3050 Spruce Street, St. Louis, MO 63103 USA
Tel: (800) 521-8956 (314) 771-5765 Fax: (800) 325-5052 (314) 771-5757
email: techservice@sial.com sigma-aldrich.com

Product Information

MBP
from porcine brain

Catalog Number **SRP5204**
Storage Temperature –20 °C

Synonym: Myelin Basic Protein

Product Description

MBP exists as four major forms in the pig CNS with apparent molecular masses of 21.5, 20.2, 18.5, and 17.3 kDa.[1] Native porcine MBP is extracted under acidic conditions and further purified by cation chromatography. MBP is an efficient substrate for numerous protein kinases including the ERK/MAP Kinase family, cAMP-dependent Protein Kinase, Calmodulin-dependent Protein Kinase, Protein Kinase C, and Phosphorylase Kinase.[2,3]

Native Swine MBP was extracted under acidic conditions and further purified by cation chromatography from pig brain.[4] This product is routinely evaluated using active MAP Kinase 3/ERK1. Native protein stored in 100 mM MOPS, pH 6.5, 150 mM NaCl, 0.25 mM DTT, and 0.1 mM PMSF.

Molecular mass: ~21.5 kDa

Purity: 70–95% (SDS-PAGE, see Figure 1)

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

The product ships on dry ice and storage at –70 °C is recommended. After opening, aliquot into smaller quantities and store at –70 °C. Avoid repeated handling and multiple freeze/thaw cycles.

Figure 1.
SDS-PAGE Gel of Typical Lot
70–95% (densitometry)

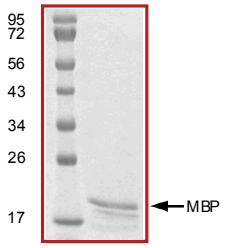
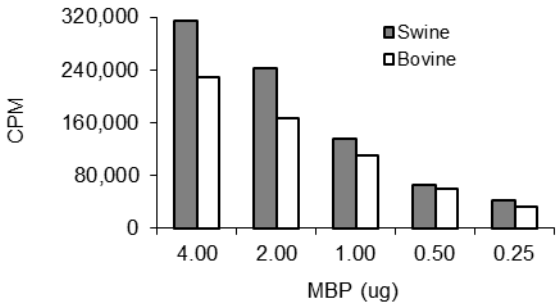


Figure 2.
Comparision of ERK1 Activity with Two Sources of MBP



References

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2. Sanghera, J. et al., Identification of the sites in myelin basic protein that are phosphorylated by meiosis-activated protein kinase p44mpk. FEBS Lett., **273**, 223-226 (1990).
3. Martenson, et al., Identification of multiple *in vivo* phosphorylation sites in rabbit myelin basic protein. J. Biol. Chem., **258**, 930, (1983).
4. Chevalier, D. et al., Purification of myelin basic protein from bovine brain. Protein Expr. Purif., **18**, 229-234 (2000).

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