abcam

Product datasheet

Human AK4 (AK3L1) knockout HeLa cell lysate ab257827

2 Images

Overview

Product name Human AK4 (AK3L1) knockout HeLa cell lysate

Product overview

Knockout cell lysate achieved by CRISPR/Cas9.

Parental Cell Line HeLa

Organism Human

Mutation description Knockout achieved by using CRISPR/Cas9, 2 bp insertion in exon2.

Passage number <20

Knockout validation Sanger Sequencing, Western Blot (WB)

Reconstitution notes To use as WB control, resuspend the lyophilizate in 50 μL of LDS* Sample Buffer to have a final

concentration of 2 mg/ml. For reducing conditions, we recommend a final concentration of 0.1 M

DTT.

*Usage of SDS sample buffer is not recommended with these lyophilized lysates.

Notes

Lysate preparation: Our lysates are made using RIPA buffer to which we add a protease

inhibitor cocktail and phosphatase inhibitor cocktail (ratio: 300:100:10). *This means that the protein of interest is denatured.* If you require a native form of the protein please use the live cell version - found **here**. Please refer to our lysis protocol for further details on how our lysates are

prepared.

User storage instructions: Lyophilizate may be stored at 4°C. After reconstitution, store at -

20°C for short-term storage or -80°C for long-term storage.

Access thousands of knockout cell lysates, generated from commonly used cancer cell lines.

See here for more information on knockout cell lysates.

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Tested applications Suitable for: WB

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Properties

Storage instructions Store at -80°C. Please refer to protocols.

Components	1 kit
ab262225 - Human AK4 knockout HeLa cell lysate	1 x 100µg
ab255929 - Human wild-type HeLa cell lysate	1 x 100μg

Cell type epithelial

Disease Adenocarcinoma

Gender Female

STR Analysis Amelogenin X D5S818: 11, 12 D13S317: 12, 13.3 D7S820: 8, 12 D16S539: 9, 10 vWA: 16, 18

TH01: 7 TPOX: 8,12 CSF1PO: 9, 10

Target

Function Catalyzes the reversible transfer of the terminal phosphate group between ATP and AMP. May

also be active with GTP.

Sequence similarities Belongs to the adenylate kinase family.

Cellular localization Mitochondrion matrix.

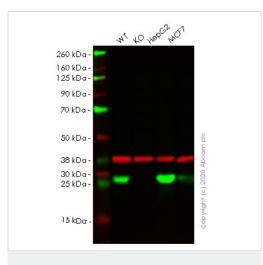
Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab257827 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: 25 kDa.

Images



Western blot - Human AK4 knockout HeLa cell lysate (ab257827)

Lane 1: Wild-type HeLa cell lysate (20 µg)

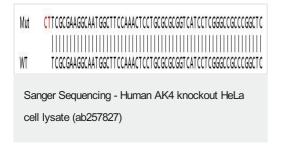
Lane 2: AK4 knockout HeLa cell lysate (20 µg)

Lane 3: HepG2 cell lysate (20 µg)

Lane 4: MCF7 cell lysate (20 µg)

Lanes 1-4: Merged signal (red and green). Green - <u>ab131327</u> observed at 25 kDa. Red - loading control <u>ab8245</u> observed at 37 kDa.

ab131327 Anti-AK3L1 antibody [EPR7678] was shown to specifically react with Adenylate kinase 4 in wild-type HeLa cells. Loss of signal was observed when knockout cell line ab265331 (knockout cell lysate ab257827) was used. Wild-type and Adenylate kinase 4 knockout samples were subjected to SDS-PAGE. ab131327 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 lgG H&L (IRDye® 800CW) preadsorbed (ab216773) and Goat anti-Mouse lgG H&L (IRDye® 680RD) preadsorbed (ab216776) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Homozygous: 2 bp insertion in exon2

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