarities</b>	Belongs to the protein kinase superfamily. Tyr protein kinase family. BRK/PTK6/SIK subfamily. Contains 1 protein kinase domain. Contains 1 SH2 domain. Contains 1 SH3 domain.
<b>Post-translational modifications</b>	Autophosphorylated. The phosphorylation of Tyr-447 may lead to the autoinhibition of the enzyme.
<b>Cellular localization</b>	Cytoplasm. Nucleus. Colocalizes with KHDRBS1, KHDRBS2 or KHDRBS3, within the nucleus. In secretory epithelial cells from prostate adenocarcinoma, nuclear localization is higher in low-grade and lower in high-grade regions of the tumors.

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