



# Anti-TET1 (aa 1350-1450) polyclonal antibody (DPABH-21678)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Antigen Description</b>	Dioxygenase that catalyzes the conversion of methylcytosine (5mC) to 5-hydroxymethylcytosine (hmC). Plays a role in embryonic stem (ES) cell maintenance and inner cell mass (ICM) cell specification, possibly by participating in DNA demethylation. Specifically binds 5mC, a minor base in mammalian DNA found in repetitive DNA elements that is crucial for retrotransposon silencing and mammalian development. 5mC is present in ES cells and is enriched in the brain, especially in Purkinje neurons. The clear function of hmC is still unclear but it could constitute an intermediate component in cytosine demethylation. A role of hmC in DNA demethylation is supported by TET1 function in ES cell maintenance, which is required to prevent NANOG hypermethylation and maintain NANOG expression in ES cells.
<b>Specificity</b>	Please note this antibody does not give a signal within endogenous lysates.
<b>Immunogen</b>	Synthetic peptide corresponding to Human TET1 aa 1350-1450 conjugated to Keyhole Limpet Haemocyanin (KLH). Database link: Q8NFU7
<b>Isotype</b>	IgG
<b>Source/Host</b>	Rabbit
<b>Species Reactivity</b>	Human
<b>Purification</b>	Immunogen affinity purified
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	WB
<b>Format</b>	Liquid
<b>Size</b>	100 µg

---

<b>Buffer</b>	pH: 7.40; Constituent: PBS
<b>Preservative</b>	0.02% Sodium Azide
<b>Storage</b>	Store at 4°C short term (1-2 weeks). Aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.

---

## GENE INFORMATION

<b>Gene Name</b>	<a href="#">TET1 tet methylcytosine dioxygenase 2 [ Homo sapiens ]</a>
<b>Official Symbol</b>	TET1
<b>Synonyms</b>	TET1; tet methylcytosine dioxygenase 1; LCX; CXXC6; bA119F7.1; methylcytosine dioxygenase TET1; CXXC finger 6; tet oncogene 1; CXXC zinc finger 6; TET1 splice variant VP_DE4; ten-eleven translocation-1; TET1 splice variant VP_DE456; CXXC-type zinc finger protein 6; ten-eleven translocation 1 gene protein; leukemia-associated protein with a CXXC domain;
<b>Entrez Gene ID</b>	<a href="#">80312</a>
<b>Protein Refseq</b>	<a href="#">NP_085128.2</a>
<b>UniProt ID</b>	<a href="#">Q8NFU7</a>
<b>Pathway</b>	Epigenetic regulation of gene expression; TET1,2,3 and TDG demethylate DNA.
<b>Function</b>	iron ion binding; methylcytosine dioxygenase activity; methylcytosine dioxygenase activity; structure-specific DNA binding

---