

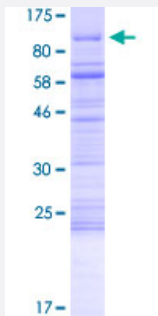
Full-Length

MBD4 (Human) Recombinant Protein (P02)

Catalog # H00008930-P02

Size 25 ug, 10 ug

Applications



Specification

Product Description

Human MBD4 full-length ORF (ADZ15439.1, 1 a.a. - 574 a.a.) recombinant protein with GST tag at N-terminal.

Sequence

MGTTGLESLSLGDRGAAPTVTSSERLVPDPPNDLRKEDVAMELERVGEDEEQMMIKRSSECNP
LLQEPIASAQFGATAGTECRKSVPCGWERVVKQRLFGKTAGRFDVYFISPQGLKFRSKSSLANYL
HKNGETSLKPEDFDFTVLSKRGISRYKDCSMAALTSHLQNSNNSNWNLRTRSKCKKDVFMPP
SSSELQESRGLSNFTSTHLLKEDGVDVNFVRKPKGKVTILKGPIKKTGCRKSCSGFV
QSDSKRESVCNKADAESPEVAQKSQDLRTVCISDAGACGETLSVTSEENSLVKKKERSLSSGS
NFCSEQKTSGIINKFCSAKDSEHNEKYEDTFLESEEIGTKVEVVERKEHLHTDILKRGSEMDNNCS
PTRKDFTEDTIPRTQIERKTSLYFSSKYNKEALSPRRKAFKKWTPPRSPFNLVQETLFHDPWKL
LIATIFLNRTSGKMAIPVLWKFLKYPKSAEVARTADWRDVSELLKPLGLYDLRAKTIVKFSDEYLT
QWKYPIELHGIGKYGNDSYRIFCVNEWKQVHPEDHKLNKYHDWLWENHEKLSLS

Host

Wheat Germ (in vitro)

Theoretical MW (kDa)

89.6

Interspecies Antigen Sequence

Mouse (65); Rat (65)

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 — MBD4

Entrez GeneID	8930
GeneBank Accession#	JF432222.1
Protein Accession#	ADZ15439.1
Gene Name	MBD4
Gene Alias	MED1
Gene Description	methyl-CpG binding domain protein 4
Omim ID	603574
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. MBD4 may function to mediate the biological consequences of the methylation signal. In addition, MBD4 has protein sequence similarity to bacterial DNA repair enzymes and thus may have some function in DNA repair. Further, MBD4 gene mutations are detected in tumors with primary microsatellite-instability (MSI), a form of genomic instability associated with defective DNA mismatch repair, and MBD4 gene meets 4 of 5 criteria of a bona fide MIS target gene. [provided by RefSeq]

Other Designations

3,N(4)-ethenocytosine glycosylase|G/5-fluorouracil mismatch glycosylase with biphasic kinetics|G/T mismatch glycosylase|G/U mismatch glycosylase|putative methyl-CpG binding protein

Pathway

- [Base excision repair](#)

Disease

- [Adenocarcinoma](#)
- [Carcinoma](#)
- [DNA Damage](#)
- [Esophageal Neoplasms](#)
- [Gastrointestinal Neoplasms](#)
- [Genetic Predisposition to Disease](#)
- [Graft vs Host Disease](#)
- [Lung carcinoma](#)
- [Lung Neoplasms](#)
- [Microsatellite Instability](#)
- [Multiple Sclerosis](#)
- [Pulmonary Disease](#)
- [Purpura](#)
- [Small Cell Lung Carcinoma](#)

- [Urinary Bladder Neoplasms](#)
- [Werner syndrome](#)