

# TET2 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP17372a

## Product Information

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<b>Application</b>	IHC-P, WB, E
<b>Primary Accession</b>	<a href="#">Q6N021</a>
<b>Other Accession</b>	<a href="#">NP_001120680.1</a> , <a href="#">NP_060098.3</a>
<b>Reactivity</b>	Human
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	Rabbit IgG
<b>Clone Names</b>	RB37907
<b>Calculated MW</b>	223811
<b>Antigen Region</b>	528-554

## Additional Information

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<b>Gene ID</b>	54790
<b>Other Names</b>	Methylcytosine dioxygenase TET2, 11411n2, TET2, KIAA1546
<b>Target/Specificity</b>	This TET2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 528-554 amino acids from the N-terminal region of human TET2.
<b>Dilution</b>	IHC-P~~1:100 WB~~1:1000 E~~Use at an assay dependent concentration.
<b>Format</b>	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.
<b>Storage</b>	Maintain refrigerated 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.
<b>Precautions</b>	TET2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	TET2
<b>Synonyms</b>	KIAA1546
<b>Function</b>	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. Has a preference for 5-hydroxymethylcytosine in CpG motifs. 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, 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.

**Cellular Location**

Nucleus. Chromosome. Note=Localization to chromatin depends upon monoubiquitination at Lys-1299.

**Tissue Location**

Broadly expressed. Highly expressed in hematopoietic cells; highest expression observed in granulocytes Expression is reduced in granulocytes from peripheral blood of patients affected by myelodysplastic syndromes.

## Background

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TET2 may catalyze the conversion of methylcytosine (5mC) to 5-hydroxymethylcytosine (hmC) (By similarity). Play an important role in the regulation of myelopoiesis.

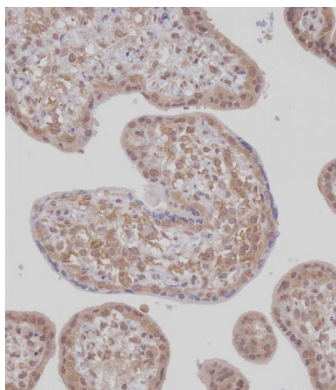
## References

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Smith, A.E., et al. Blood (2010) In press :  
Tefferi, A., et al. Leukemia 24(7):1302-1309(2010)  
Kim, S.T., et al. Prostate (2010) In press :  
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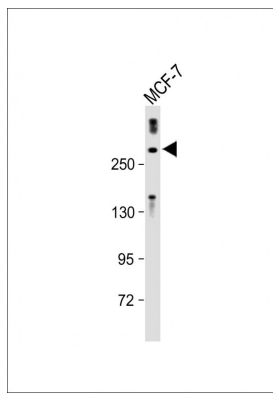
## Images

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Immunohistochemical analysis of AP17372a on paraffin-embedded Human placenta tissue. Tissue was fixed with formaldehyde at room temperature. Heat induced epitope retrieval was performed by EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:100) for 1 hour at room temperature. Undiluted CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.

Anti-TET2 Antibody (N-term) at 1:2000 dilution + MCF-7 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 224 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.