



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

Antigen Description	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.
Specificity	Please note this antibody does not give a signal within endogenous lysates.
Immunogen	Synthetic peptide corresponding to Human TET1 aa 1350-1450 conjugated to Keyhole Limpet Haemocyanin (KLH). Database link: Q8NFU7
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Human
Purification	Immunogen affinity purified
Conjugate	Unconjugated
Applications	WB
Format	Liquid
Size	100 µg

Buffer	pH: 7.40; Constituent: PBS
Preservative	0.02% Sodium Azide
Storage	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

Gene Name	TET1 tet methylcytosine dioxygenase 2 [Homo sapiens]
Official Symbol	TET1
Synonyms	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;
Entrez Gene ID	80312
Protein Refseq	NP_085128.2
UniProt ID	Q8NFU7
Pathway	Epigenetic regulation of gene expression; TET1,2,3 and TDG demethylate DNA.
Function	iron ion binding; methylcytosine dioxygenase activity; methylcytosine dioxygenase activity; structure-specific DNA binding