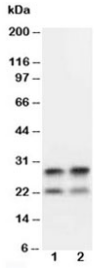
MBP Antibody / Myelin Basic Protein (R30229)

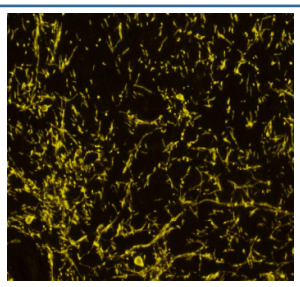
Catalog No.	Formulation	Size
R30229	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

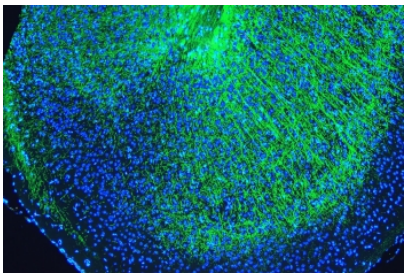
Availability	1-3 business days
Species Reactivity	Mouse, Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide/thimerosal
UniProt	P02686
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml Immunofluorescence (FFPE) : 2-4ug/ml
Limitations	This MBP antibody is available for research use only.



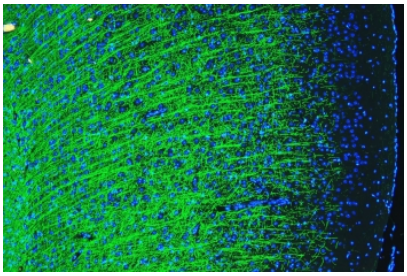
Western blot testing of MBP antibody and mouse brain tissue lysate. Multiple isoforms may be visualized from 20~37 kDa.



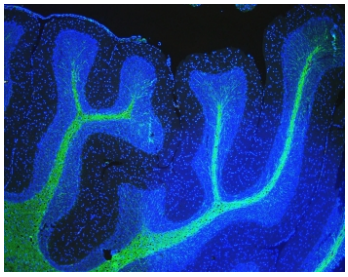
IHC staining of rat brain tissue with MBP antibody (yellow), HRP secondary and TSA 570 reagent. HIER: boil tissue sections in pH8 EDTA buffer for 10-20 min and allow to cool before testing.



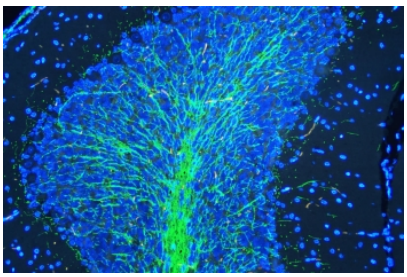
Immunofluorescent staining of FFPE mouse brain with MBP antibody (green) at 2ug/ml and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



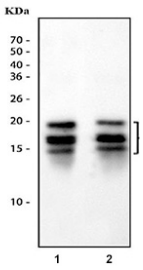
Immunofluorescent staining of FFPE rat brain with MBP antibody (green) at 2ug/ml and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



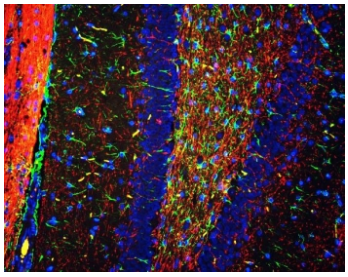
Immunofluorescent staining of FFPE rat brain with MBP antibody (green) at 2ug/ml and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



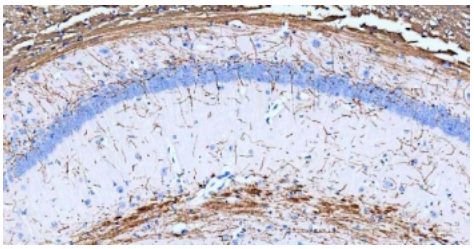
Immunofluorescent staining of FFPE rat brain with MBP antibody (green) at 2ug/ml and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



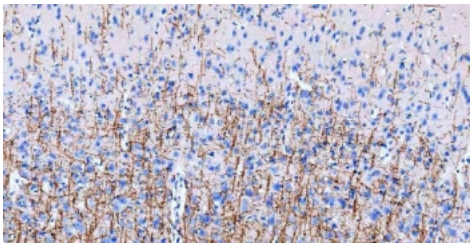
Western blot testing of MBP antibody with 1) rat brain and 2) mouse brain lysate. Multiple isoforms may be visualized from 20~37 kDa.



Immunofluorescent staining of FFPE rat brain with MBP antibody (red), anti-GFAP mAb (green) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



IHC-P: MBP antibody testing of mouse hippocampus tissue. HIER: boil tissue sections in pH8 EDTA buffer for 10-20 min and allow to cool before testing.



IHC-P: MBP antibody testing of mouse cerebral cortex tissue. HIER: boil tissue sections in pH8 EDTA buffer for 10-20 min and allow to cool before testing.

Description

MBP (Myelin Basic Protein) is a major structural component of the myelin sheath, the multilayered membrane that insulates axons in the central and peripheral nervous systems. It plays a critical role in the compaction and stability of myelin, ensuring proper nerve conduction and efficient transmission of electrical signals. Because of its importance in neural structure and disease, an MBP antibody is widely used in neurobiology and immunology research.

Myelin Basic Protein exists in several isoforms generated by alternative splicing of the MBP gene. These isoforms vary in molecular weight and tissue distribution but share the ability to contribute to myelin assembly and maintenance. MBP is essential for oligodendrocyte differentiation and myelin membrane adhesion. Using an MBP antibody enables researchers to study isoform-specific expression, developmental regulation, and myelin architecture in both normal and pathological states.

Dysregulation of MBP has been implicated in demyelinating diseases such as multiple sclerosis, where immune-mediated attack on myelin proteins leads to neurological dysfunction. MBP is also of interest in traumatic brain injury, neurodegenerative conditions, and autoimmune responses. Employing an MBP antibody helps researchers investigate mechanisms of demyelination, repair processes, and immune recognition in disease models.

NSJ Bioreagents provides a high-quality MBP antibody validated for western blot, immunohistochemistry, and immunofluorescence. Choosing an MBP antibody from NSJ Bioreagents ensures reliable detection and reproducible results in studies of myelin biology, neurodegeneration, and autoimmune disease.

Application Notes

The stated application concentrations are suggested starting amounts. Titration of the MBP antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

Amino acids KLGGRDSRSGSPMARR were used as the immunogen for this MBP antibody.

Storage

After reconstitution, the MBP antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.