

Human HK2 (Hexokinase II) knockout HCT116 cell line ab273721

[1 References](#) [2 图像](#)

概述

产品名称	人HK2 (Hexokinase II) knockout HCT116 cell line
Parental Cell Line	HCT116
Organism	Human
Mutation description	Knockout achieved by using CRISPR/Cas9, Homozygous: 1 bp insertion in exon 2
Passage number	<20
Knockout validation	Sanger Sequencing, Western Blot (WB)
经测试应用	适用于: WB
Biosafety level	1
常规说明	<p>Recommended control: Human wild-type HCT116 cell line (ab273730). 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"> 1. Thaw the vial in 37°C water bath for approximately 1-2 minutes. 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. 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 2×10^4 cells/cm². Seeding density is given as a guide only and should be scaled to align with individual lab schedules. 4. Incubate the culture at 37°C incubator with 5% CO₂. Cultures should be monitored daily. <p>Subculture guidelines:</p> <p>All seeding densities should be based on cell counts gained by established methods. A guide seeding density of 2×10^4 cells/cm² is recommended.</p>

A partial media change 24 hours prior to subculture may be helpful to encourage growth, if required.

Cells should be passaged when they have achieved 80-90% confluence.

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We will provide viable cells that proliferate on revival.

性能

Number of cells	1 x 10 ⁶ cells/vial, 1 mL
Adherent /Suspension	Adherent
Tissue	Colon
Cell type	epithelial
Disease	Carcinoma
Gender	Male
Antibiotic resistance	Puromycin 1.00µg/ml
Mycoplasma free	Yes
存放说明	Shipped on Dry Ice. Store in liquid nitrogen.
存储溶液	Constituents: 8.7% Dimethylsulfoxide, 2% Cellulose, methyl ether

靶标

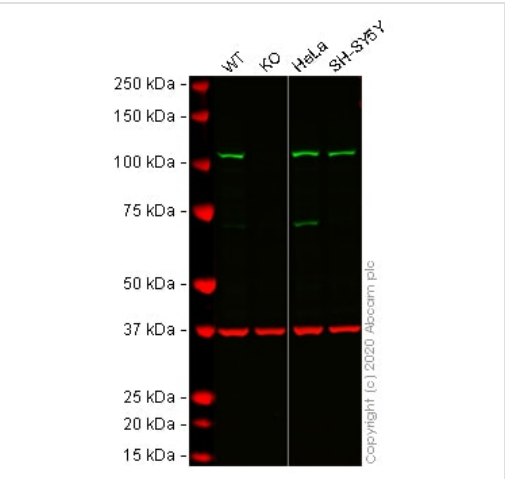
组织特异性	Predominant hexokinase isozyme expressed in insulin-responsive tissues such as skeletal muscle.
通路	Carbohydrate metabolism; hexose metabolism.
序列相似性	Belongs to the hexokinase family. Contains 2 hexokinase domains.
结构域	The N- and C-terminal halves of this hexokinase show extensive sequence similarity to each other. The catalytic activity is associated with the C-terminus while regulatory function is associated with the N-terminus. Each domain can bind a single glucose and Gluc-6-P molecule.
细胞定位	Mitochondrion outer membrane. Its hydrophobic N-terminal sequence may be involved in membrane binding.

应用

The Abpromise guarantee **Abpromise™**承诺保证使用ab273721于以下的经测试应用

“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB		Use at an assay dependent concentration. Predicted molecular weight: 102 kDa.



Western blot - Human HK2 (Hexokinase II) knockout HCT116 cell line (ab273721)



Sanger Sequencing - Human HK2 (Hexokinase II) knockout HCT116 cell line (ab273721)

All lanes : Anti-Hexokinase II antibody [EPR20839] ([ab209847](#)) at 1/1000 dilution

- Lane 1** : Wild-type HCT116 cell lysate
- Lane 2** : HK2 knockout HCT116 cell lysate
- Lane 3** : HeLa cell lysate
- Lane 4** : SH-SY5Y cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 102 kDa
Observed band size: 105 kDa

Lanes 1 -4: Merged signal (red and green). Green - [ab209847](#) observed at 105 kDa. Red - loading control [ab8245](#) (Mouse anti-GAPDH antibody [6C5]) observed at 37kDa.

[ab209847](#) was shown to react with Anti-Hexokinase II in wild-type HCT 116 cells in western blot with loss of signal observed in HK2 knockout cell line ab273721 (HK2 knockout cell lysate [ab275250](#)). Wild-type and HK2 knockout HCT 116 cell lysates were subjected to SDS-PAGE. Membranes were blocked in 3% milk in TBS-T (0.1% Tween®) before incubation with [ab209847](#) and [ab8245](#) (Mouse anti-GAPDH antibody [6C5]) overnight at 4°C at a 1 in 1000 dilution and a 1 in 20000 dilution respectively. Blots were incubated with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed ([ab216773](#)) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed ([ab216776](#)) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.

Allele-1: 1 bp insertion in exon 2.

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