

Product datasheet

Anti-ketohexokinase antibody [EPR15847] α b197593

KO VALIDATED Recombinant RabMAb[®]

1 References 7 Images

Overview

Product name	Anti-ketohexokinase antibody [EPR15847]
Description	Rabbit monoclonal [EPR15847] to ketohexokinase
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P, ICC/IF, IP
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide within Human ketohexokinase aa 1-100. The exact sequence is proprietary. Database link: P50053
Positive control	WB: HEK293T cell lysate; Human fetal kidney and fetal liver lysates; Mouse kidney, mouse liver, rat kidney and rat liver lysates. IHC-P: Human liver tissue. ICC/IF: HepG2 cells. IP: Human fetal kidney lysate.
General notes	

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

For more information [see here](#).

Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to [RabMAb[®] patents](#).

Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.

Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.

We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise[™] guarantee.

In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.

We are also updating the applications & species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, as well as customer reviews and Q&As.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol, 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR15847
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab197593** in the following tested applications.

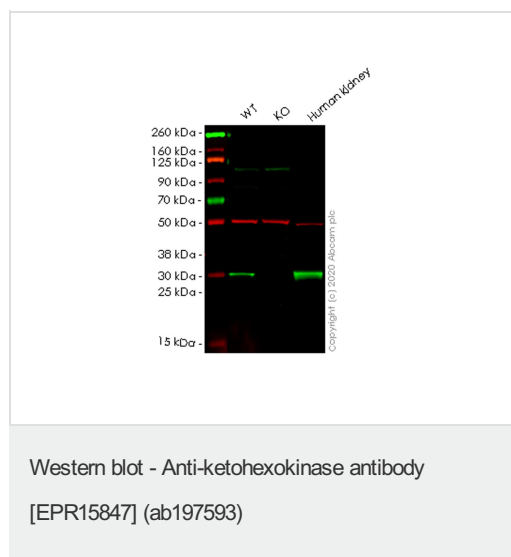
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/2500. Detects a band of approximately 33 kDa (predicted molecular weight: 33 kDa).
IHC-P		1/500. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC/IF		1/1000.
IP		1/100.

Target

Tissue specificity	Most abundant in liver, kidney, gut, spleen and pancreas. Low levels also found in adrenal, muscle, brain and eye.
Pathway	Carbohydrate metabolism; fructose metabolism.
Involvement in disease	Defects in KHK are the cause of fructosuria (FRUCT) [MIM:229800]. Fructosuria is a benign defect of intermediary metabolism.

Images



All lanes : Anti-ketohexokinase antibody [EPR15847] (ab197593) at 1/1000 dilution

Lane 1 : Wild-type HEK293T cell lysate

Lane 2 : KHK knockout HEK293T cell lysate

Lane 3 : Human kidney tissue lysate

Lysates/proteins at 20 µg per lane.

Secondary

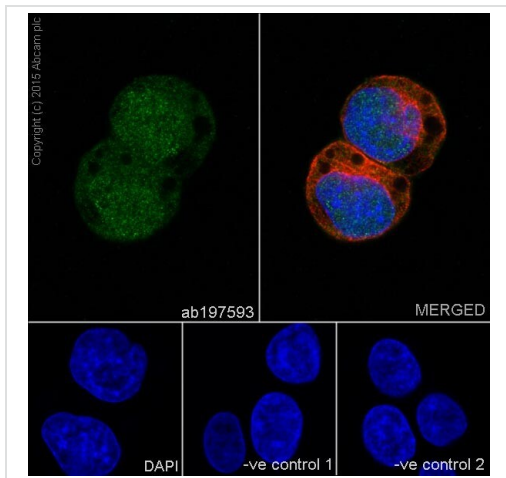
All lanes : Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (ab216773) at 1/10000 dilution

Predicted band size: 33 kDa

Observed band size: 33 kDa

Lanes 1-3: Merged signal (red and green). Green - ab197593 observed at 33 kDa. Red - loading control ab7291 observed at 50 kDa.

ab197593 Anti-ketohexokinase antibody [EPR15847] was shown to specifically react with ketohexokinase in wild-type HEK293T cells. Loss of signal was observed when knockout cell line ab267292 (knockout cell lysate ab258017) was used. Wild-type and ketohexokinase knockout samples were subjected to SDS-PAGE. ab197593 and Anti-alpha Tubulin antibody [DM1A] - Loading Control (ab7291) 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.



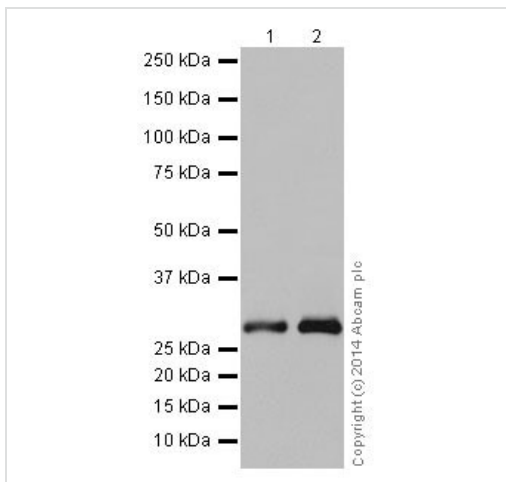
Immunocytochemistry/ Immunofluorescence - Anti-ketohexokinase antibody [EPR15847] (ab197593)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HepG2 (Human liver hepatocellular carcinoma) cells labeling ketohexokinase with ab197593 at 1/1000 dilution, followed by Goat anti-rabbit IgG (Alexa Fluor® 488) (ab150077) secondary antibody at 1/500 dilution (green). Cytoplasm and nuclear staining on HepG2 cell line is observed. The nuclear counter stain is DAPI (blue). Tubulin is detected with ab7291 (anti-Tubulin mouse mAb) at 1/1000 dilution and ab150120 (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500 dilution (red).

The negative controls are as follows:

-ve control 1: ab197593 at 1/1000 dilution followed by ab150120 (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500 dilution.

-ve control 2: ab7291 (anti-Tubulin mouse mAb) at 1/1000 dilution followed by ab150077 (Alexa Fluor®488 Goat Anti-Rabbit IgG H&L) at 1/500 dilution.



Western blot - Anti-ketohexokinase antibody [EPR15847] (ab197593)

All lanes : Anti-ketohexokinase antibody [EPR15847] (ab197593) at 1/5000 dilution

Lane 1 : Human fetal kidney lysate

Lane 2 : Human fetal liver lysate

Lysates/proteins at 20 µg per lane.

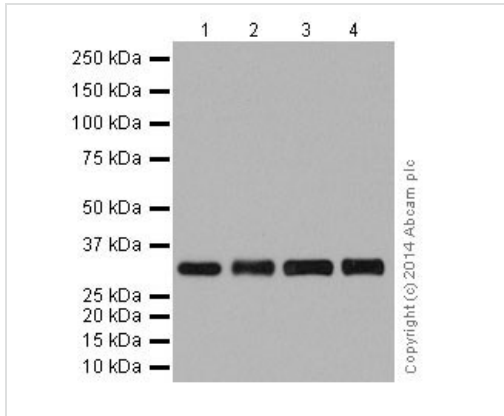
Secondary

All lanes : Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 33 kDa

Observed band size: 33 kDa

Blocking/Dilution buffer: 5% NFDm/TBST.



Western blot - Anti-ketohexokinase antibody [EPR15847] (ab197593)

All lanes : Anti-ketohexokinase antibody [EPR15847] (ab197593) at 1/2500 dilution

Lane 1 : Mouse kidney lysate

Lane 2 : Mouse liver lysate

Lane 3 : Rat kidney lysate

Lane 4 : Rat liver lysate

Lysates/proteins at 10 µg per lane.

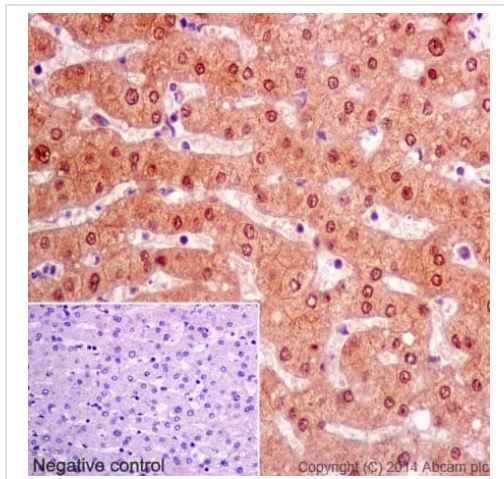
Secondary

All lanes : Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 33 kDa

Observed band size: 33 kDa

Blocking/Dilution buffer: 5% NFDm/TBST.

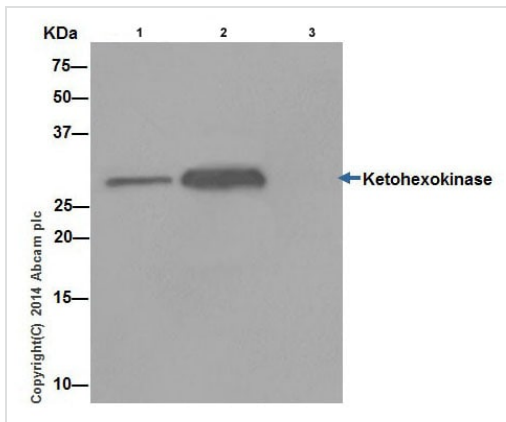


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ketohexokinase antibody [EPR15847] (ab197593)

Immunohistochemical analysis of paraffin-embedded Human liver tissue labeling ketohexokinase with ab197593 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) secondary antibody at 1/500 dilution. Cytoplasm and nuclear staining on Human liver tissues is observed. Counter stained with Hematoxylin.

Negative control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.







Immunoprecipitation - Anti-ketohehexokinase antibody [EPR15847] (ab197593)

Ketohehexokinase was immunoprecipitated from Human fetal kidney lysate with ab197593 at 1/100 dilution. Western blot was performed from the immunoprecipitate using ab197593 at 1/2000 dilution. Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG, was used as secondary antibody at 1/1500 dilution.

Lane 1: Human fetal kidney lysate 10 µg (Input). Lane 2: ab197593 IP in Human fetal kidney lysate. Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab197593 in Human fetal kidney lysate.

Blocking and dilution buffer and concentration: 5% NFDm/TBST.

Why choose a recombinant antibody?

 Research with confidence Consistent and reproducible results	 Long-term and scalable supply Recombinant technology
 Success from the first experiment Confirmed specificity	 Ethical standards compliant Animal-free production

Anti-ketohehexokinase antibody [EPR15847] (ab197593)

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

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