

# **Myelin Basic Protein Antibody**

Rat Monoclonal Antibody [Clone MBP/4274]

Catalog No	Format	Size
4155-RTM4-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
4155-RTM4-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
4155-RTM4-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

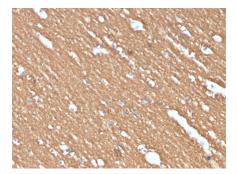
Applications	Tested Dillution	Note
Immunofluorescence (IF)	1-3ug/ml	
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes
Western Blot (WB)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

### **Product Details**

Clone	MBP/4274
Gene Name	MBP
Immunogen	Reacts with human MBP, recognizing epitopes in the 36-50 amino acid region (GILDSIGRFFGGDRG)
Host	Rat
Clonality	Monoclonal
Isotype / Light Chain	lgG2b
Mol. Weight of Antigen	13-21kDa
Cellular Localization	Myelin membrane, Nucleus
Species Reactivity	Bovine, Chicken, Horse, Human
Positive Control	Human brain or astrocytoma tissue.
Positive Control *Optimal dilution for a specific ap	

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## Product Images for Myelin Basic Protein Antibody

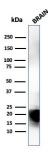


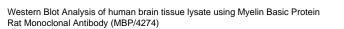
Formalin-fixed, paraffin-embedded human brain stained with Myelin Basic Protein Rat Monoclonal Antibody (MBP/4274).

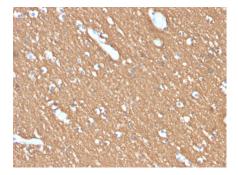
kDa		NR	R	
		ININ	n.	
.50				
.50				
75	-	-		2ug loading
50			-	NR=Non- reduced
37 —				R=reduced
25 —	_		_	
20				
15 —				
10				

SDS-PAGE Analysis of Purified Myelin Basic Protein Rat Monoclonal Antibody (MBP/4274). Confirmation of Purity and Integrity of Antibody.









Formalin-fixed, paraffin-embedded human brain stained with Myelin Basic Protein Rat Monoclonal Antibody (MBP/4274).

# **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/4274 recognizes an epitope in the 36-50 region of MBP, useful in clinical diagnosis to detect MBP levels or myelination in human MBP.

#### 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

## **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.

