

Myelin Basic Protein, Dephosphorylated, Bovine Protein | mapk1-a protein

Myelin Basic Protein, Dephosphorylated, Bovine (MBP)

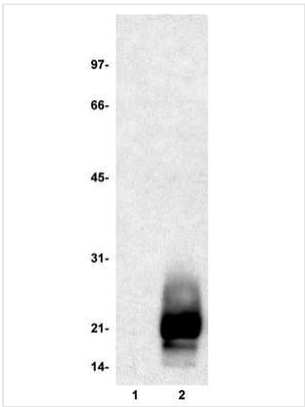
CATALOG # AAA14742	HOST Bovine Brain	APPLICATIONS Western Blot
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PRODUCT SYNONYMS

Myelin Basic Protein; Dephosphorylated; Bovine; Bovine (MBP); mapk1-a protein

PRODUCT SPECIFICATIONS

Host	Bovine Brain
Form/Format	Supplied as a liquid in 10mM MOPS, pH 7.0, 0.246 uM MnCl ₂ , 1.23 uM EDTA, 385 ng inactive lambda phosphatase, 0.05% sodium azide.
Concentration	5mg/ml (varies by lot)
Applicable Applications for mapk1-a protein	WB (Western Blot)
Application Notes	Western Blot: 1 ug/ml detected MBP when used to probe 800ng MBP incubated with and without MAPK2. Protein Kinase Assay: Dephosphorylated MBP incorporated 32P-phosphate in radioactive kinase reactions using MAPK2/Erk2. Phosphorylated in a non-radioactive kinase assay using (MAP Kinase 2, Recombinant, Mouse). MBP phosphorylation was detected by Western Blot using (Myelin Basic Protein, phosphorylated (MBP)). No detectable endogenous phosphorylation on MBP was seen as determined by Western Blot of 1 ug of the dephosphorylated MBP with 1 ug/ml Activity: When incubated with pNPP for 45 minutes, 400ug had no detectable levels of active phosphatase. Optimal dilutions to be determined by the researcher. Other applications not been tested
Source	Bovine brain
Purity	Purified from bovine brain using FPLC liquid chromatography and de-phosphorylated using Lambda protein phosphatase. Lambda protein phosphatase was inactivated in the presence of 10mM sodium EDTA, at 65°C for one hour. Purity was assessed at 95% using SDS-PAGE and Coomassie blue staining of 1ug of product.
Preparation and Storage	Aliquot to avoid repeated freezing and thawing. Store at -20°C. Aliquots are stable for 6 months after receipt at -20°C. For maximum recovery of product, centrifuge the original vial after thawing and prior to removing the cap. Further dilutions can be made in assay buffer.



WB (Western Blot)
Western Blot analysis: 800ng MBP using M9758-06 (1ug/ml).Lane 1: Incubated without MAPK
2 Lane 2: Incubated with MAPK 2

ADDITIONAL INFORMATION

Related Product Information for mapk1-a protein	The protein encoded by the classic MBP gene is a major constituent of the myelin sheath of oligodendrocytes and Schwann cells in the nervous system. However, MBP-related transcripts are also present in the bone marrow and the immune system. These mRNAs arise from the long MBP gene (otherwise called "Golli-MBP") that contains 3 additional exons located upstream of the classic MBP exons. Alternative splicing from the Golli and the MBP transcription start sites gives rise to 2 sets of MBP-related transcripts and gene products. The Golli mRNAs contain 3 exons unique to Golli-MBP, spliced in-frame to 1 or more MBP exons. They encode hybrid proteins that have N-terminal Golh aa sequence linked to MBP aa sequence. The second family of transcripts contain only MBP exons and produce the well characterized myelin basic proteins. This complex gene structure is conserved among species suggesting that the MBP transcription unit is an Integral part of the Gofli transcription unit and that this arrangement is important for the function and/or regulation of these genes. Developed Tor use in radioactive and non-radioactive kinase assays.
Product Categories/Family for mapk1-a protein	Molecular Biology; MB-Myelin

NCBI AND UNIPROT INFORMATION

NCBI GI #	117949815
NCBI GeneID	398985
NCBI Official Full Name	Mitogen-activated protein kinase 1
NCBI Official Synonym Full Names	mitogen-activated protein kinase 1
NCBI Official Symbol	mapk1-a
NCBI Official Synonym Symbols	erk; erk2; ert1; mapk; mpk1; xp42; mapk1; mapk2; prkm1; prkm2; mapk1a; p42mapk
NCBI Protein Information	mitogen-activated protein kinase 1; MAP kinase; mitogen-activated protein kinase 1a

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.