

Product datasheet

Human UCHL1 (PGP9.5) knockout HEK-293T cell lysate ab263773

[2 Images](#)

Overview

Product name	Human UCHL1 (PGP9.5) knockout HEK-293T cell lysate
Product overview	Knockout cell lysate achieved by CRISPR/Cas9.
Parental Cell Line	HEK293T
Organism	Human
Mutation description	Knockout achieved by using CRISPR/Cas9, Homozygous: 45 bp deletion in exon 1.
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. <i>*Usage of SDS sample buffer is not recommended with these lyophilized lysates.</i>

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

Properties

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

Components	1 kit
ab255547 - Human UCHL1 knockout HEK293T cell lysate	1 x 100µg
ab255594 - Human wild-type HEK293T cell lysate	1 x 100µg

Cell type epithelial

STR Analysis Amelogenin X D5S818: 8, 9 D13S317: 11, 12, 14 D7S820: 11 D16S539: 9, 13 vWA: 15, 20 TH01: 7, 9.3 TPOX: 11, 12 CSF1PO: 12

Target

Function Ubiquitin-protein hydrolase involved both in the processing of ubiquitin precursors and of ubiquitinated proteins. This enzyme is a thiol protease that recognizes and hydrolyzes a peptide bond at the C-terminal glycine of ubiquitin. Also binds to free monoubiquitin and may prevent its degradation in lysosomes. The homodimer may have ATP-independent ubiquitin ligase activity.

Tissue specificity Found in neuronal cell bodies and processes throughout the neocortex (at protein level). Expressed in neurons and cells of the diffuse neuroendocrine system and their tumors. Weakly expressed in ovary. Down-regulated in brains from Parkinson disease and Alzheimer disease patients.

Involvement in disease Parkinson disease 5
Neurodegeneration with optic atrophy, childhood-onset

Sequence similarities Belongs to the peptidase C12 family.

Post-translational modifications O-glycosylated.

Cellular localization Cytoplasm. Endoplasmic reticulum membrane. About 30% of total UCHL1 is associated with membranes in brain.

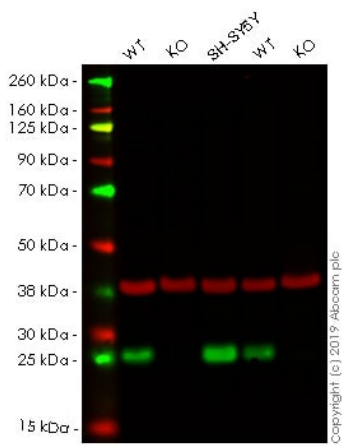
Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab263773 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.

Images



Western blot - Human UCHL1 knockout HEK293T cell lysate (ab263773)

Lane 1: Wild-type Hap1 cell lysate (20 µg)

Lane 2: UCHL1 knockout Hap1 cell lysate (20 µg)

Lane 3: SH-SY5Y cell lysate (20 µg)

Lane 4: Wild-type HEK-293T cell lysate (20 µg)

Lane 5: UCHL1 knockout HEK-293T cell lysate (20 µg)

Lanes 1 - 5: Merged signal (red and green). Green - **ab108986** observed at 25 kDa. Red - loading control, **ab8245** observed at 37 kDa.

ab108986 was shown to react with PGP9.5 in wild-type HEK-293T cells. Loss of signal was observed when knockout cell line **ab255443** (knockout cell lysate ab263773) was used. Wild-type and PGP9.5 knockout samples were subjected to SDS-PAGE. **ab108986** 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.

Homozygous: 45 bp deletion in exon 1

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Mut  .....GGTGCACCGCTACCC
      |||||
WT   AGATGCAGCTCAAGCCGATGGAGATCAACCCCGAGGTGAGCGCCAGGTGCACCGCTACCC
  
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Sanger Sequencing - Human UCHL1 knockout HEK293T cell lysate (ab263773)

Homozygous: 45 bp deletion in exon 1

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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