Datasheet for ABIN7156356

anti-IGF2BP1 antibody (AA 440-534)

2 Images

Go to Product page

Overview

Quantity:	100 µg
Target:	IGF2BP1
Binding Specificity:	AA 440-534
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This IGF2BP1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), ELISA

Product Details

Immunogen:	Recombinant Human Insulin-like growth factor 2 mRNA-binding protein 1 protein (440-534AA)
Isotype:	IgG
Cross-Reactivity:	Human
Purification:	>95%, Protein G purified

Target Details

Target:	IGF2BP1
Alternative Name:	IGF2BP1 (IGF2BP1 Products)
Background:	Background: RNA-binding factor that recruits target transcripts to cytoplasmic protein-RNA complexes (mRNPs). This transcript \\\'caging\\\' into mRNPs allows mRNA transport and

transient storage. It also modulates the rate and location at which target transcripts encounter the translational apparatus and shields them from endonuclease attacks or microRNA-mediated degradation. Plays a direct role in the transport and translation of transcripts required for axonal regeneration in adult sensory neurons (By similarity). Regulates localized beta-actin/ACTB mRNA translation, a crucial process for cell polarity, cell migration and neurite outgrowth. Co-transcriptionally associates with the ACTB mRNA in the nucleus. This binding involves a conserved 54-nucleotide element in the ACTB mRNA 3\\\'-UTR, known as the \\\'zipcode\\\'. The RNP thus formed is exported to the cytoplasm, binds to a motor protein and is transported along the cytoskeleton to the cell periphery. During transport, prevents ACTB mRNA from being translated into protein. When the RNP complex reaches its destination near the plasma membrane, IGF2BP1 is phosphorylated. This releases the mRNA, allowing ribosomal 40S and 60S subunits to assemble and initiate ACTB protein synthesis. Monomeric ACTB then assembles into the subcortical actin cytoskeleton (By similarity). During neuronal development, key regulator of neurite outgrowth, growth cone guidance and neuronal cell migration, presumably through the spatiotemporal fine tuning of protein synthesis, such as that of ACTB (By similarity). May regulate mRNA transport to activated synapses (By similarity). Binds to and stabilizes ABCB1/MDR-1 mRNA (By similarity). During interstinal wound repair, interacts with and stabilizes PTGS2 transcript. PTGS2 mRNA stabilization may be crucial for colonic mucosal wound healing (By similarity). Binds to the 3\\\'-UTR of IGF2 mRNA by a mechanism of cooperative and sequential dimerization and regulates IGF2 mRNA subcellular localization and translation. Binds to MYC mRNA, in the coding region instability determinant (CRD) of the open reading frame (ORF), hence prevents MYC cleavage by endonucleases and possibly microRNA targeting to MYC-CRD. Binds to the 3\\\'-UTR of CD44 mRNA and stabilizes it, hence promotes cell adhesion and invadopodia formation in cancer cells. Binds to the oncofetal H19 transcript and to the neuron-specific TAU mRNA and regulates their localizations. Binds to and stabilizes BTRC/FBW1A mRNA. Binds to the adenine-rich autoregulatory sequence (ARS) located in PABPC1 mRNA and represses its translation. PABPC1 mRNA-binding is stimulated by PABPC1 protein. Prevents BTRC/FBW1A mRNA degradation by disrupting microRNA-dependent interaction with AGO2. Promotes the directed movement of tumor-derived cells by fine-tuning intracellular signaling networks. Binds to MAPK4 3\\\'-UTR and inhibits its translation. Interacts with PTEN transcript open reading frame (ORF) and prevents mRNA decay. This combined action on MAPK4 (down-regulation) and PTEN (up-regulation) antagonizes HSPB1 phosphorylation, consequently it prevents G-actin sequestration by phosphorylated HSPB1, allowing F-actin polymerization. Hence enhances the velocity of cell migration and stimulates directed cell migration by PTEN-modulated polarization. Interacts with Hepatitis C virus (HCV) 5\\\'-UTR and 3\\\'-UTR and specifically

Target Details

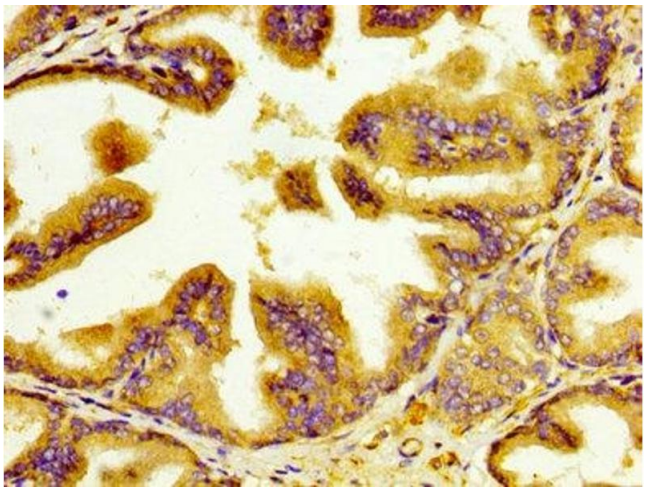
	enhances translation at the HCV IRES, but not 5\\\'-cap-dependent translation, possibly by recruiting eIF3. Interacts with HIV-1 GAG protein and blocks the formation of infectious HIV-1 particles. Reduces HIV-1 assembly by inhibiting viral RNA packaging, as well as assembly and processing of GAG protein on cellular membranes. During cellular stress, such as oxidative stress or heat shock, stabilizes target mRNAs that are recruited to stress granules, including CD44, IGF2, MAPK4, MYC, PTEN, RAPGEF2 and RPS6KA5 transcripts. Aliases: Coding region determinant-binding protein antibody, CRD BP antibody, CRD-BP antibody, CRDBP antibody, IF2B1 antibody, IF2B1_HUMAN antibody, IGF II mRNA binding protein 1 antibody, IGF-II mRNA-binding protein 1 antibody, IGF2 mRNA binding protein 1 antibody, IGF2 mRNA-binding protein 1 antibody, IGF2BP1 antibody, IMP 1 antibody, IMP-1 antibody, IMP1 antibody, Insulin like growth factor 2 mRNA binding protein 1 antibody, Insulin-like growth factor 2 mRNA-binding protein 1 antibody, VICKZ family member 1 antibody, VICKZ1 antibody, ZBP 1 antibody, ZBP-1 antibody, ZBP1 antibody, Zip code binding protein 1 antibody, Zip code-binding protein 1 antibody, Zipcode binding protein 1 antibody, Zipcode-binding protein 1 antibody
UniProt:	Q9NZI8

Application Details

Application Notes:	Recommended dilution: WB:1:500-1:5000, IHC:1:200-1:500,
Restrictions:	For Research Use only

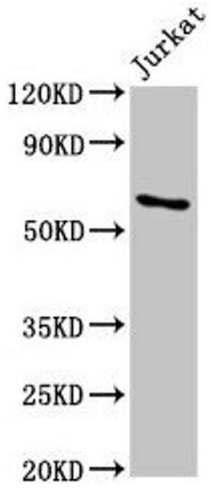
Handling

Format:	Liquid
Buffer:	Preservative: 0.03 % Proclin 300 Constituents: 50 % Glycerol, 0.01M PBS, pH 7.4
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C,-80 °C
Storage Comment:	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.



Immunohistochemistry

Image 1. IHC image of ABIN7156356 diluted at 1:400 and staining in paraffin-embedded human prostate tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.



Western Blotting

Image 2. Western Blot Positive WB detected in: Jurkat whole cell lysate All lanes: IGF2BP1 antibody at 5.5 µg/mL Secondary Goat polyclonal to rabbit IgG at 1/50000 dilution Predicted band size: 64, 49 kDa Observed band size: 64 kDa

