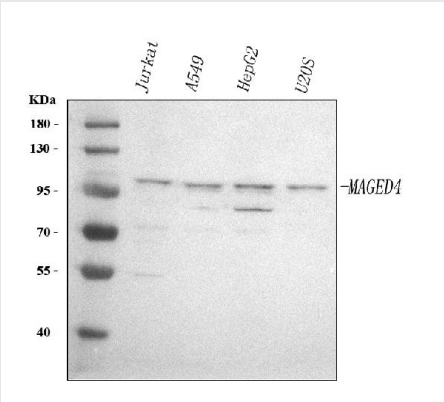
MAGED4 Antibody – Rabbit Polyclonal

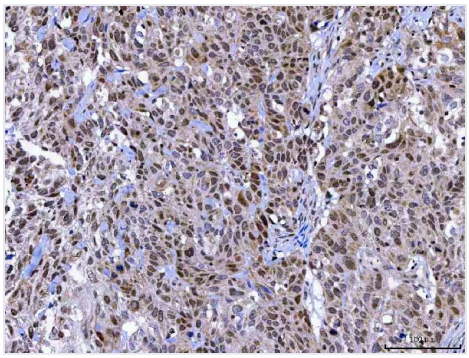
PRODUCT OVERVIEW

Product Name	MAGED4, Polyclonal Antibody
Full Product Name	Anti-MAGED4 Antibody Picoband
Product Gene Name	anti-MAGED4 antibody
Product Synonym Names	Transmembrane protein 240; kelch repeat and BTB domain containing 2; Kelch repeat and BTB domain-containing protein 2; BTB and kelch domain-containing protein 1; KBTBD2; BKLHD1; KIAA1489
Clonality	Polyclonal
Isotype	Rabbit IgG
Host	Rabbit
Species Reactivity	Human
Form/Format	Lyophilized. Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
Purity/Purification	Immunogen affinity purified.
Specificity	Detected in liver, skeletal muscle, kidney, pancreas, spleen, thyroid, testis, ovary, small intestine and colon.
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	24kDa
OMIM	AB040527 mRNA
3D Structure	ModBase 3D Structure for Q96JG8
Immunogen	E coli-derived human MAGED4 recombinant protein (Position: F51-R741).
Subcellular Localization	Cul3-RING ubiquitin ligase complex
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	Required for DNA double-strand breaks (DSBs) formation in unsynapsed regions during meiotic recombination. Probably acts by forming a complex with MEI4 and REC114, which activates DSBs formation in unsynapsed regions, an essential step to ensure completion of synapsis. Not required for HORMAD1 functions in pairing-independent synaptonemal complex formation, ATR recruitment to unsynapsed axes, meiotic silencing of unsynapsed chromatin (MSUC) or meiotic surveillance.
Product Categories/Family for anti-MAGED4 antibody	Primary Antibodies; Cell Biology
ISO Certification	Manufactured in an ISO 13485:2003 and EN ISO 13485:2012 Certified Laboratory.
Applications Tested/Suitable for anti-MAGED4 antibody	Western Blot (WB), Immunohistochemistry (IHC), Immunocytochemistry (ICC), Immunofluorescence (IF), Flow Cytometry (FC/FACS), ELISA (EIA)
Application Notes for anti-MAGED4 antibody	WB: 0.25-0.5ug/ml, Human IHC: 2-5ug/ml, Human ICC/IF: 5ug/ml, Human FC/FACS (Fixed): 1-3ug/1x10^6 cells, Human ELISA: 0.1-0.5ug/ml

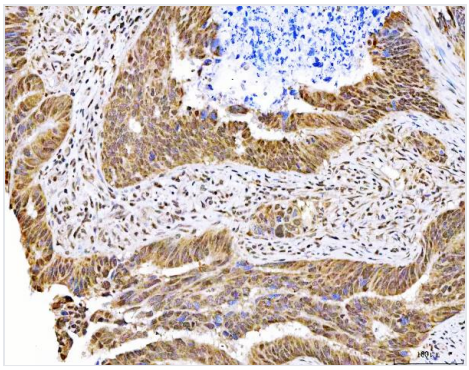
Related Product Information for anti-MAGED4 antibody	The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Product References and Citations for anti-MAGED4 antibody	1. Chomez, P., De Backer, O., Bertrand, M., De Plaen, E., Boon, T., Lucas, S. An overview of the MAGE gene family with the identification of all human members of the family. Cancer Res. 61: 5544-5551, 2001. [PubMed: 11454705, related citations]2. Hartz, P. A. Personal Communication. Baltimore, Md. 4/30/2009.3. Ito, S., Kawano, Y., Katakura, H., Takenaka, K., Adachi, M., Sasaki, M., Shimizu, K., Ikenaka, K., Wada, H., Tanaka, F. Expression of MAGE-D4, a novel MAGE family antigen, is correlated with tumor-cell proliferation of non-small cell lung cancer. Lung Cancer 51: 79-88, 2006.
Other Notes	Small volumes of anti-MAGED4 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 MAGED4 purchase	MBS1759485 is an antibody targeting MAGED4. Also known as Anti-MAGED4 Antibody Picoband. Reactive in Human. Host: Rabbit.



Western Blot (WB) of anti-MAGED4 antibody
Figure 1. Western blot analysis of MAGED4 using anti-MAGED4 antibody (MBS1759485).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 Jurkat whole cell lysates,Lane 2: human A549 whole cell lysates,Lane 3: human HepG2 whole cell lysates,Lane 4: human U2OS whole cell 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-MAGED4 antigen affinity purified polyclonal antibody (#MBS1759485) 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 MAGED4 at approximately 100 kDa. The expected band size for MAGED4 is at 100 kDa.

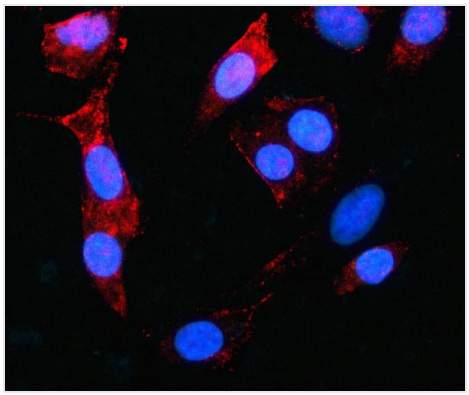


Immunohistochemistry (IHC) of anti-MAGED4 antibody
Figure 2. IHC analysis of MAGED4 using anti-MAGED4 antibody (MBS1759485).MAGED4 was detected in a paraffin-embedded section of human adrenocortical adenoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-MAGED4 Antibody (MBS1759485) 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.



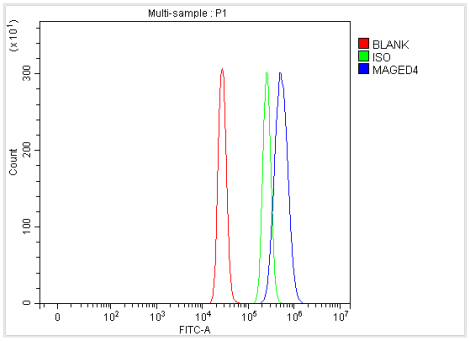
Immunohistochemistry (IHC) of anti-MAGED4 antibody

Figure 3. IHC analysis of MAGED4 using anti-MAGED4 antibody (MBS1759485).MAGED4 was detected in a paraffin-embedded section of human bladder urothelial carcinoma 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-MAGED4 Antibody (MBS1759485) 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.



Immunofluorescence (IF) of anti-MAGED4 antibody

Figure 4. IF analysis of MAGED4 using anti-MAGED4 antibody (MBS1759485).MAGED4 was detected in an immunocytochemical section of A549 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (#MBS176582) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5ug/mL rabbit anti-MAGED4 Antibody (MBS1759485) 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.



Flow Cytometry (FC/FACS) of anti-MAGED4 antibody

Figure 5. Flow Cytometry analysis of HepG2 cells using anti-MAGED4 antibody (MBS1759485).Overlay histogram showing HepG2 cells stained with MBS1759485 (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-MAGED4 Antibody (MBS1759485, 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 MAGED4. It may not necessarily be applicable to this product.

NCBI GI #	149274614
NCBI GeneID	728239
NCBI Accession #	NP_001092270.1
UniProt Primary Accession #	Q96JG8
UniProt Secondary Accession #	Q5HYN6; Q8WXW4; Q9BQ84; Q9BVH1; Q9BYH3; Q9BYH4; Q9H217; A8K093
UniProt Related Accession #	Q96JG8
GenBank Nucleotide #	NM_001098800.2
NCBI Official Full Name	melanoma-associated antigen D4 isoform 2
NCBI Official Synonym Full Names	MAGE family member D4

NCBI Official Symbol	MAGED4
NCBI Official Synonym Symbols	MAGE1; MAGEE1; MAGE-E1
UniProt Protein Name	Melanoma-associated antigen D4
UniProt Synonym Protein Names	MAGE-D4 antigen; MAGE-E1 antigen
Protein Family	Melanoma-associated antigen
UniProt Gene Name	MAGED4
UniProt Synonym Gene Names	KIAA1859; MAGED4A; MAGEE1
UniProt Entry Name	MAGD4_HUMAN
NCBI Protein Information	melanoma-associated antigen D4
UniProt Comments for MAGED4	MAGE-D4B: May enhance ubiquitin ligase activity of RING-type zinc finger-containing E3 ubiquitin-protein ligases. Proposed to act through recruitment and/or stabilization of the Ubl-conjugating enzyme (E2) at the E3:substrate complex. 4 isoforms of the human protein are produced by alternative splicing. Chromosomal Location of Human Ortholog: Xp11
Research Articles on MAGED4	**1.** Results suggest that MAGE-D4 overexpression influences tumor progression, and MADE-D4 can be a prognostic marker and a potential molecular target in squamous cell esophageal cancer.
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
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