

## Product datasheet for **TA336053**

### Myelin Basic Protein (MBP) Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	IHC, IP, WB
Recommended Dilution:	WB, IHC, IP
Reactivity:	Human, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	The immunogen for Anti-MBP Antibody: synthetic peptide directed towards the middle region of human MBP. Synthetic peptide located within the following region: FGGDRGAPKRGSGKDSHHPARTAHYGSLPQKSHGRTQDENPVVHFFKNIV
Formulation:	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose. <i>Note that this product is shipped as lyophilized powder to China customers.</i>
Purification:	Affinity Purified
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	33 kDa
Gene Name:	myelin basic protein
Database Link:	<a href="#">NP_001020272</a> <a href="#">Entrez Gene 24547 Rat</a> <a href="#">Entrez Gene 4155 Human</a> <a href="#">P02686</a>



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**Background:**

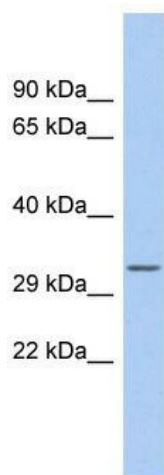
The classic group of MBP isoforms (isoform 4-isoform 14) are with PLP the most abundant protein components of the myelin membrane in the CNS. They have a role in both its formation and stabilization. The smaller isoforms might have an important role in remyelination of denuded axons in multiple sclerosis. The non-classic group of MBP isoforms (isoform 1-isoform 3/Golli-MBPs) may preferentially have a role in the early developing brain long before myelination, maybe as components of transcriptional complexes, and may also be involved in signaling pathways in T-cells and neural cells. Differential splicing events combined with optional post-translational modifications give a wide spectrum of isomers, with each of them potentially having a specialized function. MBP induces T-cell proliferation. The protein encoded by the classic MBP gene is a major constituent of the myelin sheath of oligodendrocytes and Schwann cells in the nervous system. However, MBP-related transcripts are also present in the bone marrow and the immune system. These mRNAs arise from the long MBP gene (otherwise called 'Golli-MBP') that contains 3 additional exons located upstream of the classic MBP exons. Alternative splicing from the Golli and the MBP transcription start sites gives rise to 2 sets of MBP-related transcripts and gene products. The Golli mRNAs contain 3 exons unique to Golli-MBP, spliced in-frame to 1 or more MBP exons. They encode hybrid proteins that have N-terminal Golli aa sequence linked to MBP aa sequence. The second family of transcripts contain only MBP exons and produce the well characterized myelin basic proteins. This complex gene structure is conserved among species suggesting that the MBP transcription unit is an integral part of the Golli transcription unit and that this arrangement is important for the function and/or regulation of these genes.

**Synonyms:**

MGC99675

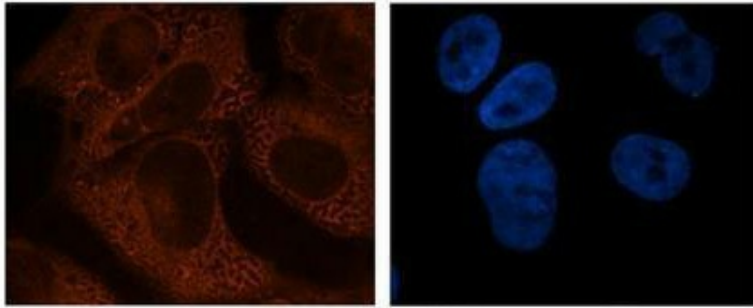
**Note:**

Immunogen Sequence Homology: Human: 100%; Mouse: 93%; Rabbit: 93%; Dog: 87%; Rat: 87%; Pig: 80%; Horse: 80%; Bovine: 80%; Guinea pig: 79%

**Product images:**

WB Suggested Anti-MBP Antibody Titration: 0.2-1 ug/ml; ELISA Titer: 1:312500; Positive Control: Human brain

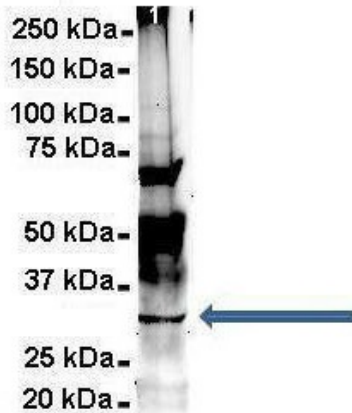
**MBP**



Antibody--RED  
DAPI--Blue

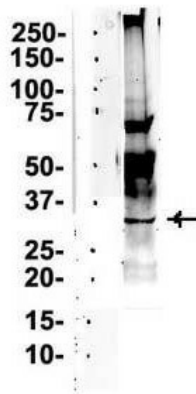
Sample Type ;; Human brain stem cells  
Primary Antibody Dilution ;; 1:500  
Secondary Antibody ;; Goat anti-rabbit Alexa-Fluor 594  
Secondary Antibody Dilution ;; 1:1000  
Color/Signal Descriptions ;; MBP: Red DAPI:Blue  
Gene Name ;; MBP  
Submitted by ;; Dr. Yuzhi Chen, University of Arkansas for Medical Science

**MBP**



Amount and Sample Type ;; 500 ug rat brain homogenate  
Amount of IP Antibody ;; 6 ug  
Primary Antibody ;; MBP  
Primary Antibody Dilution ;; 1:500  
Secondary Antibody ;; Goat anti-rabbit Alexa-Fluor 594  
Secondary Antibody Dilution ;; 1:5000  
Gene Name ;; MBP  
Submitted by ;; Dr. Yuzhi Chen, University of Arkansas for Medical Science

**MBP**



IP Suggested Anti-MBP Antibody Positive Control: NT2 CELL/BRAIN TISSUE