

TET2 Antibody (internal region)
Peptide-affinity purified goat antibody
Catalog # AF3022a**Specification**

TET2 Antibody (internal region) - Product Information

Application	IHC, FC, Pep-ELISA
Primary Accession	Q6N021
Other Accession	NP_001120680.1 , NP_060098.3 , 54790 , 214133 (mouse)
Reactivity	Human
Predicted	Mouse, Dog
Host	Goat
Clonality	Polyclonal
Concentration	0.5 mg/ml
Isotype	IgG
Calculated MW	223811

TET2 Antibody (internal region) - Additional Information**Gene ID** 54790**Other Names**

Methylcytosine dioxygenase TET2, 1.14.11.n2, TET2, KIAA1546

Dilution

IHC~~1:100~500

FC~~1:10~50

Pep-ELISA~~N/A

Format

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

TET2 Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

TET2 Antibody (internal region) - Protein Information**Name** TET2**Synonyms** KIAA1546

Function

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.

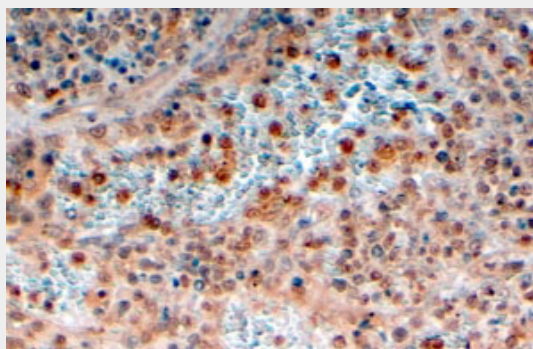
Tissue Location

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.

TET2 Antibody (internal region) - 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](#)

TET2 Antibody (internal region) - Images

AF3022a (4 µg/ml) staining of paraffin embedded Human Spleen. Steamed antigen retrieval with citrate buffer pH 6, HRP-staining.

TET2 Antibody (internal region) - Background

This antibody is expected to recognize both reported isoforms (NP_001120680.1; NP_060098.3).

TET2 Antibody (internal region) - References

Acquired mutations in TET2 are common in myelodysplastic syndromes. Langemeijer SM, Kuiper RP, Berends M, Knops R, Aslanyan MG, Massop M, Stevens-Linders E, van Hoogen P, van Kessel AG, Raymakers RA, Kamping EJ, Verhoef GE, Verburgh E, Hagemeijer A, Vandenberghe P, de Witte T, van der Reijden BA, Jansen JH, Nature Gen. 2009 Jul 41 (7): 838-42. PMID: 19483684