

## Anti-Myelin basic protein [E2] Standard Size Ab03093-23.0

This full-length chimeric rabbit antibody was made using the variable domain sequences of the original Human scFv format for improved compatibility with existing reagents assays and techniques.

**Isotype and Format:** Rabbit IgG, Lambda

**Clone Number:** E2

Alternative Name(s) of Target: MBP; Myelin A1 protein; Myelin membrane encephalitogenic protein

**UniProt Accession Number of Target Protein:** P02687

Published Application(s): IP, WB, ELISA

Published Species Reactivity: Bovine, Epstein Barr virus

**Immunogen:** The original antibody was isolated from a phage display library of single-chain variable fragments (scFvs), which was constructed from blood lymphocytes of patienst with MS as a potential source of representative MS autoantibodies.

**Specificity:** This antibody binds bovine myelin binding protein (MBP) and also shows cross reactivity against Epstein-Barr virus (EBV) latent membrane protein 1 (LMP1). This antibody can recognize both the native and denatured forms of MBP. The MBP isoforms 4 and 14 along with PLP are most abundant protein components of the myelin membrane in the CNS. The smaller isoforms are believed to have an important role in remyelination of denuded axons in multiple sclerosis.

**Application Notes:** The scFv version of this antibody binds bovine myelin basic protein (MBP) with a binding affinity of 3.9 nM in an ELISA. Both the scFv and the recombinant huamn IgG1 antibody were capable of recognizing MBP and LMP1 proteins in a western blot assay. The recombinant human IgG1 version of this antibody can also be used for the immunoprecipitation of EBV LMP1 protein from a solution (PMID: 21859892).

**Antibody First Published in:** Gabibov et al. Combinatorial antibody library from multiple sclerosis patients reveals antibodies that cross-react with myelin basic protein and EBV antigen. FASEB J. 2011 Dec;25(12):4211-21. PMID:21859892

**Note on publication:** Describes the isolation of antibodies against myelin basic protein and EBV antigens from a combinatorial library generated from blood lymphocytes of patienst with multiple sclerosis.

## **Product Form**

**Size:** 200 μg Purified antibody.

**Purification:** 

Protein A affinity purified

**Supplied In:** PBS with 0.02% Proclin 300.

Storage Recommendation: Store at 4°C for up to 3 months. For longer storage, aliquot and store at -

20°C.

**Concentration:** 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.