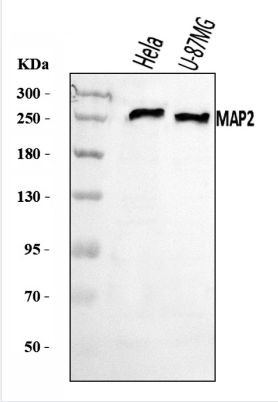
MAP2 Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

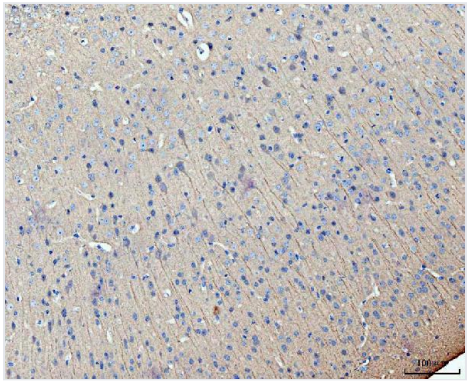
Product Name	MAP2, Polyclonal Antibody
Full Product Name	Anti-MAP2 Antibody Picoband
Product Gene Name	anti-MAP2 antibody
Clonality	Polyclonal
Isotype	Rabbit IgG
Host	Rabbit
Species Reactivity	Human, Mouse, Rat
Samples	Cell culture supernatants, serum, plasma (heparin, EDTA, citrate) and urine
Detection Range	31.2 pg/ml - 2,000 pg/ml
Sensitivity	<20 pg/ml
Form/Format	Lyophilized Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
Purity/Purification	Immunogen affinity purified.
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml. (lot specific)
Specificity	Natural and recombinant Human C3
Preparation and Storage	Store 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.
Inter-assay Precision	Inter-Assay Precision (Precision across assays): Three samples of known concentration were tested in separate assays to assess inter-assay precision.
Intra-assay Precision	Intra-Assay Precision (Precision within an assay): Three samples of known concentration were tested on one plate to assess intra-assay precision.
Molecular Weight	199,526 Da
Chromosome Location	Chromosome: 2; NC_000002.11 (210288771..210598834). Location: 2q34-q35
OMIM	157130
3D Structure	ModBase 3D Structure for P11137
Product Categories/Family for anti-MAP2 antibody	Primary Antibodies, Rabbit Polyclonal Antibodies
ISO Certification	Manufactured in an ISO 13485:2003 and EN ISO 13485:2012 Certified Laboratory.
Applications Tested/Suitable for anti-MAP2 antibody	Western Blot (WB), Immunohistochemistry (IHC), ELISA (EIA)
Application Notes for anti-MAP2 antibody	WB: 0.25-0.5 ug/ml, Human IHC-P: 2-5 ug/ml, Mouse, Rat Direct ELISA: 0.1-0.5 ug/ml, Human Tested Species: In-house tested species with positive results. Enhanced Chemiluminescent Kit with anti-Rabbit IgG (#MBS176460) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (#MBS176453) for IHC(P).

Related Product Information for anti-MAP2 antibody	Background: Complement component 3, often simply called C3, is a protein of the immune system. In humans it is encoded on chromosome 19 by a gene called C3. Complement component C3 plays a central role in the activation of complement system. Its activation is required for both classical and alternative complement activation pathways. The encoded preproprotein is proteolytically processed to generate alpha and beta subunits that form the mature protein, which is then further processed to generate numerous peptide products. The C3a peptide, also known as the C3a anaphylatoxin, modulates inflammation and possesses antimicrobial activity. Mutations in this gene are associated with atypical hemolytic uremic syndrome and age-related macular degeneration in human patients. Principle of the Assay: The Picokine™ Human C3 Pre-Coated ELISA (Enzyme-Linked Immunosorbent Assay) kit is a solid-phase immunoassay specially designed to measure Human C3 with a 96-well strip plate that is pre-coated with antibody specific for C3. The detection antibody is a biotinylated antibody specific for C3. The capture antibody is monoclonal antibody from mouse and the detection antibody is biotinylated polyclonal antibody from goat. The kit contains recombinant Human C3 with immunogen: Expression system for standard: E.coli; Immunogen sequence: S672-R748. The kit is analytically validated with ready-to-use reagents. To measure Human C3, add standards and samples to the wells, then add the biotinylated detection antibody. Wash the wells with PBS or TBS buffer, and add Avidin-Biotin-Peroxidase Complex (ABC-HRP). Wash away the unbounded ABC-HRP with PBS or TBS buffer and add TMB. TMB is an HRP substrate and will be catalyzed to produce a blue color product, which changes into yellow after adding the acidic stop solution. The absorbance of the yellow product at 450nm is linearly proportional to Human C3 in the sample. Read the absorbance of the yellow product in each well using a plate reader, and benchmark the sample wells' readings against the standard curve to determine the concentration of Human C3 in the sample.
Other Notes	Small volumes of anti-MAP2 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 MAP2 purchase	MBS1754888 is an antibody targeting MAP2. Also known as Anti-MAP2 Antibody Picoband. Reactive in Human, Mouse, Rat. Host: Rabbit.



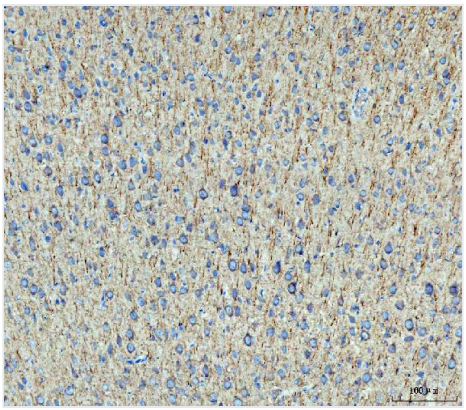
Western Blot (WB) of anti-MAP2 antibody

Figure 1. Western blot analysis of MAP2 using anti-MAP2 antibody (MBS1754888).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 Hela whole cell lysates,Lane 2: human U-87MG 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-MAP2 antigen affinity purified polyclonal antibody (#MBS1754888) at 0.5 ug/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 with Tanon 5200 system. A specific band was detected for MAP2 at approximately 280 kDa. The expected band size for MAP2 is at 200 kDa.



Immunohistochemistry (IHC) of anti-MAP2 antibody

Figure 2. IHC analysis of MAP2 using anti-MAP2 antibody (MBS1754888).MAP2 was detected in a paraffin-embedded section of mouse brain 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 2 ug/ml rabbit anti-MAP2 Antibody (MBS1754888) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.



Immunohistochemistry (IHC) of anti-MAP2 antibody
Figure 3. IHC analysis of MAP2 using anti-MAP2 antibody (MBS1754888).MAP2 was detected in a paraffin-embedded section of rat brain 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 2 ug/ml rabbit anti-MAP2 Antibody (MBS1754888) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for MAP2. It may not necessarily be applicable to this product.

NCBI GI #	87578396
NCBI GeneID	4133
NCBI Accession #	NP_002365.3
UniProt Primary Accession #	P11137
UniProt Secondary Accession #	Q17S04; Q8IUX2; Q99975; Q99976
UniProt Related Accession #	P11137
GenBank Nucleotide #	NM_002374.3
NCBI Official Full Name	microtubule-associated protein 2 isoform 1
NCBI Official Synonym Full Names	microtubule-associated protein 2
NCBI Official Symbol	MAP2
NCBI Official Synonym Symbols	MAP2A; MAP2B; MAP2C
UniProt Protein Name	Microtubule-associated protein 2
Protein Family	Microtubule-associated protein
UniProt Gene Name	MAP2
UniProt Synonym Gene Names	MAP-2
UniProt Entry Name	MTAP2_HUMAN
NCBI Protein Information	microtubule-associated protein 2; MAP-2
NCBI Summary for MAP2	This gene encodes a protein that belongs to the microtubule-associated protein family. The proteins of this family are thought to be involved in microtubule assembly, which is an essential step in neurogenesis. The products of similar genes in rat and mouse are neuron-specific cytoskeletal proteins that are enriched in dentrites, implicating a role in determining and stabilizing dentritic shape during neuron development. A number of alternatively spliced variants encoding distinct isoforms have been described. [provided by RefSeq, Jan 2010]

UniProt Comments for MAP2	MAP2: a member of the microtubule-associated protein (MAP) family. Its exact function is unknown but MAPs appear to stabilize the microtubules against depolymerization. They also seem to have a stiffening effect on microtubules. Expressed at high levels in neural tissue and the prostate. Four alternatively spliced transcript variants have been reported. Protein type: Cytoskeletal; Motility/polarity/chemotaxis Chromosomal Location of Human Ortholog: 2q34-q35 Cellular Component: microtubule; microtubule associated complex; cell soma; cytoplasm; nucleolus; dendritic shaft Molecular Function: calmodulin binding; protein binding; microtubule binding; structural molecule activity Biological Process: axonogenesis; dendrite morphogenesis; microtubule bundle formation; neurite development; central nervous system neuron development
Research Articles on MAP2	**1.** MAP-2 and nestin participate in the regulation of the development of gastric tissues in human embryos.
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