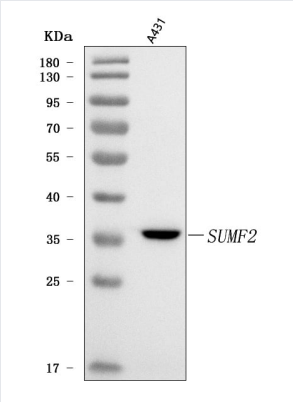
SUMF2 Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

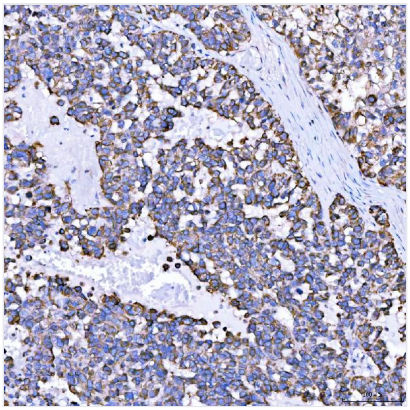
Product Name	SUMF2, Polyclonal Antibody
Full Product Name	Anti-SUMF2 Antibody Picoband
Product Gene Name	anti-SUMF2 antibody
Product Synonym Names	pannexin 2; Pannexin-2; PANX2
Clonality	Polyclonal
Isotype	Rabbit IgG
Host	Rabbit
Species Reactivity	Human
Form/Format	Lyophilized. Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
Purity/Purification	Immunogen affinity purified.
Specificity	Expressed in fetal and adult brain. Also detected in fetal liver and skeletal muscle, but not in their adult counterparts.
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	Observed Molecular Weight: 36kDa
OMIM	607940
3D Structure	ModBase 3D Structure for Q8NBJ7
Immunogen	E coli-derived human SUMF2 recombinant protein (Position: Q26-L301).
Subcellular Localization	Cell membrane. Multi-pass membrane protein. Gap junction
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	Structural component of the gap junctions and the hemichannels.
Product Categories/Family for anti-SUMF2 antibody	Primary Antibodies; Organelles; Subcellular Markers; Tags & Cell Markers
ISO Certification	Manufactured in an ISO 13485:2003 and EN ISO 13485:2012 Certified Laboratory.
Applications Tested/Suitable for anti-SUMF2 antibody	ELISA (EIA), Flow Cytometry (FC/FACS), Immunofluorescence (IF), Immunohistochemistry (IHC), Western Blot (WB)
Application Notes for anti-SUMF2 antibody	WB: 0.25-0.5ug/ml, Human IHC(Paraffin-embedded Section): 2-5ug/ml, Human IF: 5ug/ml, Human FC/FACS (Fixed): 1-3ug/1x10^6 cells, Human ELISA: 0.1-0.5ug/ml
Related Product Information for anti-SUMF2 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-SUMF2 antibody	1. Cosma, M. P., Pepe, S., Annunziata, I., Newbold, R. F., Grompe, M., Parenti, G., Ballabio, A. The multiple sulfatase deficiency gene encodes an essential and limiting factor for the activity of sulfatases. Cell 113: 445-456, 2003.2. Dierks, T., Schmidt, B., Borissenko, L. V., Peng, J., Preusser, A., Mariappan, M., von Figura, K. Multiple sulfatase deficiency is caused by mutations in the gene encoding the human C-alpha-formylglycine generating enzyme. Cell 113: 435-444, 2003. 3. Gross, M. B. Personal Communication. Baltimore, Md. 2/26/2015.
Other Notes	Small volumes of anti-SUMF2 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 SUMF2 purchase	MBS1758967 is an antibody targeting SUMF2. Also known as Anti-SUMF2 Antibody Picoband. Reactive in Human. Host: Rabbit.



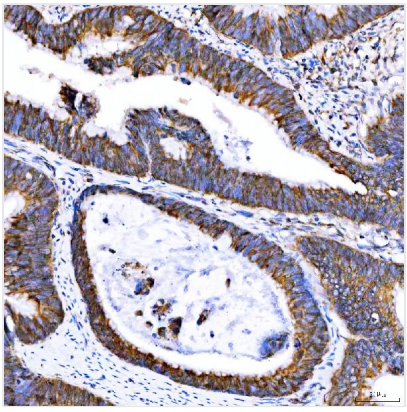
Western Blot (WB) of anti-SUMF2 antibody

Figure 1. Western blot analysis of SUMF2 using anti-SUMF2 antibody (MBS1758967).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 A431 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-SUMF2 antigen affinity purified polyclonal antibody (#MBS1758967) 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 SUMF2 at approximately 36 kDa. The expected band size for SUMF2 is at 34 kDa.



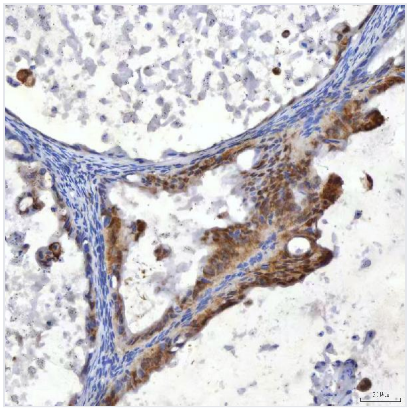
Immunohistochemistry (IHC) of anti-SUMF2 antibody

Figure 2. IHC analysis of SUMF2 using anti-SUMF2 antibody (MBS1758967).SUMF2 was detected in a paraffin-embedded section of human breast 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-SUMF2 Antibody (MBS1758967) 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.



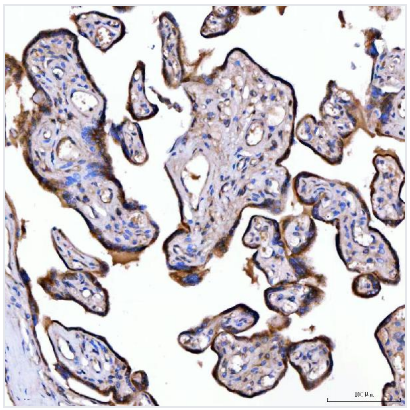
Immunohistochemistry (IHC) of anti-SUMF2 antibody

Figure 3. IHC analysis of SUMF2 using anti-SUMF2 antibody (MBS1758967).SUMF2 was detected in a paraffin-embedded section of human colon 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-SUMF2 Antibody (MBS1758967) 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.

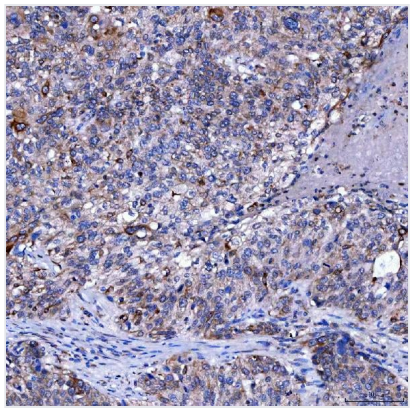


Immunohistochemistry (IHC) of anti-SUMF2 antibody

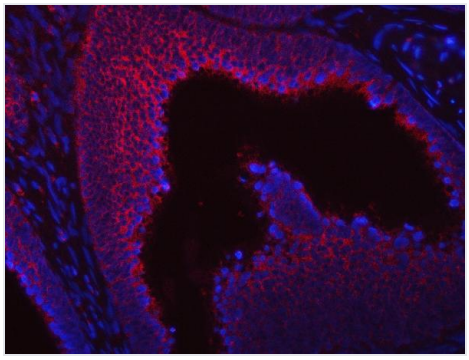
Figure 4. IHC analysis of SUMF2 using anti-SUMF2 antibody (MBS1758967).SUMF2 was detected in a paraffin-embedded section of human ovarian tumor tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-SUMF2 Antibody (MBS1758967) 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.



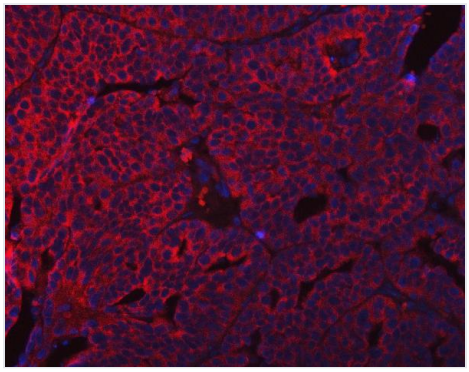
Immunohistochemistry (IHC) of anti-SUMF2 antibody
Figure 5. IHC analysis of SUMF2 using anti-SUMF2 antibody (MBS1758967).SUMF2 was detected in a paraffin-embedded section of human placenta tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-SUMF2 Antibody (MBS1758967) 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-SUMF2 antibody
Figure 6. IHC analysis of SUMF2 using anti-SUMF2 antibody (MBS1758967).SUMF2 was detected in a paraffin-embedded section of human squamous cell 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-SUMF2 Antibody (MBS1758967) 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-SUMF2 antibody
Figure 7. IF analysis of SUMF2 using anti-SUMF2 antibody (MBS1758967).SUMF2 was detected in a paraffin-embedded section of human colon 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 5ug/mL rabbit anti-SUMF2 Antibody (MBS1758967) 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.



Immunofluorescence (IF) of anti-SUMF2 antibody
Figure 8. IF analysis of SUMF2 using anti-SUMF2 antibody (MBS1758967).SUMF2 was detected in a paraffin-embedded section of human ovarian 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 5ug/mL rabbit anti-SUMF2 Antibody (MBS1758967) 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.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for SUMF2. It may not necessarily be applicable to this product.

NCBI GeneID	25870
UniProt Primary Accession #	Q8NBJ7
UniProt Protein Name	Sulfatase-modifying factor 2
UniProt Synonym Protein Names	C-alpha-formylglycine-generating enzyme 2
Protein Family	Sulfatase-modifying factor
UniProt Gene Name	SUMF2
UniProt Entry Name	SUMF2_HUMAN

UniProt Comments for SUMF2	SUMF2: Lacks formyl-glycine generating activity and is unable to convert newly synthesized inactive sulfatases to their active form. Inhibits the activation of sulfatases by SUMF1. Belongs to the sulfatase-modifying factor family. 5 isoforms of the human protein are produced by alternative splicing. Protein type: Secreted, signal peptide; Secreted Chromosomal Location of Human Ortholog: 7q11.1 Cellular Component: endoplasmic reticulum lumen Molecular Function: metal ion binding Biological Process: cellular protein metabolic process; post-translational protein modification
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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Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

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