

# Recombinant human MBD3 protein

Catalog Number: ATGP1747

## PRODUCT INFORMATION

---

**Expression system**

E.coli

**Domain**

1-291aa

**UniProt No.**

O95983

**NCBI Accession No.**

NP\_003917

**Alternative Names**

Methyl-CpG-binding domain protein 3, Methyl CpG binding domain protein 3, Methyl-CpG-binding protein MBD3

## PRODUCT SPECIFICATION

---

**Molecular Weight**

35.2 kDa (314aa) confirmed by MALDI-TOF

**Concentration**

0.25mg/ml (determined by Bradford assay)

**Formulation**

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 0.2M NaCl, 40% glycerol, 1mM DTT, 1mM EDTA

**Purity**

&gt; 85% by SDS-PAGE

**Tag**

His-Tag

**Application**

SDS-PAGE

**Storage Condition**

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

---

**Description**

Methyl-CpG-binding domain protein 3, also known as MBD3, is a member of the MBD family of transcriptional repressors. Human proteins MECP2, MBD1, MBD2, MBD3, and MBD4 comprise a family of nuclear proteins related by the presence in each of a methyl-CpG binding domain (MBD). However, unlike the other family members, MBD3 is not capable of binding to methylated DNA. The predicted MBD3 protein shares 71% and 94% identity with MBD2 (isoform 1) and mouse Mbd3. MBD3 is a subunit of the NuRD, a multisubunit complex containing nucleosome remodeling and histone deacetylase activities. MBD3 mediates the association of

# Recombinant human MBD3 protein

Catalog Number: ATGP1747

metastasis-associated protein 2 (MTA2) with the core histone deacetylase complex. Recombinant human MBD3 protein, fused to His-tag at N-terminus, was expressed in *E. coli* and purified by using conventional chromatography techniques.

## Amino acid Sequence

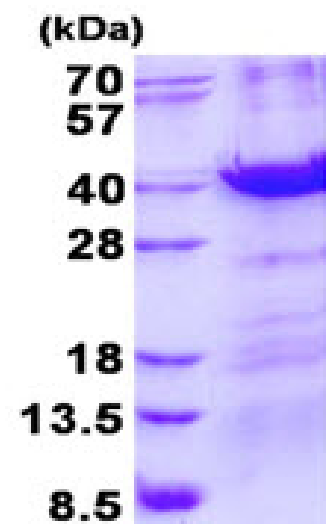
MGSSHHHHHHH SSGLVPRGSH MGSMERKRWE CPALPQGWER EEVPRRSGLS AGHRDVFYYS PSGKKFRSKP  
QLARYLGGSM DLSTDFRGTG KMLMSKMNKS RQRVRYDSSN QVKGKPD LNT ALPVRQTASI FKQPVTKITN HPSNKVKSDP  
QKAVDQPRQL FWEKKLSGLN AFDIAEELVK TMDLPKGLQG VGP GCTDETL LSAIASALHT STMPITGQLS AAVEKNPGVW  
LNTTQPLCKA FMVTDEDIRK QEELVQQVRK RLEEALMADM LAHVEELARD GEAPLDKACA EDDDEEDEEE EEEEPDPDPE  
MEHV

## General References

Nan X., et al. (1998) *Nature*. 393:386-389  
Hendrich B., et al. (1999) *Mamm Genome*. 10: 906-912.

## DATA

### SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

15% SDS-PAGE (3ug)