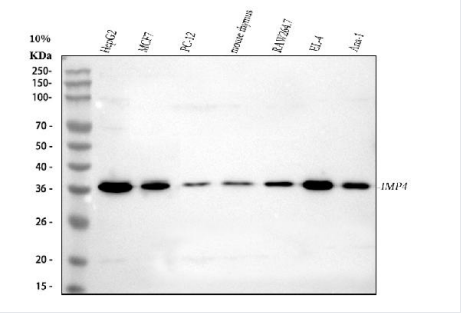
IMP4 Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

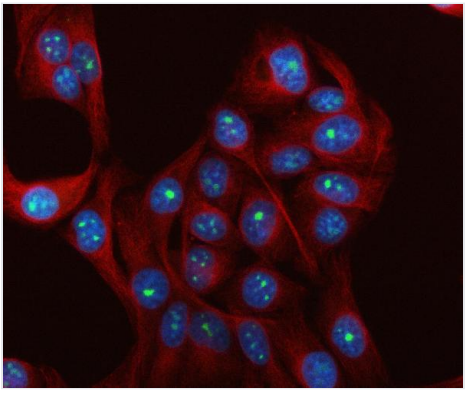
Product Name	IMP4, Polyclonal Antibody
Full Product Name	Anti-IMP4 Antibody Picoband
Product Gene Name	anti-IMP4 antibody
Product Synonym Names	Serine/threonine-protein kinase AtPK1/AtPK6; 70 kDa ribosomal protein S6 kinase 1 antibody, KS6B1_HUMAN antibody, p70 alpha antibody, P70 beta 1 antibody, p70 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	291
OMIM	612981
3D Structure	ModBase 3D Structure for Q96G21
Immunogen	E coli-derived human PCF11 recombinant protein (Position: N1214-V1555).
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-IMP4 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-IMP4 antibody	Western Blot (WB), Immunocytochemistry (ICC), Immunofluorescence (IF), Flow Cytometry (FC/FACS), ELISA (EIA)

Application Notes for anti-IMP4 antibody	WB: 0.25-0.5ug/ml, Human, Mouse, Rat 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-IMP4 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-IMP4 antibody	1. Granneman, S., Gallagher, J. E. G., Vogelzangs, J., Horstman, W., van Venrooij, W. J., Baserga, S. J., Pruijn, G. J. M. The human Imp3 and Imp4 proteins form a ternary complex with hMpp10, which only interacts with the U3 snoRNA in 60-80S ribonucleoprotein complexes. Nucleic Acids Res. 31: 1877-1887, 2003.
Other Notes	Small volumes of anti-IMP4 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 IMP4 purchase	MBS1759122 is an antibody targeting IMP4. Also known as Anti-IMP4 Antibody Picoband. Reactive in Human, Mouse, Rat. Host: Rabbit.



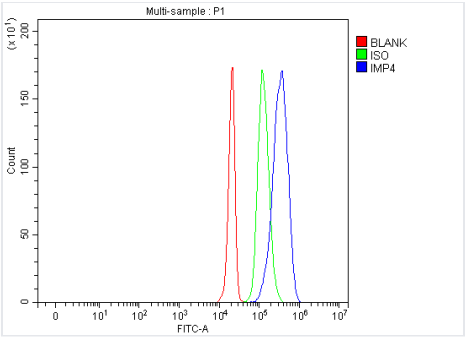
Western Blot (WB) of anti-IMP4 antibody

Figure 1. Western blot analysis of IMP4 using anti-IMP4 antibody (MBS1759122).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 HepG2 whole cell lysates,Lane 2: human MCF-7 whole cell lysates,Lane 3: rat PC-12 whole cell lysates,Lane 4: mouse thymus tissue lysates,Lane 5: mouse RAW264.7 whole cell lysates,Lane 6: mouse EL-4 whole cell lysates,Lane 7: mouse Ana-1 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-IMP4 antigen affinity purified polyclonal antibody (#MBS1759122) 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 IMP4 at approximately 36 kDa. The expected band size for IMP4 is at 34 kDa.



Immunofluorescence (IF) of anti-IMP4 antibody

Figure 2. IF analysis of IMP4 using anti-IMP4 antibody (MBS1759122) and anti-Beta Tubulin antibody (M01857-3).IMP4 was detected in immunocytochemical section of HELA cell. 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-IMP4 Antibody (MBS1759122) and mouse anti-Beta Tubulin antibody (M01857-3) overnight at 4 degree C. DyLight488 Conjugated Goat Anti-Rabbit IgG (MBS177405) and Cy3 Conjugated Goat Anti-Mouse IgG (BA1031) were 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-IMP4 antibody
Figure 3. Flow Cytometry analysis of HepG2 cells using anti-IMP4 antibody (MBS1759122).Overlay histogram showing HepG2 cells stained with MBS1759122 (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-IMP4 Antibody (MBS1759122, 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 IMP4. It may not necessarily be applicable to this product.

NCBI GI #	73621060
NCBI GeneID	92856
NCBI Accession #	Q96G21.1
UniProt Primary Accession #	Q96G21
UniProt Secondary Accession #	Q3ZTT3
UniProt Related Accession #	Q96G21
NCBI Official Full Name	U3 small nucleolar ribonucleoprotein protein IMP4
NCBI Official Synonym Full Names	IMP4, U3 small nucleolar ribonucleoprotein
NCBI Official Symbol	IMP4
NCBI Official Synonym Symbols	BXDC4
UniProt Protein Name	U3 small nucleolar ribonucleoprotein protein IMP4
UniProt Synonym Protein Names	Brix domain-containing protein 4
Protein Family	U3 small nucleolar ribonucleoprotein protein
UniProt Gene Name	IMP4
UniProt Synonym Gene Names	BXDC4; U3 snoRNP protein IMP4
UniProt Entry Name	IMP4_HUMAN
NCBI Protein Information	U3 small nucleolar ribonucleoprotein protein IMP4; U3 snoRNP protein IMP4; U3 snoRNP protein 4 homolog; brix domain-containing protein 4; IMP4, U3 small nucleolar ribonucleoprotein, homolog
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