

Human HLA-E (HLA E) knockout HEK-293T cell line ab267231

5 图像

概述

产品名称	人HLA-E (HLA E) knockout HEK-293T cell line
Parental Cell Line	HEK293T
Organism	Human
Mutation description	Knockout achieved by using CRISPR/Cas9, 1 bp deletion in exon 3 and 1 bp insertion in exon 3 and 8 bp deletion in exon 3
Passage number	<20
Knockout validation	Sanger Sequencing, Western Blot (WB)
经测试应用	适用于: WB
Biosafety level	2
常规说明	<p>Recommended control: Human wild-type HEK293T cell line (ab255449). 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: DMEM (High Glucose) + 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> <p>A partial media change 24 hours prior to subculture may be helpful to encourage growth, if</p>

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	Kidney
Cell type	epithelial
STR Analysis	Amelogenin X D5S818: 8, 9 D13S317: 12, 14 D7S820: 11 D16S539: 9, 13 vWA: 16, 19 TH01: 7, 9.3 TPOX: 11 CSF1PO: 11, 12
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

相关性	HLA E belongs to the HLA class I heavy chain paralogues. This class I molecule is a heterodimer consisting of a heavy chain and a light chain (beta-2 microglobulin). The heavy chain is anchored in the membrane. HLA E binds a restricted subset of peptides derived from the leader peptides of other class I molecules.
细胞定位	Membrane; Single-pass type I membrane protein

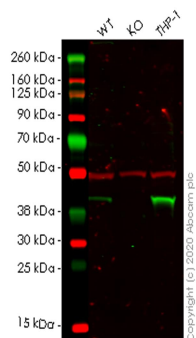
应用

The Abpromise guarantee **Abpromise™**承诺保证使用ab267231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: 40 kDa.

图片



Western blot - Human HLA-E (HLA E) knockout HEK-293T cell line (ab267231)

All lanes : Anti-HLA E antibody [MEM-E/02] ([ab2216](#)) at 1/500 dilution

Lane 1 : Wild-type HEK-293T cell lysate

Lane 2 : HLA-E knockout HEK-293T cell lysate

Lane 3 : THP-1 cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (IRDye® 680RD) preadsorbed ([ab216777](#)) at 1/10000 dilution

Performed under reducing conditions.

Predicted band size: 40 kDa

Observed band size: 40 kDa

Lanes 1-3: Merged signal (red and green). Green - [ab2216](#) observed at 40 kDa. Red - loading control [ab52901](#) observed at kDa.

[ab2216](#) Anti-HLA E antibody [MEM-E/02] was shown to specifically react with HLA E in wild-type HEK293T cells. Loss of signal was observed when knockout cell line ab267231 (knockout cell lysate [ab258454](#)) was used. Wild-type and HLA E knockout samples were subjected to SDS-PAGE. [ab2216](#) and Anti-beta Tubulin [EP1331Y] - Microtubule Marker ([ab52901](#)) were incubated overnight at 4°C at 1 in 500 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 680RD) preadsorbed ([ab216777](#)) and Goat anti-Mouse IgG H&L (IRDye® 800CW) preadsorbed ([ab216772](#)) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.

Mut	TATTTGTGGAGCCACTCCAC-----CTTCCAGTAGGCTCTCTGGTGCTCCGCCTCA
WT	TATTTGTGGAGCCACTCCACGCATGTGTCTTCCAGTAGGCTCTCTGGTGCTCCGCCTCA

Sanger Sequencing - Human HLA-E knockout
HEK293T cell line (ab267231)

Allele-1: 8 bp deletion in exon3

Mut	TATTTGTGGAGCCACTCCAC- CATGTGTCTTCCAGTAGGCTCTCTGGTGCTCCGCCTCA
WT	TATTTGTGGAGCCACTCCACGCATGTGTCTTCCAGTAGGCTCTCTGGTGCTCCGCCTCA

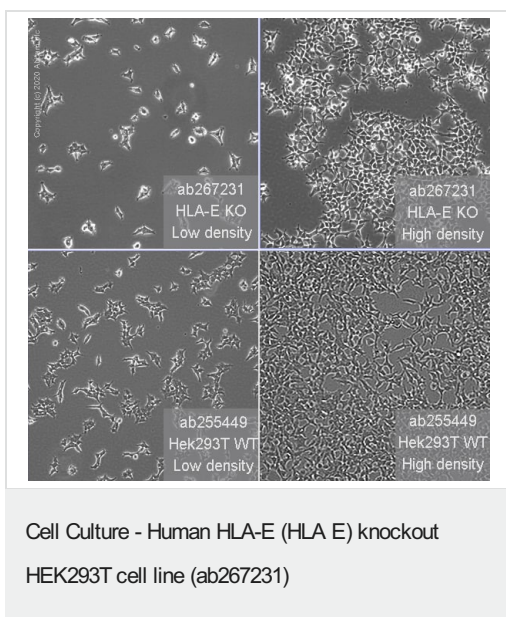
Sanger Sequencing - Human HLA-E knockout
HEK293T cell line (ab267231)

Allele-2: 1 bp deletion in exon 3.

Mut	TATTTGTGGAGCCACTCCACCGCATGTGTCTTCCAGTAGGCTCTCTGGTGCTCCGCCTC
WT	TATTTGTGGAGCCACTCCAC GCATGTGTCTTCCAGTAGGCTCTCTGGTGCTCCGCCTC

Sanger Sequencing - Human HLA-E knockout
HEK293T cell line (ab267231)

Allele-3: 1 bp insertion in exon 3.



Representative images of HLA-E knockout HEK293T cells, low and high confluency examples (top left and right respectively) and wild-type HEK293T cells, low and high confluency (bottom left and right respectively) showing typical adherent, epithelial-like morphology. Images were captured at 10X magnification using an EVOS M5000 microscope.

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