

# Anti-MBP

Chicken Polyclonal Antibody

Catalog # M42-563C

Lot # J1274-24

## **Cited Applications**

WB, IF

Suggested Dilutions: WB 1:5,000, IF 1:500

Ideal working dilutions for each application should be empirically determined by the investigator.

## **Specificity**

Recognizes the MBP protein

## **Cross Reactivity**

Human, Mouse, Rat and Bovine

## Host/Isotype/Clone#

Chicken, IgY

### **Immunogen**

Three peptide sequences conserved in higher vertebrate MBP proteins

#### **Formulation**

Total IgY fraction in PBS + 10 mM NaN3.

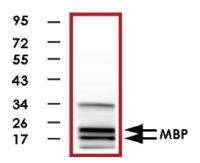
# **Scientific Background**

Myelin Basic Protein (MBP) is a major protein of the myelin sheath. The region of the protein that is required for folding, polymerization and substrate specificities is conserved among various species. This conserved region may also have a specialized role in protein-lipid interactions in the myelin membrane (1). MBP is expressed in oligodendrocytes, thus antibodies to MBP are useful tools for identifying this cell type. In the central nervous system there are different forms of the protein made by alternate transcription from a single gene. These isoforms have molecular weights of 21.5, 18.5, and 17.2 kDa. Because the two smaller isoforms have similar molecular weights, Western blots using MBP antibodies typically result in two bands.

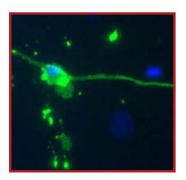
## References

 Chapman, et al: Confomation of myelin basic protein and its role in myelin formation. AdvExp Med Biol 1978;100:207-20.

## **Sample Data**



Western blot of rat cortex homogenate showing specific immunolabeling of the  $\sim 18 \& 22 \text{kDa MBP}$  protein.



Rat mixed neuron/glial cultures stained with chicken anti-Myelin Basic Protein (green). Blue is a DNA stain. Note that the Myelin Basic Protein antibody stains an oligodendrocyte and some membrane shed from this cell. Other cells in the field include neurons, astrocytes, microglia and fibroblasts, all of which are completely negative.

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Catalog Number
Specific Lot Number
Purification
Stability
Storage & Shipping

M42-563C
J1274-24
Total IgY fraction
1yr at -20°C from date of shipment
Store product at -20°C. For optimal
storage, aliquot antibody into smaller
quantities after centrifugation and
store at recommended temperature.
For optimal performance, avoid
repeated handling and multiple
freeze/thaw cycles. Product shipped
on ice packs.