# abcam

## Product datasheet

## Human KIF7 knockout HeLa cell lysate ab258487

## 2 Images

Overview

Product name Human KIF7 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, 1 bp insertion in exon8 and 7 bp deletion in exon8.

Passage number <20

Knockout validation Sanger Sequencing

 $\label{eq:Reconstitution notes} \textbf{To use as WB control, resuspend the lyophilizate in 50 $\mu$L 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.

 $\hbox{$^*$Usage of SDS sample buffer is not recommended with these lyophilized lysates.}$ 

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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licenses and patents please refer to our limited use license and patent pages.

**Properties** 

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#### Storage instructions

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

Components	1 kit
ab263015 - Human KIF7 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 Acts as both a negative and positive regulator of sonic hedgehog (Shh) pathway, acting

downstream of SMO. Negatively regulates the pathway by preventing inappropriate activation of the transcriptional activator GLI2 in the absence of ligand. Positively regulates the pathway by preventing the processing of the transcription factor GLI3 into its repressor form. Required for efficient localization of GLI3 to cilia in response to Shh. May also act as a ciliary motor.

Tissue specificity Embryonic stem cells, melanotic melanoma and Jurkat T-cells.

**Sequence similarities**Belongs to the kinesin-like protein family. KIF27 subfamily.

Contains 1 kinesin-motor domain.

**Cellular localization** Cell projection > cilium. SMO is required for its accumulation within cilia. Moves from the cilia

base to the cilia tip in response to activation of the Shh pathway.

## **Images**

Mut ATGGCTCACTCCCCTAGCAGGTGACAAATGG------GCTGGAGCTGAGTTGCTGACTG

T ATGCCTCACTCCCCTAGCAGGTGACAAATGGCAGGGAGGCTGAGCTGAGTTGCTGACTG

Sanger Sequencing - Human KIF7 knockout HeLa

cell lysate (ab258487)

Allele-1: 7 bp deletion in exon8

 ${\it Mut} \qquad {\it ATGGCTCACTCCCCTAGCAGGTGACAAATGGGCAGGGAGGCTGGAGCTGAGTTGCTGACT}$ 

NT ATGGCTCACTCCCCTAGCAGGTGACAAATGG CAGGGAGGCTGGAGCTGAGTTGCTGACT

Sanger Sequencing - Human KIF7 knockout HeLa cell lysate (ab258487)

Allele-2: 1 bp insertion in exon8

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