**Product** Data Sheet

**Proteins** 

# MBP/MalE Protein, E.coli (Myc, His)

Cat. No.: HY-P71499

Synonyms: malE; b4034; JW3994; Maltose/maltodextrin-binding periplasmic protein; MMBP; Maltodextrin-

binding protein; Maltose-binding protein; MBP

E.coli Species: Source: E. coli

Accession: P0AEX9 (K27-K396)

Gene ID: 948538

Molecular Weight: Approximately 48.2 kDa

## **PROPERTIES**

| AA Sequ | uence |
|---------|-------|
|---------|-------|

KIEEGKLVIW INGDKGYNGL AEVGKKFEKD TGIKVTVEHP DKLEEKFPQV AATGDGPDII FWAHDRFGGY AQSGLLAEIT PDKAFQDKLY PFTWDAVRYN GKLIAYPIAV EALSLIYNKD LLPNPPKTWE EIPALDKELK AKGKSALMFN LQEPYFTWPL YENGKYDIKD IAADGGYAFK VGVDNAGAKA GLTFLVDLIK ETAMTINGPW NKHMNADTDY SIAEAAFNKG AWSNIDTSKV NYGVTVLPTF KGQPSKPFVG VLSAGINAAS PNKELAKEFL EAVNKDKPLG ENYLLTDEGL AVALKSYEEE LAKDPRIAAT MENAQKGEIM PNIPQMSAFW YAVRTAVINA ASGRQTVDEA

LKDAQTRITK

**Appearance** 

Lyophilized powder.

**Formulation** 

Lyophilized from a 0.2 µm sterile filtered PBS, 6% Trehalose, pH 7.4.

**Endotoxin Level** 

<1 EU/µg, determined by LAL method.

Reconsititution

It is not recommended to reconstitute to a concentration less than 100  $\mu$ g/mL in ddH<sub>2</sub>O.

Storage & Stability

Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.

Shipping

Room temperature in continental US; may vary elsewhere.

### **DESCRIPTION**

Background

MBP/MalE protein functions as a crucial component of the ABC transporter complex MalEFGK, specializing in the active import of maltose and maltodextrins. This versatile protein exhibits a binding affinity for maltose as well as higher maltodextrins, including maltotriose. As part of this transporter complex, MBP/MalE plays a pivotal role in the efficient and selective uptake of maltose and related substrates, contributing to the cellular processes associated with maltose metabolism.

Caution: Product has not been fully validated for medical applications. For research use only.

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