

MBD1 (Human) Recombinant Protein (Q01)

Catalog # H00004152-Q01 Size 25 ug, 10 ug

Applications



| Specification | |
|-------------------------|--|
| Product Description | Human MBD1 partial ORF (NP_056671, 415 a.a 508 a.a.) recombinant protein with GST-tag at N -terminal. |
| Sequence | HHLGPTLKPTLATRTAQPDHTQAPTKQEAGGGFVLPPPGTDLVFLREGASSPVQVPGPVAASTE ALLQEAQCSGLSWVVALPQVKQEKADTQDE |
| Host | Wheat Germ (in vitro) |
| Theoretical MW (kDa) | 36.08 |
| 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 | <u>4152</u> |
| GeneBank Accession# | <u>NM_015846</u> |
| Protein Accession# | <u>NP_056671</u> |
| Gene Name | MBD1 |
| Gene Alias | CXXC3, PCM1, RFT |
| Gene Description | methyl-CpG binding domain protein 1 |
| Omim ID | <u>156535</u> |
| Gene Ontology | <u>Hyperlink</u> |
| Gene Summary | DNA methylation is the major modification of eukaryotic genomes and plays an essential role in m ammalian development. Human proteins MECP2, MBD1, MBD2, MBD3, and MBD4 comprise a f amily 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 methylat ed DNA. MECP2, MBD1 and MBD2 can also repress transcription from methylated gene promot ers. Five transcript variants of the MBD1 are generated by alternative splicing resulting in protein i soforms that contain one MBD domain, two to three cysteine-rich (CXXC) domains, and some diff erences 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 |
| Other Designations | OTTHUMP00000163504 OTTHUMP00000163506 OTTHUMP00000163507 methyl-CpG bindin g domain protein 1 isoform PCM1 the regulator of fibroblast growth factor 2 (FGF-2) transcription |

Disease



- Adenocarcinoma
- Carcinoma
- Genetic Predisposition to Disease
- Head and Neck Neoplasms
- Lung Neoplasms
- Neoplasm Recurrence
- Neoplasms