

Rabbit anti-Mouse Tet1 Polyclonal Antibody | anti-Tet1 antibody

(Mouse) Tet1 Antibody (C-term)

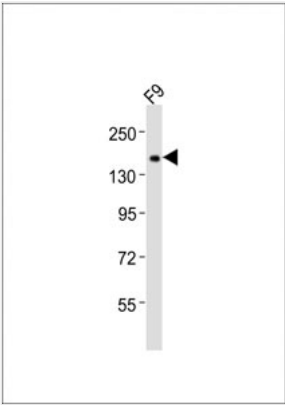
CATALOG # AAA286513	HOST Rabbit	REACTIVITY Mouse	APPLICATIONS ELISA, Western Blot
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PRODUCT SYNONYMS

Tet1; Polyclonal Antibody; (Mouse) Tet1 Antibody (C-term); anti-Tet1 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Mouse
Clonality	Polyclonal
Isotype	Rabbit Ig
Specificity	This mouse Tet1 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 1845-1879 amino acids from the C-terminal region of mouse Tet1.
Purity/Purification	Purified Rabbit Polyclonal Antibody (Pab)
Form/Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Sequence Length	2007
Applicable Applications for anti-Tet1 antibody	ELISA, WB (Western Blot)
Calculated MW	219261
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. Also mediates subsequent conversion of 5hmC into 5-formylcytosine (5fC), and conversion of 5fC to 5-carboxylcytosine (5caC). Conversion of 5mC into 5hmC, 5fC and 5caC probably constitutes the first step in cytosine demethylation. Methylation at the C5 position of cytosine bases is an epigenetic modification of the mammalian genome which plays an important role in transcriptional regulation. In addition to its role in DNA demethylation, plays a more general role in chromatin regulation. Preferentially binds to CpG-rich sequences at promoters of both transcriptionally active and Polycomb-repressed genes. Involved in the recruitment of the O-GlcNAc transferase OGT to CpG-rich transcription start sites of active genes, thereby promoting histone H2B GlcNAcylation by OGT. Also involved in transcription repression of a subset of genes through recruitment of transcriptional repressors to promoters. 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. Plays an essential 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:).
Cellular location	Nucleus
Tissue location	Present in embryonic stem cells (ES cells)
Preparation and Storage	Store at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.



WB (Western Blot)
Anti-Tet1 Antibody (C-term)at 1:2000 dilution + F9 whole cell lysatesLysates/proteins at 20 ug per lane.SecondaryGoat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilutionPredicted band size : 219 kDaBlocking/Dilution buffer: 5% NFD/MTBST.

NCBI AND UNIPROT INFORMATION

NCBI GI #	241896976
NCBI GeneID	52463
NCBI Accession #	NP_081660.1
NCBI GenBank Nucleotide #	NM_027384.1
UniProt Accession #	Q3URK3; Q6ZPK2; Q9CY36
NCBI Official Full Name	methylcytosine dioxygenase TET1 isoform 2
NCBI Official Synonym Full Names	tet methylcytosine dioxygenase 1
NCBI Official Symbol	Tet1
NCBI Official Synonym Symbols	LCX; Cxxc6; AA517754; BB001228; mKIAA1676; D10Ertd17e; 2510010B09Rik
NCBI Protein Information	methylcytosine dioxygenase TET1
UniProt Protein Name	Methylcytosine dioxygenase TET1
UniProt Gene Name	Tet1
UniProt Synonym Gene Names	Cxxc6; Kiaa1676
UniProt Entry Name	TET1_MOUSE

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.