Active Myelin Basic Protein (MBP)

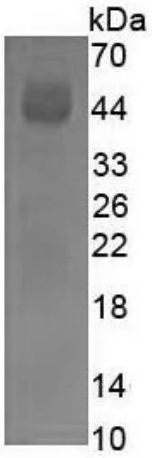
Catalog#:PHH12392

概述（Summary）

别称（Alternative Names）	Myelin A1 protein; Myelin membrane encephalitogenic protein
纯度（Purity）	Greater than 95% as determined by reducing SDS-PAGE.
内毒素（Endotoxin level）	Please contact with the lab for this information
蛋白构建（Construction）	【Met1-Arg304】
Accession #	P02686
表达宿主（Host）	293F
种属（Species）	Homo sapiens (Human)
预测分子量（Predicted MW）	34.7 kDa
制剂（Form）	Lyophilized from a 0.2 μm filtered solution of PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
运输方式（Shipping）	The product is shipped with ice bag. Upon receipt, store it immediately at the temperature listed below.
稳定性&储存（Stability &Storage）	12 months at -20°C to -80°C in lyophilized state.6 months at -20°C to -80°C under sterile conditions after reconstitution.7-10 days at 2°C to 8°C under sterile conditions after reconstitution.Please minimize freeze-thaw cycles.
复溶（Reconstitution）	Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
背景介绍（References）	The classic group of MBP isoforms (isoform 4-isoform 14) are with PLP the most abundant protein components of the myelin membrane in the CNS. They have a role in both its formation and stabilization. The smaller isoforms might have an important role in remyelination of denuded axons in multiple sclerosis. The non-classic group of MBP isoforms (isoform 1-isoform 3/Golli-MBPs) may preferentially have a role in the early developing brain long before myelination, maybe as components of transcriptional complexes, and may also be involved in signaling pathways in T-cells and neural cells. Differential splicing events combined with optional post-translational modifications give a wide spectrum of

isomers, with each of them potentially having a specialized function. Induces T-cell proliferation.

电泳图（SDS-PAGE image）



Greater than 95% as determined by reducing SDS-PAGE.

活性图（Bioactivity image）

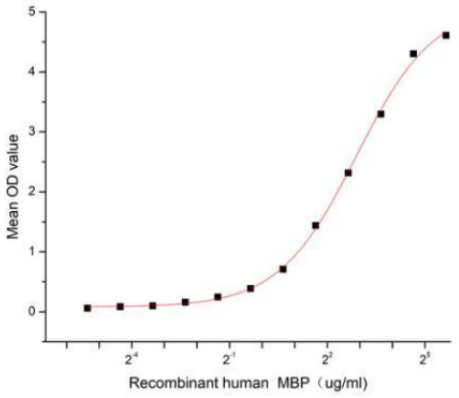


Figure 1. The binding activity of recombinan human MBP and recombinan human CALML3

Myelin basic protein (MBP), a 18.5-kDa encephalitogenic peptide, is the second most abundant in central nervous system and responsible for adhesion of the cytosolic surfaces of multilayered compact myelin, MBP is biased expressed in cerebellum adult and cortex adult. It can interact with a number of polyanionic proteins including actin, tubulin, Ca(2)-calmodulin, and clathrin, and negatively charged lipids, and acquires structure on binding to them. Calmodulin Like Protein 3 (CALML3) is a kind of Ca(2)-calmodulin, thus a functional binding ELISA assay was conducted to detect the interaction of recombinant human MBP and recombinant human CALML3. Briefly, biotin-linked MBP were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 ul were then transferred to CALML3-coated microtiter wells and incubated for 1h at 37℃. Wells were washed with PBST 3 times and incubation with Streptavidin-HRP for 30min, then wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37℃. Finally, add 50 µl stop solution to the wells and read at 450 nm immediately. The binding activity of recombinan human MBP and recombinan human CALML3 was shown in Figure 1, the EC50 for this effect is 7.4 ug/mL.

注意事项（Note）

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