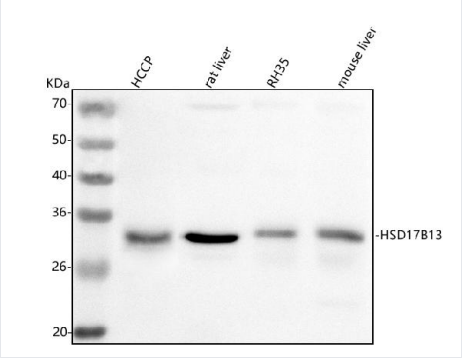
HSD17B13 Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

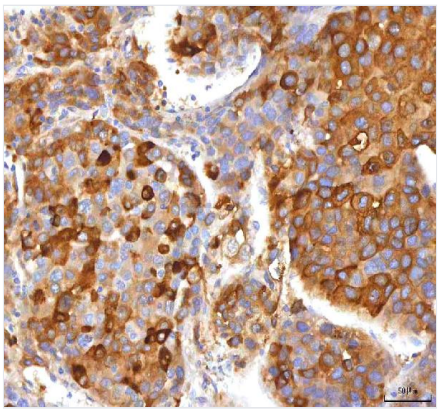
Product Name	HSD17B13, Polyclonal Antibody
Full Product Name	Anti-HSD17B13 Antibody Picoband
Product Gene Name	anti-HSD17B13 antibody
Product Synonym Names	Serine/threonine-protein kinase AtPK1/AtPK6; 70 kDa ribosomal protein S6 kinase 1 antibody, KS6B1_HUMAN antibody, p70 alpha antibody, P70 beta 1 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
Clonality	Polyclonal
Isotype	IgG
Host	Rabbit
Species Reactivity	Human, Mouse, Rat
Form/Format	Lyophilized. Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
Purity/Purification	Immunogen affinity purified.
Specificity	Expressed in all tissues.
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.
Molecular Weight	29,605 Da
OMIM	612127
3D Structure	ModBase 3D Structure for Q7Z5P4
Immunogen	E coli-derived human HSD17B13 recombinant protein (Position: R59-K300). Human HSD17B13 shares 82.6% and 80.6% amino acid (aa) sequence identity with mouse and rat HSD17B13, respectively.
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.
Product Categories/Family for anti-HSD17B13 antibody	Primary Antibodies; Signal Transduction; Signaling Pathway; Small G Proteins
ISO Certification	Manufactured in an ISO 13485:2003 and EN ISO 13485:2012 Certified Laboratory.
Applications Tested/Suitable for anti-HSD17B13 antibody	Western Blot (WB), Immunohistochemistry (IHC), Flow Cytometry (FC/FACS), ELISA (EIA)

Application Notes for anti-HSD17B13 antibody	WB: 0.25-0.5ug/ml, Human, Mouse, Rat IHC: 2-5ug/ml, Human FC/FACS (Fixed): 1-3ug/1x10^6 cells, Human ELISA: 0.1-0.5ug/ml
Related Product Information for anti-HSD17B13 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 References and Citations for anti-HSD17B13 antibody	1. Abul-Husn, N. S., Cheng, X., Li, A. H., Xin, Y., Schurmann, C., Stevis, P., Liu, Y., Kozlitina, J., Stender, S., Wood, G. C., Stepanchick, A. N., Still, M. D., and 36 others. A protein-truncating HSD17B13 variant and protection from chronic liver disease. New Eng. J. Med. 378: 1096-1106, 2018.2. Liu, S., Huang, C., Li, D., Ren, W., Zhang, H., Qi, M., Li, X., Yu, L. Molecular cloning and expression analysis of a new gene for short-chain dehydrogenase/reductase 9. Acta Biochim. Pol. 54: 213-218, 2007.3. Tang, S., Zhang, J., Mei, T. T., Zhang, W. Y., Zheng, S. J., Yu, H. B. Association of HSD17B13 rs72613567: TA allelic variant with liver disease: review and meta-analysis. BMC Gastroent. 21: 490, 2021.
Other Notes	Small volumes of anti-HSD17B13 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for HSD17B13 purchase	MBS1759291 is an antibody targeting HSD17B13. Also known as Anti-HSD17B13 Antibody Picoband. Reactive in Human, Mouse, Rat. Host: Rabbit.



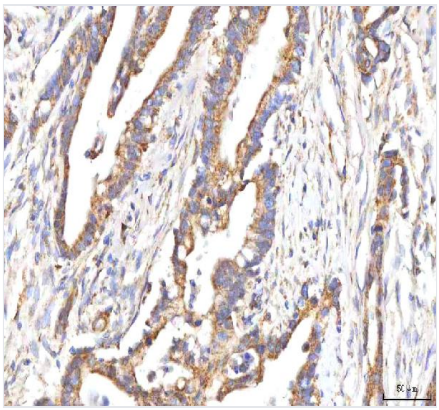
Western Blot (WB) of anti-HSD17B13 antibody

Figure 1. Western blot analysis of HSD17B13 using anti-HSD17B13 antibody (MBS1759291).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 hepatocellular carcinoma paracancerous tissue (HCCP) lysates,Lane 2: rat liver tissue lysates,Lane 3: rat RH-35 whole cell lysates,Lane 4: 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-HSD17B13 antigen affinity purified polyclonal antibody (#MBS1759291) 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 (#MBS176460) with Tanon 5200 system. A specific band was detected for HSD17B13 at approximately 34 kDa. The expected band size for HSD17B13 is at 34 kDa.

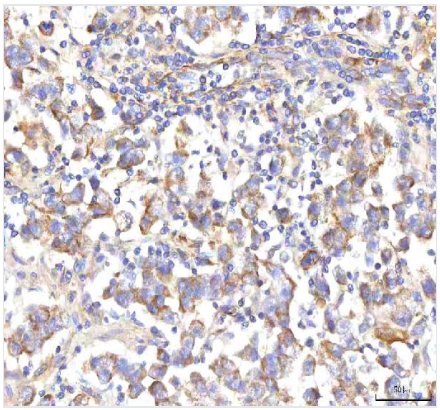


Immunohistochemistry (IHC) of anti-HSD17B13 antibody

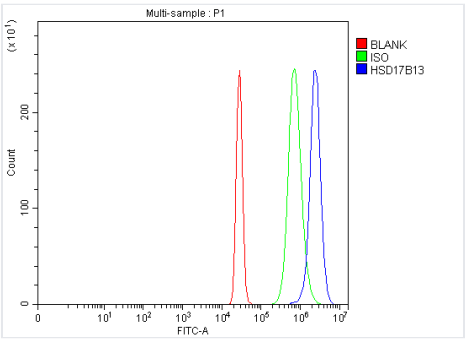
Figure 2. IHC analysis of HSD17B13 using anti-HSD17B13 antibody (MBS1759291).HSD17B13 was detected in a paraffin-embedded section of human liver cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-HSD17B13 Antibody (MBS1759291) 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 (#MBS176453) with DAB as the chromogen.



Immunohistochemistry (IHC) of anti-HSD17B13 antibody
Figure 3. IHC analysis of HSD17B13 using anti-HSD17B13 antibody (MBS1759291).HSD17B13 was detected in a paraffin-embedded section of human pancreas ductal adenocarcinoma 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-HSD17B13 Antibody (MBS1759291) 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 (#MBS176453) with DAB as the chromogen.



Immunohistochemistry (IHC) of anti-HSD17B13 antibody
Figure 4. IHC analysis of HSD17B13 using anti-HSD17B13 antibody (MBS1759291).HSD17B13 was detected in a paraffin-embedded section of human testicular seminoma 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-HSD17B13 Antibody (MBS1759291) 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 (#MBS176453) with DAB as the chromogen.



Flow Cytometry (FC/FACS) of anti-HSD17B13 antibody
Figure 5. Flow Cytometry analysis of HepG2 cells using anti-HSD17B13 antibody (MBS1759291).Overlay histogram showing HepG2 cells stained with MBS1759291 (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-HSD17B13 Antibody (MBS1759291, 1ug/1x106 cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG (MBS177405, 5-10ug/1x106 cells) 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.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for HSD17B13. It may not necessarily be applicable to this product.

NCBI GI #	210032112
NCBI GeneID	345275
NCBI Accession #	NP_001129702.1
UniProt Primary Accession #	Q7Z5P4
UniProt Secondary Accession #	Q2M1L5; Q86W22; Q86W23; A8K9R9
UniProt Related Accession #	Q7Z5P4
GenBank Nucleotide #	NM_001136230.2
NCBI Official Full Name	17-beta-hydroxysteroid dehydrogenase 13 isoform B

NCBI Official Synonym Full Names	hydroxysteroid (17-beta) dehydrogenase 13
NCBI Official Symbol	HSD17B13
NCBI Official Synonym Symbols	SCDR9; NIIL497; SDR16C3; HMFN0376
UniProt Protein Name	17-beta-hydroxysteroid dehydrogenase 13
UniProt Synonym Protein Names	Short chain dehydrogenase/reductase family 16C member 3; Short-chain dehydrogenase/reductase 9
Protein Family	17-beta-hydroxysteroid dehydrogenase
UniProt Gene Name	HSD17B13
UniProt Synonym Gene Names	SCDR9; SDR16C3; 17-beta-HSD 13
UniProt Entry Name	DHB13_HUMAN
NCBI Protein Information	17-beta-hydroxysteroid dehydrogenase 13
UniProt Comments for HSD17B13	HSD17B13: Belongs to the short-chain dehydrogenases/reductases (SDR) family. 2 isoforms of the human protein are produced by alternative splicing. Protein type: Oxidoreductase; EC 1.1.-.-; Secreted, signal peptide; Secreted Chromosomal Location of Human Ortholog: 4q22.1 Cellular Component: extracellular region; lipid particle Molecular Function: oxidoreductase activity Biological Process: positive regulation of lipid biosynthetic process
Research Articles on HSD17B13	**1.** 17beta-HSD13 as a pathogenic protein in the development of nonalcoholic fatty liver disease.
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