

## Myelin Basic Protein Antibody

Rat Monoclonal Antibody [Clone MBP/4273]

Catalog No	Format	Size
4155-RTM3-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
4155-RTM3-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
4155-RTM3-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

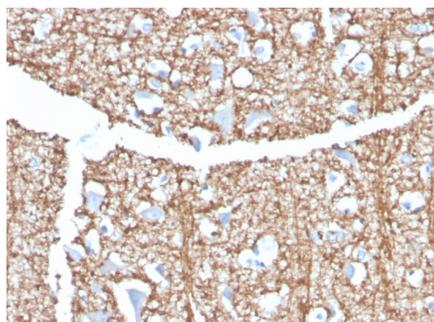
Applications	Tested Dillution	Note
Flow Cytometry (Flow)	1-2ug/million cells	
Immunofluorescence (IF)	1-3ug/ml	
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes
Western Blot (WB)	2-4ug/ml	

### Product Details

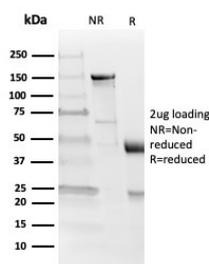
<b>Clone</b>	MBP/4273
<b>Gene Name</b>	MBP
<b>Immunogen</b>	Reacts with human MBP, recognizing epitopes in the 82-87 amino acid region (DENPVV).
<b>Host</b>	Rat
<b>Clonality</b>	Monoclonal
<b>Isotype / Light Chain</b>	IgG2a
<b>Mol. Weight of Antigen</b>	14-22kDa
<b>Cellular Localization</b>	Myelin membrane, Nucleus
<b>Species Reactivity</b>	Apteronotus Leptorhynchus, Cow, Dog, Guinea Pig, Human, Mouse, Pig, Rabbit, Rat, Sheep
<b>Positive Control</b>	Human brain or astrocytoma tissue.

\*Optimal dilution for a specific application should be determined.

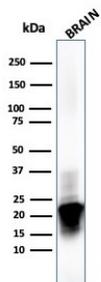
### Product Images for Myelin Basic Protein Antibody



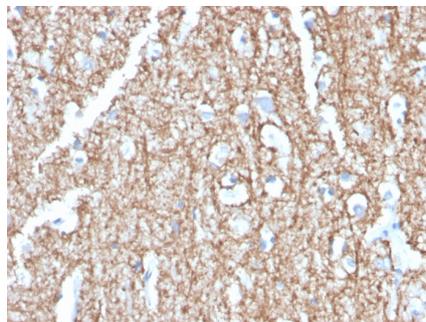
Formalin-fixed, paraffin-embedded human brain stained with Myelin Basic Protein Rat Monoclonal Antibody (MBP/4273).



SDS-PAGE Analysis of Purified Myelin Basic Protein Rat Monoclonal Antibody (MBP/4273). Confirmation of Purity and Integrity of Antibody.



Western Blot Analysis of human brain tissue lysate using Myelin Basic Protein Rat Monoclonal Antibody (MBP/4273).



Formalin-fixed, paraffin-embedded human brain stained with Myelin Basic Protein Rat Monoclonal Antibody (MBP/4273).

### Specificity & Comments

Myelin basic protein (MBP) is the second most abundant protein in central nervous system (CNS) myelin: it comprises 30% of the total protein and about 10% of the dry weight of myelin. It is the only structural protein found so far to be essential for formation of CNS myelin, and has been called the executive molecule of myelin. MBP can interact with a number of polyanionic proteins including actin, tubulin, calmodulin, and clathrin, and negatively charged lipids, and acquires structure on binding to them. It may act as a membrane actin-binding protein, which might allow it to participate in transmission of extracellular signals to the cytoskeleton in oligodendrocytes and tight junctions in myelin. MBP may be applicable as a marker for oligodendrogliomas. MBP/4273 recognizes an epitope in the 82-87 region of MBP, useful in clinical diagnosis to detect MBP levels or myelination in human MBP. MBP/4273 is also used in a 2-site ELISA with clone MBP/4275. Both are used interchangeably as capture and detection antibody.

### Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

### Supplied As

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

### Storage and Stability

Antibody with azide - store at 2 to 8 °C. Antibody without azide - store at -20 to -80 °C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

### Research Areas

Cardiovascular, Complement System, Developmental Biology, Neuroscience