abcam

Product datasheet

Human LTA4H (Leukotriene A4 hydrolase) knockout HEK-293T cell line ab266467

4 Images

Overview

Product name	Human LTA4H (Leukotriene A4 hydrolase) knockout HEK-293T cell line
Parental Cell Line	HEK293T
Organism	Human
Mutation description	Knockout achieved by using CRISPR/Cas9, Homozygous: 10 bp deletion in exon 2
Passage number	<20
Knockout validation	Sanger Sequencing, Western Blot (WB)
Tested applications	**Suitable for:** WB
Biosafety level	2
General notes	**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. **Cryopreservation cell medium:** Cell Freezing Medium-DMSO Serum free media, contains 8.7% DMSO in MEM supplemented with methyl cellulose. **Culture medium:** DMEM (High Glucose) + 10% FBS **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. 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 $2x10^4$ cells/cm^2. 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% CO_2. Cultures should be monitored daily. **Subculture guidelines:** All seeding densities should be based on cell counts gained by established methods. A guide seeding density of $2x10^4$ cells/cm^2 is recommended.

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.
This product is subject to limited use licenses from The Broad Institute and ERS Genomics Limited, and is developed with patented technology. For full details of the limited use licenses and relevant patents please refer to our **limited use license** and **patent pages**.

We will provide viable cells that proliferate on revival.

Properties

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
Storage instructions	Shipped on Dry Ice. Store in liquid nitrogen.
Storage buffer	Constituents: 8.7% Dimethylsulfoxide, 2% Cellulose, methyl ether

Target

Function	Hydrolyzes an epoxide moiety of leukotriene A4 (LTA-4) to form leukotriene B4 (LTB-4). The enzyme also has some peptidase activity.
Pathway	Lipid metabolism; leukotriene B4 biosynthesis.
Sequence similarities	Belongs to the peptidase M1 family.
Cellular localization	Cytoplasm.

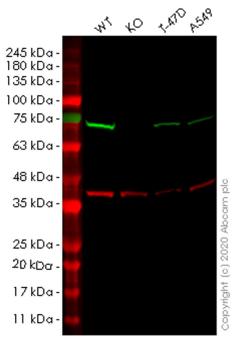
Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab266467 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use at an assay dependent concentration. Predicted molecular weight: 69 kDa.

Images



Western blot - Human LTA4H knockout HEK293T cell line (ab266467)

All lanes : Anti-Leukotriene A4 hydrolase/LTA4H antibody [EPR5712] (**ab109434**) at 1/1000 dilution

Lane 1 : Wild-type HEK293T cell lysate
Lane 2 : LTA4H knockout HEK293T cell lysate
Lane 3 : T-47D cell lysate
Lane 4 : A549 cell lysate

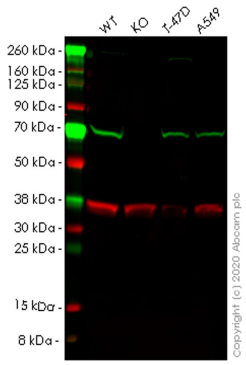
Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) at 1/10000 dilution

Predicted band size: 69 kDa
Observed band size: 69 kDa

Lanes 1-4: Merged signal (red and green). Green - **ab109434** observed at 69 kDa. Red - loading control **ab8245** observed at 36 kDa.

ab109434 Anti-Leukotriene A4 hydrolase/LTA4H antibody [EPR5712] was shown to specifically react with Leukotriene A4 hydrolase/LTA4H in wild-type HEK293T cells. Loss of signal was observed when knockout cell line ab266467 (knockout cell lysate **ab258034**) was used. Wild-type and Leukotriene A4 hydrolase/LTA4H knockout samples were subjected to SDS-PAGE. **ab109434** and Anti-GAPDH antibody [6C5] - Loading Control (**ab8245**) were incubated overnight at 4°C at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (**ab216776**) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Western blot - Human LTA4H knockout HEK293T cell line (ab266467)

All lanes : Anti-Leukotriene A4 hydrolase/LTA4H antibody [EPR5713] (**ab133512**) at 1/1000 dilution

Lane 1 : Wild-type HEK293T cell lysate
Lane 2 : LTA4H knockout HEK293T cell lysate
Lane 3 : T-47D cell lysate
Lane 4 : A549 cell lysate

Lysates/proteins at 20 µg per lane.

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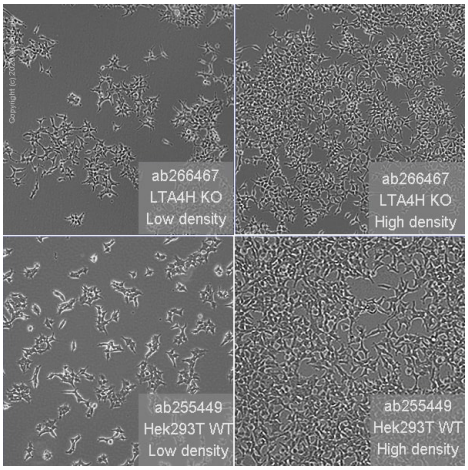
Sanger Sequencing - Human LTA4H knockout

HEK293T cell line (ab266467)

Homozygous: 10 bp deletion in exon 2



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