

Product datasheet

Human CD47 knockout HEK-293T cell lysate ab257220

3 Images

Overview

Product name	Human CD47 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, 11 bp deletion in exon 2 and 5 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.*

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
ab260176 - Human CD47 knockout HEK293T cell lysate	1 x 100µg
ab255553 - Human wild-type HEK293T cell lysate	1 x 100µg

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

Function Has a role in both cell adhesion by acting as an adhesion receptor for THBS1 on platelets, and in the modulation of integrins. Plays an important role in memory formation and synaptic plasticity in the hippocampus (By similarity). Receptor for SIRPA, binding to which prevents maturation of immature dendritic cells and inhibits cytokine production by mature dendritic cells. Interaction with SIRPG mediates cell-cell adhesion, enhances superantigen-dependent T-cell-mediated proliferation and costimulates T-cell activation. May play a role in membrane transport and/or integrin dependent signal transduction. May prevent premature elimination of red blood cells. May be involved in membrane permeability changes induced following virus infection.

Tissue specificity Very broadly distributed on normal adult tissues, as well as ovarian tumors, being especially abundant in some epithelia and the brain.

Sequence similarities Contains 1 Ig-like V-type (immunoglobulin-like) domain.

Cellular localization Cell membrane.

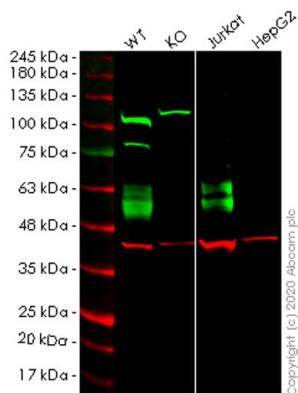
Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab257220 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: 35 kDa.

Images



Western blot - Human CD47 knockout HEK293T cell lysate (ab257220)

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

Lane 2: CD47 knockout HEK293T cell lysate (20 ug)

Lane 3: Jurkat cell lysate (20 ug)

Lane 4: HepG2 cell lysate (20 ug)

Lanes 1-4: Merged signal (red and green). Green - **ab218810** observed at 47-52 kDa. Red - loading control **ab8245** observed at 36 kDa.

ab218810 Anti-CD47 antibody [EPR21794] was shown to specifically react with CD47 in wild-type HEK293T cells. Loss of signal was observed when knockout cell line **ab266324** (knockout cell lysate ab257220) was used. Wild-type and CD47 knockout samples were subjected to SDS-PAGE. **ab218810** and Anti-GAPDH antibody [6C5] - Loading Control (**ab8245**) were incubated overnight at 4°C at 1 in 500 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  GAGGCACAAAACACTACTGAAGT-----GGAAATTTAAAGGAAGAGATTTTAC
      |||
WT   GAGGCACAAAACACTACTGAAGTATACGTAAGTGGAAATTTAAAGGAAGAGATTTTAC

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Sanger Sequencing - Human CD47 knockout HEK293T cell lysate (ab257220)

Allele-1: 11 bp deletion in exon 2

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Mut  GAGGCACAAAACACTACTGAAGT-----TAAAGTGGAAATTTAAAGGAAGAGATTTTAC
      |||
WT   GAGGCACAAAACACTACTGAAGTATACGTAAGTGGAAATTTAAAGGAAGAGATTTTAC

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Sanger Sequencing - Human CD47 knockout HEK293T cell lysate (ab257220)

Allele-2: 5 bp deletion in exon 2

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