# abcam

### **Product datasheet**

## Human ACE2 knockout Hep G2 cell lysate ab275495

4 图**像** 

概述

产品名称	人ACE2 knockout Hep G2 cell裂解物	
产 <b>品概述</b>	Knockout cell lysate achieved by CRISPR/Cas9.	
Parental Cell Line	HepG2	
Organism	Human	
Mutation description	Knockout achieved by using CRISPR/Cas9, Homozygous: 71 bp deletion in exon 2	
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.	
说 <b>明</b>	<b>Lysate preparation:</b> Our lysates are made using RIPA buffer to which we add a protease inhibitor cocktail and phosphatase inhibitor cocktail (ratio: 300:100:10). <i>This means that the protein of interest is denatured.</i> If you require a native form of the protein please use the live cell version - found <b>here</b> . Please refer to our lysis protocol for further details on how our lysates are prepared.	
	<b>User storage instructions:</b> 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.	
	Abcam has not and does not intend to apply for the REACH Authorisation of customers' uses of products that contain European Authorisation list (Annex XIV) substances. It is the responsibility of our customers to check the necessity of application of REACH Authorisation, and any other relevant authorisations, for their intended uses.	
	This product is subject to limited use licenses from The Broad Institute and ERS Genomics Limited, and is developed with patented technology. For full details of the limited use licenses and relevant patents please refer to our <u>limited use license</u> and <u>patent pages</u> .	
经测试应 <b>用</b>	适用于: WB	

存 <b>放</b> 说明	Store at -80°C. Please refer to protocols.		
组 <b>件</b>		1 kit	
ab277297 - Human ACE2 knockout Hep G2 cell lysate		1 x 100µg	
ab277298 - Human wild-type Hep G2 cell lysate		1 x 100µg	
Cell type	epithelial		
Disease	Hepatocellular Carcinoma		
Gender	Male		
靶标			
功能	Carboxypeptidase which converts angiotensin I to angiotensin 1-9, a peptide of unknown function, and angiotensin II to angiotensin 1-7, a vasodilator. Also able to hydrolyze apelin-13 and dynorphin-13 with high efficiency. May be an important regulator of heart function. In case of human coronaviruses SARS and HCoV-NL63 infections, serve as functional receptor for the spike glycoprotein of both coronaviruses.		
组织 <b>特异性</b>	Expressed in endothelial cells from small and large arteries, and in arterial smooth muscle cells. Expressed in lung alveolar epithelial cells, enterocytes of the small intestine, Leydig cells and Sertoli cells (at protein level). Expressed in heart, kidney, testis, and gastrointestinal system.		
序列相似性	Belongs to the peptidase M2 family.		
<b>翻译后修</b> 饰	N-glycosylation on Asn-90 may limit SARS infectivity.		
细 <b>胞定位</b>	Secreted and Cell membrane.		

#### 应用

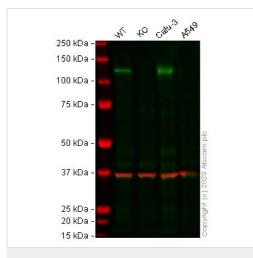
1生 肥

The Abpromise guarantee Abpromise ™承诺保证使用ab275495于以下的经测试应用

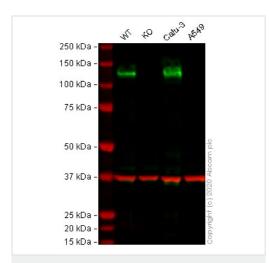
"应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB		Use at an assay dependent concentration. Predicted molecular weight: 92 kDa.

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Western blot - Human ACE2 knockout HepG2 cell Iysate (ab275495)

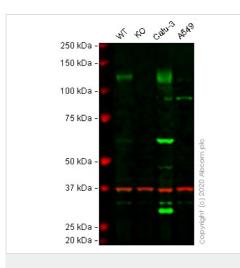


Western blot - Human ACE2 knockout HepG2 cell lysate (ab275495)

Lane 1: Wild-type HepG2 cell lysate 30 ug Lane 2: ACE2 knockout HepG2 cell lysate 30 ug Lane 3: Calu-3 cell lysate 30 ug Lane 4: A549 cell lysate 30 ug Lanes 1 - 4: Merged signal (red and green). Green - ab108252 observed at 130 kDa. Red - loading control ab8245 (Mouse anti-GAPDH antibody [6C5]) observed at 37kDa. ab108252 was shown to react with ACE2 in wild-type HepG2 cells in western blot with loss of signal observed in ACE2 knockout cell line ab273733 (knockout cell lysate ab275495). Wild-type and ACE2 knockout HepG2 cell lysates were subjected to SDS-PAGE. Membranes were blocked in 3% milk in TBS-T (0.1% Tween<sup>®</sup>) before incubation with ab108252 and ab8245 (Mouse anti-GAPDH antibody [6C5]) overnight at 4°C at a 1 in 1000 dilution and a 1 in 20000 dilution respectively. Blots were incubated with Goat anti-Rabbit IgG H&L (IRDye<sup>®</sup> 800CW) preabsorbed (ab216773) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed (ab216776) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.

Lane 1: Wild-type HepG2 cell lysate 30 ug Lane 2: ACE2 knockout HepG2 cell lysate 30 ug Lane 3: Calu-3 cell lysate 30 ug Lane 4: A549 cell lysate 30 ug Lanes 1 - 4: Merged signal (red and green). Green - ab108209 observed at 130 kDa. Red - loading control ab8245 (Mouse anti-GAPDH antibody [6C5]) observed at 37kDa. ab108209 was shown to react with ACE2 in wild-type HepG2 cells in western blot with loss of signal observed in ACE2 knockout cell line ab273733 (knockout cell lysate ab275495). Wild-type and ACE2 knockout HepG2 cell lysates were subjected to SDS-PAGE. Membranes were blocked in 3% milk in TBS-T (0.1% Tween<sup>®</sup>) before incubation with ab108209 and ab8245 (Mouse anti-GAPDH antibody [6C5]) overnight at 4°C at a 1 in 1000 dilution and a 1 in 20000 dilution respectively. Blots were incubated with Goat anti-Rabbit lgG H&L (IRDye<sup>®</sup> 800CW) preabsorbed (ab216773) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed (ab216776) secondary antibodies at 1 in 20000 dilution for 1 hour

at room temperature before imaging.



Western blot - Human ACE2 knockout HepG2 cell lysate (ab275495)

Lane 1: Wild-type HepG2 cell lysate 30 ug Lane 2: ACE2 knockout HepG2 cell lysate 30 ug Lane 3: Calu-3 cell lysate 30 ug Lane 4: A549 cell lysate 30 ug Lanes 1 - 4: Merged signal (red and green). Green - ab65863 observed at 130 kDa. Red - loading control ab8245 (Mouse anti-GAPDH antibody [6C5]) observed at 37kDa. ab65863 was shown to react with ACE2 in wild-type HepG2 cells in western blot with loss of signal observed in ACE2 knockout cell line ab273733 (knockout cell lysate ab275495). Wild-type and ACE2 knockout HepG2 cell lysates were subjected to SDS-PAGE. Membranes were blocked in fluorescent western blot (TBS-based) blocking solution before incubation with ab65863 and ab8245 (Mouse anti-GAPDH antibody [6C5]) overnight at 4 °C at 1 ug/ml and a 1 in 20000 dilution respectively. Blots were incubated with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed (ab216773) and Goat anti-Mouse IgG H&L (IRDye<sup>®</sup> 680RD) preabsorbed (ab216776) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.

Allele 1:71 bp deletion in exon 2.

WT	TCATTTCAGAATAATGCTGGGGACAAATGGTCTGCCTTTTTAAAGGAACA
КО	TCATTTCAGAATAATG
WT	GTCCACACTTGCCCAAATGTATCCACTACAAGAAATTCAGAATCTCACAGTCA
КО	

Sanger Sequencing - Human ACE2 knockout HepG2 cell line

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