

Datasheet for ABIN6972860
anti-TET1 antibody (C-Term)[Go to Product page](#)

1 Image

Overview

Quantity:	100 µL
Target:	TET1
Binding Specificity:	C-Term
Reactivity:	Human, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This TET1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Chromatin Immunoprecipitation (ChIP), ChIP DNA-Sequencing (ChIP-seq)

Product Details

Immunogen:	This antibody was raised against a peptide within the C-terminal region of mouse Tet1.
Isotype:	IgG
Characteristics:	<p>Tet1 (Ten-Eleven Translocation-1, methylcytosine dioxygenase) is a protein that catalyzes the conversion of the modified genomic base 5-methylcytosine (5mC) into 5-hydroxymethylcytosine (5hmC) which can lead to cytosine demethylation by either further oxidation via Tet proteins to 5-formylcytosine (5fC) and 5-carboxycytosine (5caC) or deamination into 5-hydroxymethyluracil (5hmU) and then subsequent replacement by unmethylated cytosine by the base excision repair system. Methylation at the C5 position of cytosine bases is an epigenetic modification of the mammalian genome which plays an important role in transcriptional regulation. Tet1 preferentially binds to CpG-rich sequences at promoters of both transcriptionally active and polycomb-repressed genes. By controlling the</p>

Product Details

levels of 5mC and 5hmC at gene promoters, it may regulate the gene expression silencing induced by cytosine methylation. May have a dual function by also repressing the expression 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. Tet1 antibody (pAb) was raised in a Rabbit host. It has been validated for use in Chromatin Immunoprecipitation, ChIP-Seq, Immunohistochemistry and Western blot, it has been shown to react with Human and Mouse samples.

Purification: Affinity Purified

Target Details

Target: TET1

Alternative Name: Tet1 ([TET1 Products](#))

Molecular Weight: 215 kDa

NCBI Accession: [NP_081660](#)

Pathways: [Stem Cell Maintenance](#), [Warburg Effect](#)

Application Details

Application Notes: Optimal working dilution should be determined by the investigator.

Restrictions: For Research Use only

Handling

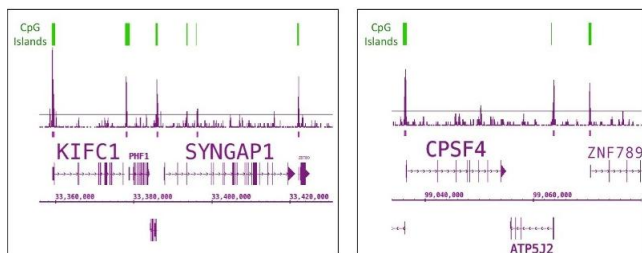
Buffer: Purified IgG in PBS with 30 % glycerol and 0.035 % sodium azide.

Preservative: Sodium azide

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Storage: -20 °C

Storage Comment: Avoid repeated freeze/thaw cycles by aliquoting items into single-use fractions for storage at -20°C for up to 2 years. Keep all reagents on ice when not in storage.



ChIP DNA-Sequencing

Image 1. Tet1 antibody (pAb) tested by ChIP-Seq. ChIP was performed using the ChIP-IT High Sensitivity Kit with 25 µg of chromatin from a human testicle and 4 µL of TET1 antibody. ChIP DNA was sequenced on the Illumina HiSeq and 15 million sequence tags were mapped to identify TET1 binding sites. TET1 ChIP-Seq data shows the expected enrichment of TET1 at CpG islands.