

Product datasheet

Human RANBP1 knockout HEK293T cell lysate  
ab258168

2 Images

Overview

<b>Product name</b>	Human RANBP1 knockout HEK293T cell lysate
<b>Product overview</b>	Knockout cell lysate achieved by CRISPR/Cas9.
<b>Parental Cell Line</b>	HEK293T
<b>Organism</b>	Human
<b>Mutation description</b>	Knockout achieved by using CRISPR/Cas9, Homozygous: Insertion of the selection cassette in exon 2.
<b>Passage number</b>	<20
<b>Knockout validation</b>	Sanger Sequencing, Western Blot (WB)
<b>Reconstitution notes</b>	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:** After reconstitution, store the lysate at -80°C.

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

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

Components	1 kit
ab260484 - Human RANBP1 knockout HEK293T cell lysate (Lyophilized)	1 x 100µg
ab255553 - Human wild-type HEK293T cell lysate (Lyophilized)	1 x 100µg

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**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

## Target

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**Function** Inhibits GTP exchange on Ran. Forms a Ran-GTP-RANBP1 trimeric complex. Increase GTP hydrolysis induced by the Ran GTPase activating protein RANGAP1. May act in an intracellular signaling pathway which may control the progression through the cell cycle by regulating the transport of protein and nucleic acids across the nuclear membrane.

**Sequence similarities** Belongs to the RANBP1 family.  
Contains 1 RanBD1 domain.

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## Applications

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Our [Abpromise guarantee](#) covers the use of **ab258168** in the following tested applications.

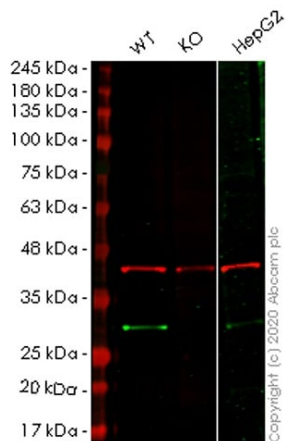
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use at an assay dependent concentration. Predicted molecular weight: 23 kDa.

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## Images

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Western blot - Human RANBP1 knockout HEK293T cell lysate (ab258168)

**Lane 1:** Wild-type HEK293T cell lysate (20 ug)

**Lane 2:** RANBP1 knockout HEK293T cell lysate (20 ug)

**Lane 3:** HepG2 cell lysate (20 ug)

**Lane 4:** HeLa cell lysate (20 ug)

[ab133550](#) was shown to specifically react with RanBP1 in wild-type HEK293T cells. Loss of signal was observed when knockout cell line [ab266202](#) (knockout cell lysate [ab258168](#)) was used. Wild-type and RanBP1 knockout samples were subjected to SDS-PAGE. [ab133550](#) and Anti-GAPDH antibody [6C5] - Loading Control ([ab8245](#)) were incubated at room temperature for 2.5 hours 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.

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Mut  GTTGGACTCGTCTGTATTCT*****Insertion*****CAGTGGAAAGTATCATGGTCC
WT   GTTGGACTCGTCTGTATTCT                               CAGTGGAAAGTATCATGGTCC
  
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Sanger Sequencing - Human RANBP1 knockout HEK293T cell lysate (ab258168)

Homozygous: Insertion of the selection cassette in exon 2

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

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