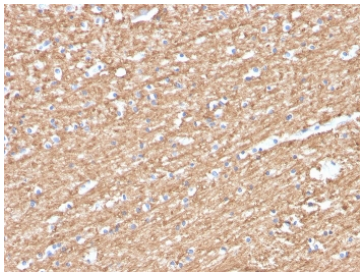
Myelin Basic Protein Antibody [clone MBP/4276] (V8680)

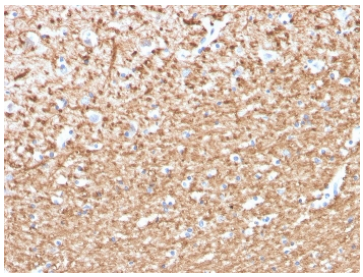
Catalog No.	Formulation	Size
V8680-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V8680-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V8680SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2a
Clone Name	MBP/4276
Purity	Protein G affinity chromatography
UniProt	P02686
Localization	Cytoplasm
Applications	Western Blot : 1-2ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml for 30 minutes at RT
Limitations	This Myelin Basic Protein antibody is available for research use only.



IHC staining of FFPE human brain with Myelin Basic Protein antibody (clone MBP/4276). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



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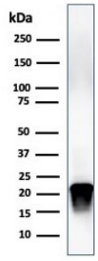
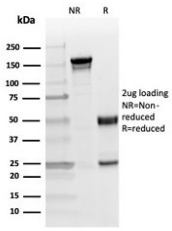


Western blot testing of human brain lysate with Myelin Basic Protein antibody (clone MBP/4276). Isoforms may be visualized from 20~37 kDa.



SDS-PAGE analysis of purified, BSA-free Myelin Basic Protein antibody (clone MBP/4276) as confirmation of integrity and purity.

Description

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. Phosphorylation been shown to decrease its ability to aggregate lipid vesicles and consequently destabilising the compact structure ofmyelin, a destruction that has been observed in demyelinating diseases such as Multiple Sclerosis. MBP/4276 is a useful detector of phosphorylated MBP by binding to Thr98 of human MBP in the phosphorylated state.

Application Notes

Optimal dilution of the Myelin Basic Protein antibody should be determined by the researcher.

Immunogen

A synthetic peptide corresponding to the amino acids surrounding phosphorylated threonine 98 were used as the immunogen for the Myelin Basic Protein antibody.

Storage

Store the Myelin Basic Protein antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).