

**TET1 Rabbit mAb [9830]**

**Cat NO. :A83217**

**Information:**

Applications	Reactivity:	UniProt ID:	MW(kDa)	Host	Isotype	Size
WB,IHC	H,M	Q3URK3	260KDa	Rabbit	IgG	50ul,100ul,200ul

**Applications detail:**

Application	Dilution
WB	1:1000-2000
IHC	1:100
The optimal dilutions should be determined by the end user	

**Conjugate:**

UnConjugate

**Form:**

Liquid

**sensitivity:**

Endogenous

**Purification:**

Protein A purification

**Specificity:**

Antibody is produced by immunizing animals with a synthetic peptide of Human TET1.

**Storage buffer and conditions:**

Antibody store in 10 mM PBS, 0.5mg/ml BSA, 50% glycerol (buffer) .

Shipped at 4°C. Store at -20°C or -80°C.

Products are valid for one natural year of receipt.Avoid repeated freeze / thaw cycles.

**Tissue specificity:**

Present in embryonic stem cells (ES cells) when its paralogs TET2 and TET3 are not detectably expressed..

**Subcellular location:**

Nucleus. Chromosome.

**Function:**

Dioxygenase that catalyzes the conversion of the modified genomic base 5-methylcytosine (5mC) into 5-hydroxymethylcytosine (5hmC) and plays a key role in active DNA demethylation (PubMed:21496894). Also mediates subsequent conversion of 5hmC into 5-formylcytosine (5fC), and conversion of 5fC to 5-carboxylcytosine (5caC) (PubMed:21778364). In addition to its role in DNA demethylation, plays a more general role in chromatin regulation by recruiting histone modifying protein complexes to alter histone marks and chromatin accessibility, leading to both activation and repression of gene expression (PubMed:28504700, PubMed:32286661). Plays therefore a role in many biological processes and diseases, including stem cell

**Introduction:** **wB:** Western Blot **IP:** Immunoprecipitation **IHC:** Immunohistochemistry **ChIP:** Chromatin Immunoprecipitation **ICC/IF:** Immunocytochemistry/Immunofluorescence **F:** Flow Cytometry

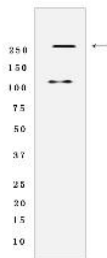
**Cross Reactivity:** **H:** human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm** D. melanogaster **X:** Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Hr:** horse

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maintenance, T and B-cell development, inflammation regulation, iron homeostasis, neural activity or DNA repair (PubMed:31089182, PubMed:32855402, PubMed:33895792). Involved in the balance between pluripotency and lineage commitment of cells it plays a role in embryonic stem cells maintenance and inner cell mass cell specification (PubMed:28504700). Plays an important role in the tumorigenicity of glioblastoma cells. TET1-mediated production of 5hmC acts as a recruitment signal for the CHTOP-methylosome complex to selective sites on the chromosome, where it methylates H4R3 and activates the transcription of genes involved in glioblastomagenesis (PubMed:25284789). Binds preferentially to DNA containing cytidine-phosphate-guanosine (CpG) dinucleotides over CpH (H=A, T, and C), hemimethylated-CpG and hemimethylated-hydroxymethyl-CpG (By similarity). Plays an essential role in the protection and maintenance of transcriptional and developmental programs together with QSER1 to inhibit the binding of DNMT3A/3B and therefore de novo methylation (By similarity)..

## Validation Data:

### TET1 Rabbit mAb [9830] Images



Western blot(SDS-PAGE) analysis of extracts from ESCs cells lysate using TET1 Rabbit mAb [9830] at dilution of 1:1000 incubated at 4°C over night.

View more information on <http://naturebios.com>

**IMPORTANT:** For western blots, incubate membrane with diluted primary antibody in 1% w/v Milk, 1X TBST at 4°C overnight.