

Anti-IGF2BP1/IMP1 antibody ab100999

★☆☆☆☆ [1 Abreviews](#) [1 References](#) [3 图像](#)

概述

产品名称	Anti-IGF2BP1/IMP1抗体
描述	兔多克隆抗体to IGF2BP1/IMP1
宿主	Rabbit
经测试应用	适用于: IHC-P, ICC/IF, WB
种属反应性	与反应: Human 预测可用于: Mouse, Rat, Cow, Dog 
免疫原	Synthetic peptide corresponding to Human IGF2BP1/IMP1 aa 1-100 conjugated to keyhole limpet haemocyanin. Database link: Q9NZI8 (Peptide available as ab113307)
阳性对照	This antibody gave a positive signal in the following tissue lysates: Human fetal heart; human fetal lung; Human fetal testis; Human fetal liver; Human fetal kidney. This antibody gave a positive result in IHC in the following FFPE tissue: Human lung adenocarcinoma.
常规说明	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>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, along with publications, customer reviews and Q&As</p>

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 or -80°C. Avoid freeze / thaw cycle.
存储溶液	pH: 7.40 Preservative: 0.02% Sodium azide Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our

scientific support team who will be happy to help.

纯度	Immunogen affinity purified
克隆	多克隆
同种型	IgG

应用

The Abpromise guarantee **Abpromise™**承诺保证使用ab100999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
IHC-P		Use a concentration of 5 µg/ml.
ICC/IF		Use a concentration of 5 µg/ml.
WB	★☆☆☆☆ (1)	Use a concentration of 1 µg/ml. Detects a band of approximately 70 kDa (predicted molecular weight: 64 kDa).

靶标

功能

RNA-binding factor that affects mRNA nuclear export, localization, stability and translation. Component of the CRD-mediated complex that promotes MYC mRNA stabilization. Regulates mRNA stability during the integrated cellular stress response (ISR) in stress granules (SGs). Stabilizes the BTRC/FBW1A mRNA from degradation by disrupting miRNA-dependent interaction with AGO2. Identified in a HCV IRES-mediated translation complex, that enhances translation at the Hepatitis C virus (HCV) RNA-replicon via the internal ribosome entry site (IRES), but does not affect 5'cap-dependent translation. Acts as a HIV-1 retrovirus restriction factor that reduces HIV-1 assembly by inhibiting viral RNA packaging, assembly and processing of HIV-1 GAG protein on cellular membranes. Binds to mRNAs in stress granules (SGs). Binds to the stem-loop IV of the 5'-UTR and to the variable region and the poly(U-C) motif of the 3'-UTR of the HCV RNA-replicon. Binds to the 5'-UTR of the insulin-like growth factor 2 (IGF2) mRNA and regulates its subcellular localization and translation. Binds both to the coding region mRNA stability determinant (CRD) and to AU-rich sequences in the 3'-UTR of the MYC and CD44 mRNAs and stabilizes these mRNAs. Binds to the fourth and fifth exons of the oncofetal H19 and neuron-specific TAU mRNAs and regulates their localizations. Binds to the adenine-rich autoregulatory sequence (ARS) 5'-UTR of the PABPC1 mRNA and is involved in its translational repression. The RNA-binding activity to ARS is stimulated by PABPC1. Binds to the coding sequence region of BTRC/FBW1A mRNA and mediates stabilization of BTRC/FBW1A and MYC mRNAs in response to beta-catenin signaling. Binding to RNA employs a cooperative, sequential mechanism of homo- or heterodimerisation. Also involved in growth or survival of lung-cancer cells. Protects the MYC and MDR-1 mRNAs from cleavage by an endoribonuclease, thus prolonging their stabilities (By similarity). Binds to the 3'-UTR axonal localization signal (ALS) of TAU mRNA (By similarity). Binds to a conserved 54-nucleotide element in the 3'-UTR of the beta actin mRNA known as the 'zipcode' (By similarity). Promotes translocation of the beta-actin mRNA to dendrites (By similarity). May act as a regulator of mRNA transport to activated synapses in response to synaptic activity.

组织特异性

Expressed in fetal liver, fetal lung, fetal kidney, fetal thymus, fetal placenta, fetal follicles of ovary,

gonocytes of testis, oocytes, spermatogonia and semen (at protein level). Expressed in testicular and lung cancer (at protein level). Expressed in kidney, prostate, trachea, testis and lung cancer.

序列相似性

Belongs to the RRM IMP/VICKZ family.

Contains 4 KH domains.

Contains 2 RRM (RNA recognition motif) domains.

结构域

The third and fourth KH domains encompass the protein dimerization motif and are necessary and sufficient for RNA binding. The four KH domains are important for granule formation and SGs targeting. Contains two nuclear export signals, situated within the second and fourth KH domains. The four KH domains are important to suppress HIV-1 infectivity.

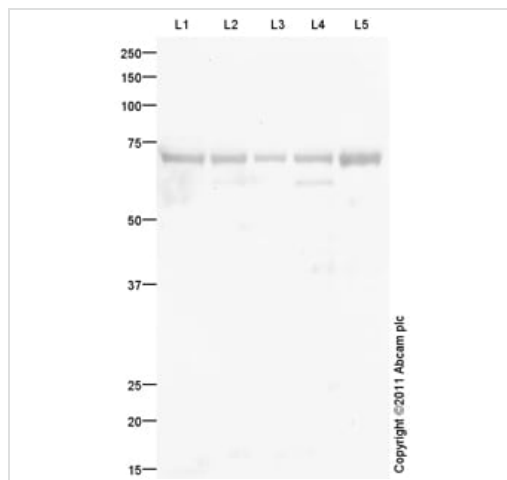
翻译后修饰

Phosphorylated. Phosphorylation may influence mRNA translation.

细胞定位

Nucleus. Cytoplasm. Cell projection > lamellipodium. Cell projection > dendrite. Cell projection > dendritic spine. Localized in cytoplasmic mRNP granules containing untranslated mRNAs. Targeted to stress granules (SGs), but not processing bodies (PBs), during cellular stress. Colocalizes with G3BP1 and TIAL1 in SGs. Colocalizes with HIV-1 GAG at the cell edges. Found in lamellipodia of the leading edge, in the perinuclear region, and beneath the plasma membrane. The subcytoplasmic localization is cell specific and regulated by cell contact and growth. Colocalized with H19 RNA at lamellipodia. Colocalized with CD44 mRNA in RNP granules. Nuclear export is mediated by XPO1/CRM1. In motile cells, is transported towards the leading edge into the cortical region of the lamellipodia where it is connected to microfilaments (By similarity). Present in the form of granules and into F-actin-rich protrusion of dendrites, spines and subsynaptic sites (By similarity). Colocalizes with beta-actin mRNA in dendrites and spines (By similarity). Exhibited rapid, bidirectional movements in dendrites and spines (By similarity). Neuronal depolarization by KCl induces its rapid efflux from the cell body into dendrites.

图片



Western blot - Anti-IGF2BP1/IMP1 antibody (ab100999)

All lanes : Anti-IGF2BP1/IMP1 antibody (ab100999) at 1 µg/ml

Lane 1 : Heart (Human) Tissue Lysate - fetal normal tissue

Lane 2 : Lung (Human) Whole Cell Lysate - fetal normal tissue
([ab30282](#))

Lane 3 : Testis (Human) Tissue Lysate - fetal normal tissue

Lane 4 : Liver (Human) Tissue Lysate - fetal normal tissue

Lane 5 : Kidney (Human) Tissue Lysate - fetal normal tissue
([ab30204](#))

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) preadsorbed
([ab97080](#)) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

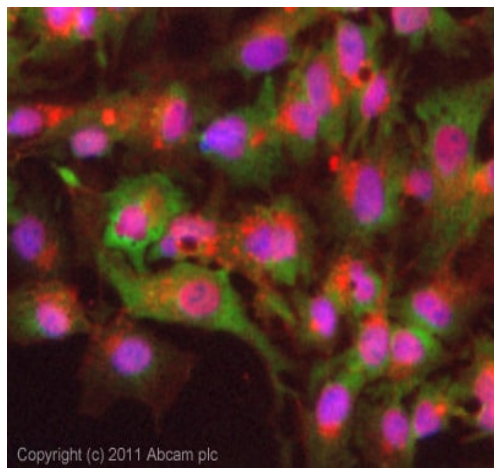
Predicted band size: 64 kDa

Observed band size: 70 kDa

Additional bands at: 60 kDa. We are unsure as to the identity of these extra bands.

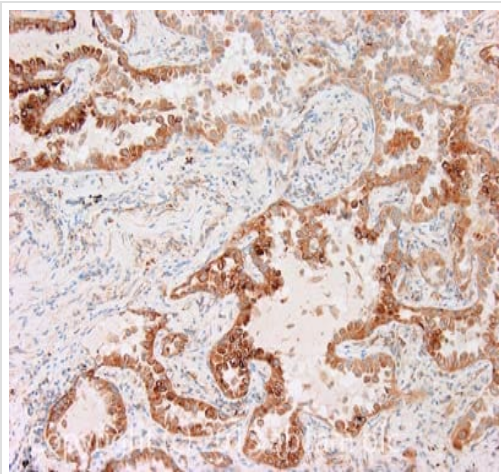
Exposure time: 4 minutes

The predicted molecular weight of IGF2BP1/IMP1 is 63 kDa (SwissProt), however we expect to observe a banding pattern at 70 kDa. Abcam welcomes customer feedback and would appreciate any comments regarding this product and the data presented above.



Immunocytochemistry/ Immunofluorescence - Anti-IGF2BP1/IMP1 antibody (ab100999)

ICC/IF image of ab100999 stained HepG2 cells. The cells were 4% PFA fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab100999, 5µg/ml) overnight at +4°C. The secondary antibody (green) was [ab96899](#), DyLight® 488 goat anti-rabbit IgG (H+L) used at a 1/250 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM. This antibody also gave a positive result in 4% PFA fixed (10 min) mcf7 cells at 5µg/ml, and in 100% methanol fixed (5 min) HepG2 and MCF7 cells at 5µg/ml.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-IGF2BP1/IMP1 antibody (ab100999)

IHC image of IGF2BP1/IMP1 staining in Human lung adenocarcinoma formalin fixed paraffin embedded tissue section, performed on a Leica Bond™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab100999, 5µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

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