

Rabbit HEBP1 Polyclonal Antibody | anti-HEBP1 antibody

Anti-HEBP1 Antibody Picoband

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA126976	Rabbit	Human, Mouse, Rat	ELISA, Flow Cytometry, Functional Assay, Immunofluorescence, Immunocytochemistry, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

HEBP1; Polyclonal Antibody; Anti-HEBP1 Antibody Picoband; Serine/threonine-protein kinase AtPK1/AtPK6; 70 kDa ribosomal protein S6 kinase 1 antibody; KS6B1_HUMAN antibody; p70 alpha antibody; P70 beta 1 antibody; p70 ribosomal S6 kinase alpha antibody; p70 ribosomal S6 kinase beta 1 antibody; p70 S6 kinase alpha antibody; P70 S6 Kinase antibody; p70 S6 kinase alpha 1 antibody; p70 S6 kinase alpha 2 antibody; p70 S6K antibody; p70 S6K-alpha antibody; p70 S6KA antibody; p70(S6K) alpha antibody; p70(S6K)-alpha antibody; p70-alpha antibody; p70-S6K 1 antibody; p70-S6K antibody; P70S6K antibody; P70S6K1 antibody; p70S6Kb antibody; PS6K antibody; Ribosomal protein S6 kinase 70kDa polypeptide 1 antibody; Ribosomal protein S6 kinase beta 1 antibody; Ribosomal protein S6 kinase beta-1 antibody; Ribosomal protein S6 kinase I antibody; RPS6KB1 antibody; S6K antibody; S6K-beta-1 antibody; S6K1 antibody; Serine/threonine kinase 14 alpha antibody; Serine/threonine-protein kinase 14A antibody; STK14A antibody; anti-HEBP1 antibody

PRODUCT SPECIFICATIONS

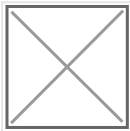
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	Expressed in all tissues.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
Applicable Applications for anti-HEBP1 antibody	ELISA, FCM/FACS (Flow Cytometry), IF (Immunofluorescence), ICC (Immunocytochemistry), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	E coli-derived human HEBP1 recombinant protein (Position: K40-R162). Human HEBP1 shares 87.1% amino acid (aa) sequence identity with mouse HEBP1.
Subcellular Localization	Cytoplasm, Nucleus
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500ug/ml.
Cross Reactivity	No cross reactivity with other proteins.
Protein Function	Downstream effector of TOR signaling pathway involved in osmotic stress response. Could be involved in the control of plant growth and development. Phosphorylates the ribosomal proteins P14, P16 and S6. Functions as a repressor of cell proliferation and required for maintenance of chromosome stability and ploidy levels through the RBR1-E2F pathway.
Preparation and Storage	At -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months.Avoid repeated freezing and thawing.



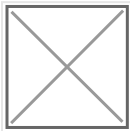
FCM/FACS (Flow Cytometry)
Figure 5. Flow Cytometry analysis of A549 cells using anti-HEBP1 antibody (AAA126976). Overlay histogram showing A549 cells stained with AAA126976 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-HEBP1 Antibody (AAA126976, 1ug/1x106 cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x106) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



IF (Immunofluorescence)
Figure 4. IF analysis of HEBP1 using anti-HEBP1 antibody (AAA126976). HEBP1 was detected in an immunocytochemical section of HELA cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5ug/mL rabbit anti-HEBP1 Antibody (AAA126976) overnight at 4 degree C. Cy3 Conjugated Goat Anti-Rabbit IgG (BA1032) was used as secondary antibody at 1:500 dilution and incubated for 30 minutes at 37 degree C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



IHC (Immunohistochemisry)
Figure 3. IHC analysis of HEBP1 using anti-HEBP1 antibody (AAA126976). HEBP1 was detected in a paraffin-embedded section of human liver cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-HEBP1 Antibody (AAA126976) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit with DAB as the chromogen.



IHC (Immunohiostchemistry)
Figure 2. IHC analysis of HEBP1 using anti-HEBP1 antibody (AAA126976). HEBP1 was detected in a paraffin-embedded section of human liver cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-HEBP1 Antibody (AAA126976) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit with DAB as the chromogen.



WB (Western Blot)
Figure 1. Western blot analysis of HEBP1 using anti-HEBP1 antibody (AAA126976). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel)/90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human A549 whole cell lysates, Lane 2: human SiHa whole cell lysates, Lane 3: human hepatocellular carcinoma tumor tissue (HCCT) lysates, Lane 4: human hepatocellular carcinoma paracancerous tissue (HCCP) lysates, Lane 5: rat liver tissue lysates, Lane 6: mouse liver tissue lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-HEBP1 antigen affinity purified polyclonal antibody (#AAA126976) at 0.5ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for HEBP1 at approximately 21 kDa. The expected band size for HEBP1 is at 21 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-HEBP1 antibody	The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Product Categories/Family for anti-HEBP1 antibody	Primary Antibodies; Signal Transduction; Signaling Pathway; Small G Proteins

References	<p>1. Blackmon, B. J., Dailey, T. A., Lianchun, X., Dailey, H. A. Characterization of a human and mouse tetrapyrrole-binding protein. Arch. Biochem. Biophys. 407: 196-201, 2002. 2. Devosse, T., Dutoit, R., Migeotte, I., De Nadai, P., Imbault, V., Communi, D., Salmon, I., Parmentier, M. Processing of HEBP1 by cathepsin D gives rise to F2L, the agonist of formyl peptide receptor 3. J. Immun. 187: 1475-1485, 2011. 3. Dias, J. S., Macedo, A. L., Ferreira, G. C., Peterson, F. C., Volkman, B. F., Goodfellow, B. J. The first structure from the SOUL/HBP family of heme-binding proteins, murine P22HBP. J. Biol. Chem. 281: 31553-31561, 2006. Note: Erratum: J. Biol. Chem. 281: 38966 only, 2006.</p>
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NCBI AND UNIPROT INFORMATION

NCBI GI #	20336761
NCBI GeneID	50865
NCBI Accession #	NP_057071.2
NCBI GenBank Nucleotide #	NM_015987.4
UniProt Accession #	Q9NRV9; Q9Y5Z5; A8K1G2
Molecular Weight	21,097 Da
NCBI Official Full Name	heme-binding protein 1
NCBI Official Synonym Full Names	heme binding protein 1
NCBI Official Symbol	HEBP1
NCBI Official Synonym Symbols	HBP; HEBP
NCBI Protein Information	heme-binding protein 1; p22HBP
UniProt Protein Name	Heme-binding protein 1
UniProt Gene Name	HEBP1
UniProt Synonym Gene Names	HBP
UniProt Entry Name	HEBP1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.