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TET2 Antibody (N-term) Blocking Peptide

Synthetic peptide
Catalog # BP17372a

Specification

TET2 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession Q6N021

TET2 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 54790

Other Names
Methylcytosine dioxygenase TET2, 11411n2, TET2, KIAA1546

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

TET2 Antibody (N-term) Blocking Peptide - 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 (N-term) Blocking Peptide - Protocols

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

- Blocking Peptides

TET2 Antibody (N-term) Blocking Peptide - Images

TET2 Antibody (N-term) Blocking Peptide - Background

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

TET2 Antibody (N-term) Blocking Peptide - References

Mallo, M., et al. Haematologica 95(10):1798-1800(2010)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 :Rocquain, J., et al. BMC Cancer 10, 401 (2010) :