Myelin Basic Protein(MBP) Rabbit pAb

CatalogNo: YN0032

Key Features

Host Species	Reactivity	Applications
• Rabbit	• Human,Mouse,Rat	• WB,ELISA

MW	Isotype
• 33kD (Observed)	• IgG

Storage

Storage*	-15°C to -25°C/1 year(Do not lower than -25°C)
Formulation	Liquid in PBS containing 50% glycerol,0.5% BSA and 0.02% sodium azide.

Recommended Dilution Ratios

WB 1:500-2000
ELISA 1:5000-20000

Basic Information

Clonality	Polyclonal

Immunogen Information

Immunogen	Synthesized peptide derived from human protein . at AA range: 180-260
Specificity	MBP Polyclonal Antibody detects endogenous levels of protein.

Target Information

Gene name	MBP

Protein Name Myelin basic protein (MBP) (Myelin A1 protein) (Myelin membrane encephalitogenic protein)

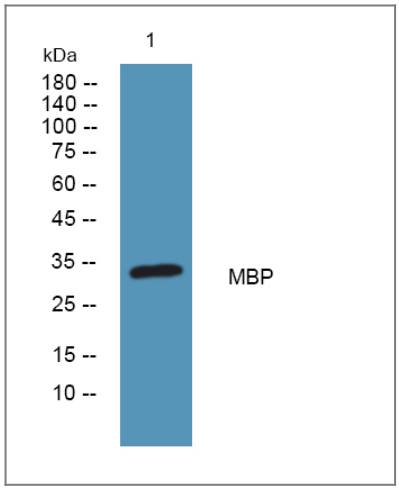
Organism	Gene ID	UniProt ID
Human	4155;	P02686;
Mouse		P04370;
Rat		P02688;

Cellular Localization Myelin membrane; Peripheral membrane protein; Cytoplasmic side. Cytoplasmic side of myelin.; [Isoform 3]: Nucleus . Targeted to nucleus in oligodendrocytes.

Tissue specificity MBP isoforms are found in both the central and the peripheral nervous system, whereas Golli-MBP isoforms are expressed in fetal thymus, spleen and spinal cord, as well as in cell lines derived from the immune system.

Function Alternative products:Additional isoforms seem to exist,developmental stage:Expression begins abruptly in 14-16 week old fetuses. Even smaller isoforms seem to be produced during embryogenesis; some of these persisting in the adult. Expression of isoform MBP2 is more evident at 16 weeks and its relative proportion declines thereafter.,Disease:The reduction in the surface charge of citrullinated and/or methylated MBP could result in a weakened attachment to the myelin membrane. This mechanism could be operative in demyelinating diseases such as chronical multiple sclerosis (MS), and fulminating MS (Marburg disease).,Function: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. Induces T-cell proliferation.,online information:Myelin basic protein entry,PTM:Arg-241 was found to be 6% monomethylated and 60% symmetrically dimethylated.,PTM:Several charge isomers of MBP; C1 (the most cationic, least modified, and most abundant form), C2, C3, C4, C5, C6, C7, C8-A and C8-B (the least cationic form); are produced as a result of optional PTM, such as phosphorylation, deamidation of glutamine or asparagine, arginine citrullination and methylation. C8-A and C8-B contain each two mass isoforms termed C8-A(H), C8-A(L), C8-B(H) and C8-B(L), (H) standing for higher and (L) for lower molecular weight. C3, C4 and C5 are phosphorylated. The ratio of methylated arginine residues decreases during aging, making the protein more cationic.,PTM:The N-terminal alanine is acetylated (isoform 3, isoform 4, isoform 5 and isoform 6).,sequence Caution:Contaminating sequence. The C-terminus contains a Histidine tag.,similarity:Belongs to the myelin basic protein family.,subcellular location:Cytoplasmic side of myelin.,subunit:Homodimer; isoform 3 exists as a homodimer.,tissue specificity:MBP isoforms are found in both the central and the peripheral nervous system, whereas Golli-MBP isoforms are expressed in fetal thymus, spleen and spinal cord, as well as in cell lines derived from the immune system.,

Validation Data



Western blot analysis of lysates from KB cells, primary antibody was diluted at 1:1000, 4°over night

Contact information

Orders:	order@immunoway.com
Support:	tech@immunoway.com
Telephone:	877-594-3616 (Toll Free), 408-747-0185
Website:	http://www.immunoway.com
Address:	2200 Ringwood Ave San Jose, CA 95131 USA

Please scan the QR code to access additional product information:
Myelin Basic Protein(MBP) Rabbit pAb