

Anti-TET3 Antibody (aa241-568, clone 11E11)
Mouse Anti Human Monoclonal Antibody
Catalog # ALS17342**Specification**

Anti-TET3 Antibody (aa241-568, clone 11E11) - Product Information

Application	WB, IHC-P
Primary Accession	O43151
Predicted	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	193705

Anti-TET3 Antibody (aa241-568, clone 11E11) - Additional Information**Gene ID** 200424

Alias Symbol	TET3
Other Names	
TET3, HCG_40738, KIAA0401	

Target/Specificity
Human TET3**Reconstitution & Storage**

PBS, pH 7.3, 1% BSA, 50% glycerol, 0.02% sodium azide Store at -20°C. Minimize freezing and thawing.

Precautions

Anti-TET3 Antibody (aa241-568, clone 11E11) is for research use only and not for use in diagnostic or therapeutic procedures.

Anti-TET3 Antibody (aa241-568, clone 11E11) - Protein Information**Name** TET3 ([HGNC:28313](#))**Synonyms** KIAA0401**Function**

Dioxygenase that catalyzes the conversion of the modified genomic base 5-methylcytosine (5mC) into 5-hydroxymethylcytosine (5hmC) and plays a key role in epigenetic chromatin reprogramming in the zygote following fertilization (PubMed:31928709). 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 (By similarity). Selectively binds to the promoter region of target genes and contributes to regulate the expression of numerous developmental genes (PubMed:23217707). In zygotes, DNA demethylation occurs selectively in the paternal pronucleus before the first cell division, while the adjacent maternal pronucleus and certain paternally-imprinted loci are protected from this process. Participates in DNA demethylation in the paternal pronucleus by mediating conversion of 5mC into 5hmC, 5fC and 5caC. Does not mediate DNA demethylation of maternal pronucleus because of the presence of DPPA3/PGC7 on maternal chromatin that prevents TET3-binding to chromatin (By similarity). In addition to its role in DNA demethylation, also 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 (PubMed:23353889). Binds preferentially to DNA containing cytidine-phosphate-guanosine (CpG) dinucleotides over CpH (H=A, T, and C), hemimethylated-CpG and hemimethylated-hydroxymethyl- CpG (PubMed:29276034).

Cellular Location

Nucleus {ECO:0000250|UniProtKB:Q8BG87}. Cytoplasm {ECO:0000250|UniProtKB:Q8BG87}. Chromosome {ECO:0000250|UniProtKB:Q8BG87}. Note=At the zygotic stage, localizes in the male pronucleus, while it localizes to the cytoplasm at other preimplantation stages. Binds to the promoter of target genes, close to the transcription start site. {ECO:0000250|UniProtKB:Q8BG87}

Tissue Location

Expressed in colon, muscle, adrenal gland and peripheral blood lymphocytes.

Anti-TET3 Antibody (aa241-568, clone 11E11) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-TET3 Antibody (aa241-568, clone 11E11) - Images