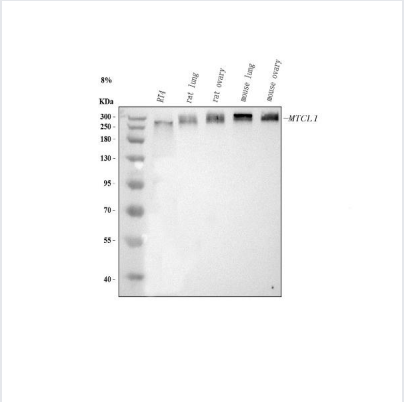
MTCL1 Antibody – Rabbit Polyclonal

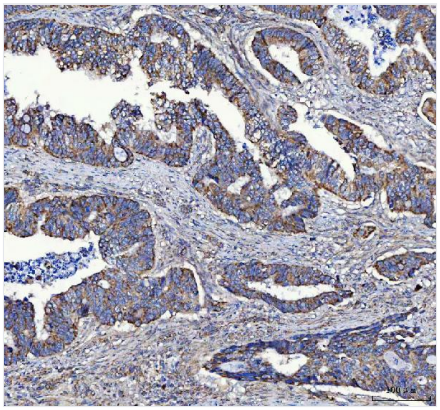
PRODUCT OVERVIEW

Product Name	MTCL1, Polyclonal Antibody
Full Product Name	Anti-MTCL1 Antibody Picoband
Product Gene Name	anti-MTCL1 antibody
Product Synonym Names	interleukin 17B; Interleukin-17B; IL-17B; Cytokine CX1; Cytokine-like protein ZCYTO7; Neuronal interleukin-17-related factor; Il17b; Nirf, Zcyto7
Clonality	Polyclonal
Isotype	Rabbit 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 adult pancreas, small intestine, stomach, spinal cord and testis. Less pronounced expression in prostate, colon mucosal lining, and ovary.
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	209,526 Da
OMIM	615766
3D Structure	ModBase 3D Structure for Q9Y4B5
Immunogen	E coli-derived human MTCL1 recombinant protein (Position: K884-D1522).
Subcellular Localization	Secreted
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	Stimulates the release of tumor necrosis factor alpha and IL-1-beta from the monocytic cell line THP-1.
Product Categories/Family for anti-MTCL1 antibody	Primary Antibodies; Cytokines; Immunology; Innate Immunity; Interleukins
ISO Certification	Manufactured in an ISO 13485:2003 and EN ISO 13485:2012 Certified Laboratory.
Applications Tested/Suitable for anti-MTCL1 antibody	Western Blot (WB), Immunohistochemistry (IHC), Flow Cytometry (FC/FACS), ELISA (EIA)
Application Notes for anti-MTCL1 antibody	WB: 0.25-0.5ug/ml, Human, Mouse, Rat IHC: 2-5ug/ml, Human, Mouse, Rat FC/FACS (Fixed): 1-3ug/1x10^6 cells, Human ELISA: 0.1-0.5ug/ml
Related Product Information for anti-MTCL1 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.

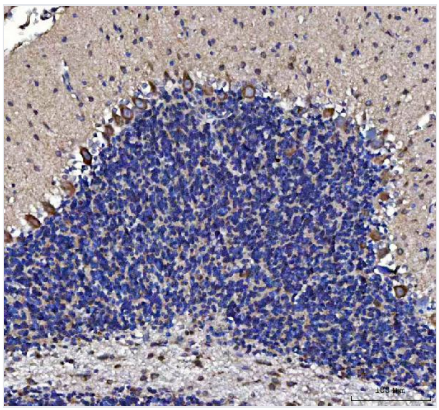
Product References and Citations for anti-MTCL1 antibody	1. Hartz, P. A. Personal Communication. Baltimore, Md. 4/28/2014.2. Nagase, T., Ishikawa, K., Suyama, M., Kikuno, R., Miyajima, N., Tanaka, A., Kotani, H., Nomura, N., Ohara, O. Prediction of the coding sequences of unidentified human genes. XI. The complete sequences of 100 new cDNA clones from brain which code for large proteins in vitro. DNA Res. 5: 277-286, 1998. 3. Sato, Y., Akitsu, M., Amano, Y., Yamashita, K., Ide, M., Shimada, K., Yamashita, A., Hirano, H., Arakawa, N., Maki, T., Hayashi, I., Ohno, S., Suzuki, A. The novel PAR-1-binding protein MTCL1 has crucial roles in organizing microtubules in polarizing epithelial cells. J. Cell Sci. 126: 4671-4683, 2013.
Other Notes	Small volumes of anti-MTCL1 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 MTCL1 purchase	MBS1759169 is an antibody targeting MTCL1. Also known as Anti-MTCL1 Antibody Picoband. Reactive in Human, Mouse, Rat. Host: Rabbit.



Western Blot (WB) of anti-MTCL1 antibody
Figure 1. Western blot analysis of MTCL1 using anti-MTCL1 antibody (MBS1759169).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 RT4 whole cell lysates,Lane 2: rat lung tissue lysates,Lane 3: rat ovary tissue lysates,Lane 4: mouse lung tissue lysates,Lane 5: mouse ovary 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-MTCL1 antigen affinity purified polyclonal antibody (#MBS1759169) 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 MTCL1 at approximately 270-300 kDa. The expected band size for MTCL1 is at 210 kDa.

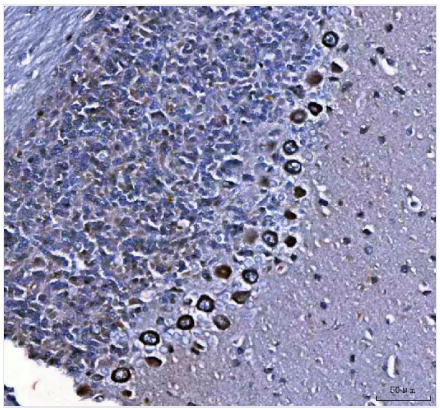


Immunohistochemistry (IHC) of anti-MTCL1 antibody
Figure 2. IHC analysis of MTCL1 using anti-MTCL1 antibody (MBS1759169).MTCL1 was detected in a paraffin-embedded section of human colorectal adenocarcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-MTCL1 Antibody (MBS1759169) 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.



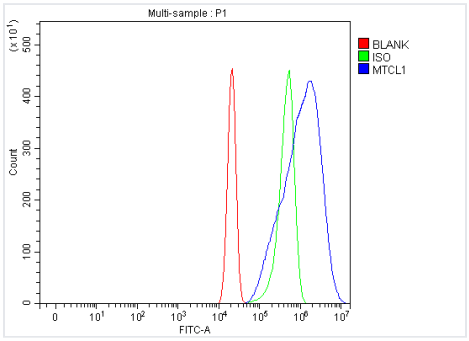
Immunohistochemistry (IHC) of anti-MTCL1 antibody

Figure 3. IHC analysis of MTCL1 using anti-MTCL1 antibody (MBS1759169).MTCL1 was detected in a paraffin-embedded section of mouse cerebellum 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-MTCL1 Antibody (MBS1759169) 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-MTCL1 antibody

Figure 4. IHC analysis of MTCL1 using anti-MTCL1 antibody (MBS1759169).MTCL1 was detected in a paraffin-embedded section of rat cerebellum 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-MTCL1 Antibody (MBS1759169) 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-MTCL1 antibody

Figure 5. Flow Cytometry analysis of U20S cells using anti-MTCL1 antibody (MBS1759169).Overlay histogram showing U20S cells stained with MBS1759169 (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-MTCL1 Antibody (MBS1759169, 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 MTCL1. It may not necessarily be applicable to this product.

NCBI GI #	163644316
NCBI GeneID	23255
NCBI Accession #	NP_056025.2
UniProt Primary Accession #	Q9Y4B5
UniProt Secondary Accession #	Q6ZMQ9; Q8IWA9; E9PAY7
UniProt Related Accession #	Q9Y4B5
GenBank Nucleotide #	NM_015210.3
NCBI Official Full Name	microtubule cross-linking factor 1
NCBI Official Synonym Full Names	microtubule crosslinking factor 1

NCBI Official Symbol	MTCL1
NCBI Official Synonym Symbols	SOGA2; CCDC165; KIAA0802
UniProt Protein Name	Microtubule cross-linking factor 1
UniProt Synonym Protein Names	Coiled-coil domain-containing protein 165; PAR-1-interacting protein; SOGA family member 2
Protein Family	Microtubule cross-linking factor
UniProt Gene Name	MTCL1
UniProt Synonym Gene Names	CCDC165; KIAA0802; SOGA2
UniProt Entry Name	MTCL1_HUMAN
NCBI Protein Information	microtubule cross-linking factor 1; protein SOGA2; SOGA family member 2; PAR-1-interacting protein; coiled-coil domain containing 165; coiled-coil domain-containing protein 165
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