10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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.

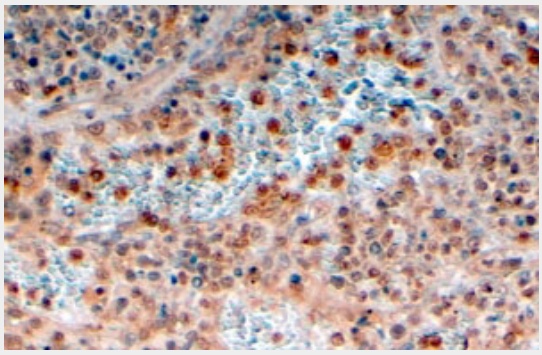
Tissue Location
Broadly expressed. Highly expressed in hematopoietic cells; highest expression observed in granulocytes Expression is reduced in granulocytes from peripheral blood of patients affected by myelodysplastic syndromes.

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 Cytomety
- 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