abcam

Product datasheet

Anti-Liver Arginase antibody [EPR6672(B)] ab133543

敲除验证 重组 RabMAb

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概述

产品名称	Anti-Liver Arginase**抗体**[EPR6672(B)]
描述	**兔单克隆抗体**[EPR6672(B)] to Liver Arginase
宿主	Rabbit
经测试应用	**适用于:** WB, IHC-P, IP **不适用于:** Flow Cyt
种属反应性	**与反应:** Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers. (Peptide available as **ab217538**)
阳性对照	WB: Human fetal liver and fetal lung lysates. IHC-P: Human hepatocellular carcinoma tissue.
常规说明	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**.

性能

形式	Liquid
存放说明	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.
存储溶液	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
纯度	Protein A purified
克隆	单克隆
克隆编号	EPR6672(B)

同种型 IgG

应用

The Abpromise guarantee Abpromise™承诺保证使用ab133543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		1/1000 - 1/10000. Detects a band of approximately 35 kDa (predicted molecular weight: 35 kDa).Can be blocked with **Liver Arginase peptide (ab217538)**.
IHC-P	★★★★★ **(2)**	1/250 - 1/500. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
IP		1/10 - 1/100.

应用说明 Is unsuitable for Flow Cyt.

靶标

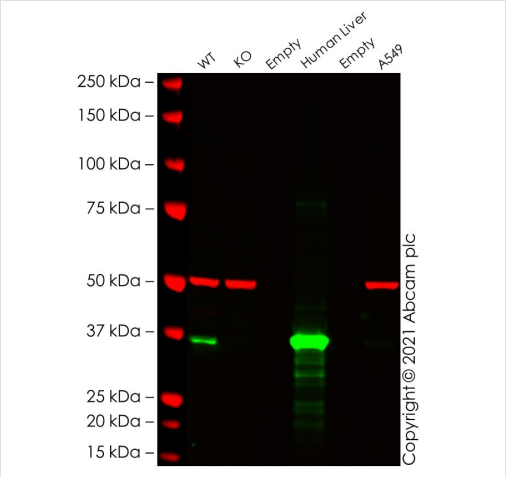
通路 Nitrogen metabolism; urea cycle; L-ornithine and urea from L-arginine: step 1/1.

疾病相关 Defects in ARG1 are the cause of argininemia (ARGIN) [MIM:207800]; also known as hyperargininemia. Argininemia is a rare autosomal recessive disorder of the urea cycle. Arginine is elevated in the blood and cerebrospinal fluid, and periodic hyperammonemia occurs. Clinical manifestations include developmental delay, seizures, mental retardation, hypotonia, ataxia, progressive spastic quadriplegia.

序列相似性 Belongs to the arginase family.

细胞定位 Cytoplasm.

图片



Western blot - Anti-Liver Arginase antibody [EPR6672(B)] (ab133543)

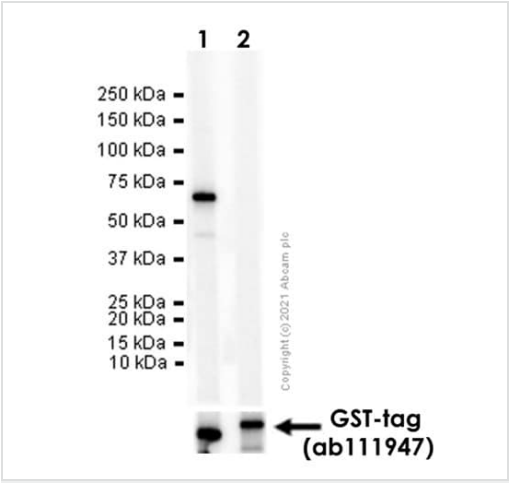
All lanes : Anti-Liver Arginase antibody [EPR6672(B)] (ab133543) at 1/1000 dilution

Lane 1 : Wild-type HepG2 cell lysate at 20 µg
Lane 2 : arg1 knockout HepG2 cell lysate at 20 µg
Lanes 3 & 5 : Empty at 0 µg
Lane 4 : Human Liver cell lysate at 5 µg
Lane 6 : A549 cell lysate at 20 µg

Performed under reducing conditions.

Predicted band size: 35 kDa
Observed band size: 36 kDa

False colour image of Western blot: Anti-Liver Arginase antibody [EPR6672(B)] staining at 1/1000 dilution, shown in green; Mouse anti-Alpha Tubulin [DM1A] (**ab7291**) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab133543 was shown to bind specifically to Liver Arginase. A band was observed at 36 kDa in wild-type HepG2 cell lysates with no signal observed at this size in arg1 knockout cell line **ab281603** (knockout cell lysate **ab282955**). To generate this image, wild-type and arg1 knockout HepG2 cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 5 % milk in TBS-0.1 % Tween® 20 (TBS-T) before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed (**ab216776**) at 1/20000 dilution.



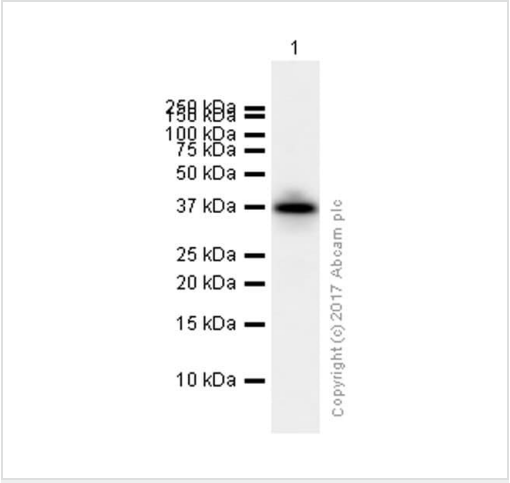
Western blot - Anti-Liver Arginase antibody [EPR6672(B)] (ab133543)

All lanes : Anti-Liver Arginase antibody [EPR6672(B)] (ab133543) at 1/1000 dilution

Lane 1 : GST tagged Recombinant Human ARG1 protein (full-length, aa 1 to 322) (61 KDa)
Lane 2 : GST tagged Recombinant Human ARG2 protein (full-length, aa 1 to 354) (65 KDa)

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution (Goat Anti-Rabbit IgG,(H+L), Peroxidase conjugated)

Predicted band size: 35 kDa
Observed band size: 61 kDa



Western blot - Anti-Liver Arginase antibody [EPR6672(B)] (ab133543)

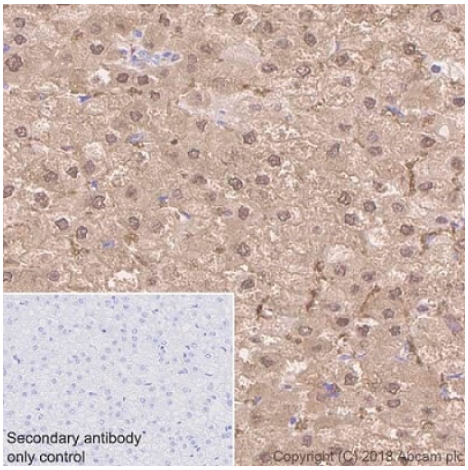
Anti-Liver Arginase antibody [EPR6672(B)] (ab133543) at 1/2000 dilution + Human liver lysates at 15 µg

Secondary
Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

Predicted band size: 35 kDa

Exposure time: 5 seconds

Blocking and diluting buffer: 5% NFDM/TBST.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Liver Arginase antibody [EPR6672(B)] (ab133543)

ab133543 staining liver arginase in paraffin embedded human hepatocellular cancer tissue sections by Immunohistochemistry.

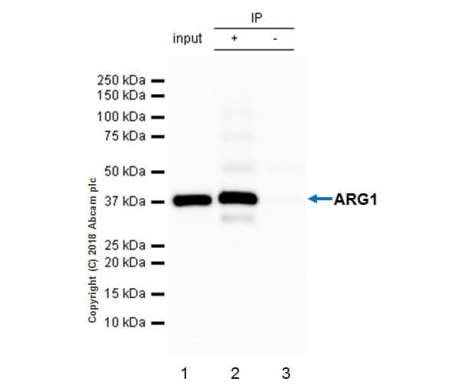
Heat mediated antigen retrieval was performed using **ab93684** (Tris/EDTA buffer, pH 9.0).

Samples were incubated with primary antibody at 1:2000 dilution (0.13 µg/ml).

A ready to use Goat anti-rabbit IgG H&L (HRP) was used as the secondary antibody.

Hematoxylin was used as a counterstain.

Cytoplasmic and nuclear staining on human hepatocellular cancer.

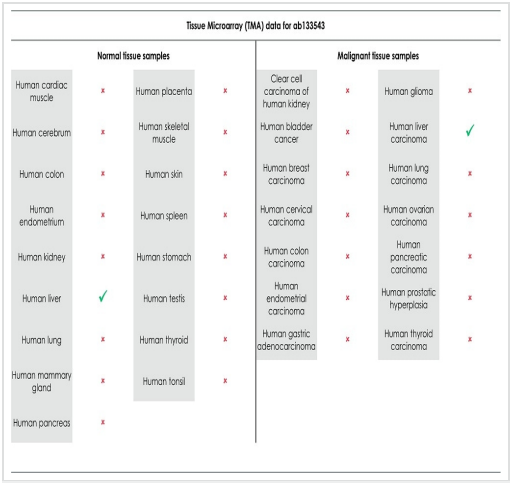


Immunoprecipitation - Anti-Liver Arginase antibody [EPR6672(B)] (ab133543)

Lane 1 (input): Human fetal liver whole cell lysate, 10µg
Lane 2: Human fetal liver whole cell lysate
Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of ab133543 in Human fetal liver whole cell lysate

Ab133543 immunoprecipitating liver arginase in Human fetal liver whole cell lysates. Primary antibody was used at a 1:1000 dilution (0.27 µg/ml). For western blotting, VeriBlot for IP Detection Reagent (HRP) (**ab131366**) was used for detection at 1:5000 dilution. Capture antibody was used at 1:20 dilution (1.3µg in 0.35mg lysates).

Blocking and diluting buffer used: 5% NFDM/TBST.



Tissue Microarray (TMA) data for ab133543

Normal tissue samples				Malignant tissue samples			
Human cardiac muscle	x	Human placenta	x	Clear cell carcinoma of human kidney	x	Human glioma	x
Human cerebrum	x	Human skeletal muscle	x	Human bladder cancer	x	Human liver carcinoma	✓
Human colon	x	Human skin	x	Human breast carcinoma	x	Human lung carcinoma	x
Human endometrium	x	Human spleen	x	Human cervical carcinoma	x	Human ovarian carcinoma	x
Human kidney	x	Human stomach	x	Human colon carcinoma	x	Human pancreatic carcinoma	x
Human liver	✓	Human testis	x	Human endometrial carcinoma	x	Human prostatic hyperplasia	x
Human lung	x	Human thyroid	x	Human gastric adenocarcinoma	x	Human thyroid carcinoma	x
Human mammary gland	x	Human tonsil	x				
Human pancreas	x						

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Liver Arginase antibody [EPR6672(B)] (ab133543)

Tissue Microarrays stained for "Anti-Liver Arginase antibody [EPR6672(B)]" using "ab133543" in immunohistochemical analysis. This table provides a detailed overview of positive (tick mark) and negative (cross mark) staining per sample type tested. The sections were pre-treated using Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0) for 20 minutes. The sections were incubated with ab133543 for 30 mins at room temperature followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). The immunostaining was performed on a Leica Biosystems BOND® RX instrument.

Anti-Liver Arginase antibody [EPR6672(B)] (ab133543)

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