# abcam

## Product datasheet

# Human PHLDA3 knockout HeLa cell lysate ab258579

### 1 Image

#### Overview

Product name Human PHLDA3 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 exon1.

Passage number <20

Knockout validation Sanger Sequencing

**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.

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

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
ab261283 - Human PHLDA3 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 p53/TP53-regulated repressor of Akt/AKT1 signaling. Represses AKT1 by preventing AKT1-

binding to membrane lipids, thereby inhibiting AKT1 translocation to the cellular membrane and activation. Contributes to p53/TP53-dependent apoptosis by repressing AKT1 activity. Its directs transcription regulation by p53/TP53 may explain how p53/TP53 can negatively regulate AKT1.

May acts as a tumor suppressor.

**Tissue specificity** Widely expressed with lowest expression in liver and spleen.

**Sequence similarities** Belongs to the PHLDA3 family.

Contains 1 PH domain.

**Domain** The PH domain binds phosphoinositides with a broad specificity. It competes with the PH domain

of AKT1 and directly interferes with AKT1 binding to phosphatidylinositol 4,5-bisphosphate (PIP2) and phosphatidylinositol 3,4,5-triphosphate (PIP3), preventing AKT1 association to membrane

lipids and subsequent activation of AKT1 signaling.

**Cellular localization** Cytoplasm. Membrane.

#### **Images**

Mut CATGACGGCGGCGACGGCTACCGTGCTTCAAGGAGGGCGTGCTGGAGAAGCGCAGCG

WT CATGACGGCGGCGGCGACGGCTACCGTGCT CAAGGAGGGCGTGCTGGAGAAGCGCAGCG

Sanger Sequencing - Human PHLDA3 knockout

HeLa cell lysate (ab258579)

Homozygous: 1 bp insertion in exon1

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