

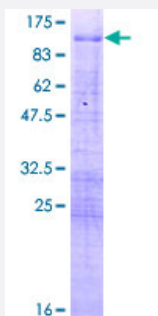
Full-Length

MBD1 (Human) Recombinant Protein (P01)

Catalog # H00004152-P01

Size 25 ug, 10 ug

Applications



Specification

Product Description

Human MBD1 full-length ORF (NP_056671.2, 1 a.a. - 605 a.a.) recombinant protein with GST-tag at N-terminal.

Sequence

MAEDWLDCPALGPGWKRREVFRKSGATCGRSDTYQSPGDRIRSKVELTRYLGPACDLTLFDF
KQGILCYPAPKAHPVAVASKKRKKPSRPAKTRKRQVGPQSGEVRKEAPRDETKADTDAPASF
PAPGCCENCISFSGDGTQRQLKTLCKDCRAQRIAFNREQRMFKRVGCGECAACQVTEDCGA
CSTCLLQLPHDVASGLFCKCERRRCLRVERS RGCVCRCQTQEDCGHCPICLRPPRPLRRQ
WKCVQRRCLRGKHARRKGGCD SKMAARRRPGAQPLPPPPPSQSPEPTEPHPRALAPSPPAEF
IYYCDEDELQPYTNRRQNRKCGACAACLRMD CGRCDFCCDKPKFGGSNQKRQKCRWRQCL
QFAMKRLPSVWSESEDGAGSPPPYRRRKRPSSARRHHLGPTLKPTLATRTAQPDHTQAPTQK
EAGGGFVLPPPGTDLVFLREGASSPVQVGPVAASTEALLQEAQCSGLSWVVALPQVKQEAD
TQDEWTPGTAVLTSPVLVPGCPSKAVDPGLPSVKQEPDPPEEDKEENKDD SASKLAPEEEAG
GAGTPVITEIFSLGGTRFRDTAVWLPRSKDLKKPGARKQ

Host

Wheat Germ (in vitro)

Theoretical MW (kDa)

93

Preparation Method

[in vitro wheat germ expression system](#)

Purification

Glutathione Sepharose 4 Fast Flow

Quality Control Testing

12.5% SDS-PAGE Stained with Coomassie Blue.

Storage Buffer	50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — MBD1

Entrez GeneID	4152
GeneBank Accession#	NM_015846.2
Protein Accession#	NP_056671.2
Gene Name	MBD1
Gene Alias	CXXC3, PCM1, RFT
Gene Description	methyl-CpG binding domain protein 1
Omim ID	156535
Gene Ontology	Hyperlink

Gene Summary	DNA methylation is the major modification of eukaryotic genomes and plays an essential role in mammalian development. 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). Each of these proteins, with the exception of MBD3, is capable of binding specifically to methylated DNA. MECP2, MBD1 and MBD2 can also repress transcription from methylated gene promoters. Five transcript variants of the MBD1 are generated by alternative splicing resulting in protein isoforms that contain one MBD domain, two to three cysteine-rich (CXXC) domains, and some differences in the COOH terminus. All five transcript variants repress transcription from methylated promoters; in addition, variants with three CXXC domains also repress unmethylated promoter activity. MBD1 and MBD2 map very close to each other on chromosome 18q21. [provided by RefSeq]
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Other Designations

OTTHUMP00000163504|OTTHUMP00000163506|OTTHUMP00000163507|methyl-CpG binding domain protein 1 isoform PCM1|the regulator of fibroblast growth factor 2 (FGF-2) transcription

Publication Reference

- [Examination of the specificity of DNA methylation profiling techniques towards 5-methylcytosine and 5-hydroxymethylcytosine.](#)

Jin SG, Kadam S, Pfeifer GP.

Nucleic Acids Research 2010 Jun; 38(11):e125.

Application: Func, Recombinant protein

Disease

- [Adenocarcinoma](#)
- [Carcinoma](#)
- [Genetic Predisposition to Disease](#)
- [Head and Neck Neoplasms](#)
- [Lung Neoplasms](#)
- [Neoplasm Recurrence](#)
- [Neoplasms](#)