# MBD3 polyclonal antibody

Catalog # PAB2214 Size 400 uL

# Applications



# Western Blot (Transfected lysate)

Western blot analysis of MBD3 (arrow) using rabbit MBD3 polyclonal antibody (Cat # PAB2214). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the MBD3 gene (Lane 2) (Origene Technologies).



### Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections)

Formalin-fixed and paraffin-embedded human cancer tissue reacted with the MBD3 polyclonal antibody (Cat # PAB2214), which was peroxidaseconjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma.

Specification	
Product Description	Rabbit polyclonal antibody raised against synthetic peptide of MBD3.
Immunogen	A synthetic peptide (conjugated with KLH) corresponding to residues surrounding E279 of human M BD3.
Host	Rabbit
Reactivity	Human, Mouse
Form	Liquid
Purification	Ammonium sulfate precipitation



# **Product Information**

Recommend Usage	Western Blot (1:1000) Immunohistochemistry (1:50-100) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.09% sodium azide)
Storage Instruction	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

# Applications

#### Western Blot (Transfected lysate)

Western blot analysis of MBD3 (arrow) using rabbit MBD3 polyclonal antibody (Cat # PAB2214). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the MBD3 gene (Lane 2) (Origene Technologies).

#### Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Formalin-fixed and paraffin-embedded human cancer tissue reacted with the MBD3 polyclonal antibody (Cat # PAB2214), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma.

# Gene Info — MBD3

Entrez GenelD	<u>53615</u>
Protein Accession#	<u>O95983</u>
Gene Name	MBD3
Gene Alias	-
Gene Description	methyl-CpG binding domain protein 3
Omim ID	<u>603573</u>
Gene Ontology	<u>Hyperlink</u>



# **Product Information**

**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). However, unlike the other family members, MBD3 is not capable of binding to methylated DNA. T he predicted MBD3 protein shares 71% and 94% identity with MBD2 (isoform 1) and mouse Mbd 3. MBD3 is a subunit of the NuRD, a multisubunit complex containing nucleosome remodeling an d histone deacetylase activities. MBD3 mediates the association of metastasis-associated protei n 2 (MTA2) with the core histone deacetylase complex. [provided by RefSeq

#### **Other Designations**

### **Publication Reference**

- Biphasic kinetics of the human DNA repair protein MED1 (MBD4), a mismatch-specific DNA N-glycosylase.
  Petronzelli F, Riccio A, Markham GD, Seeholzer SH, Stoerker J, Genuardi M, Yeung AT, Matsumoto Y, Bellacosa A.
  The Journal of Biological Chemistry 2000 Oct; 275(42):32422.
- <u>A mammalian protein with specific demethylase activity for mCpG DNA.</u>

Bhattacharya SK, Ramchandani S, Cervoni N, Szyf M. Nature 1999 Feb; 397(6720):579.

Identification and characterization of a family of mammalian methyl-CpG binding proteins.

Hendrich B, Bird A. Molecular and Cellular Biology 1998 Nov; 18(11):6538.

Application: Band shift assay, Recombinant protein