




Product datasheet

Anti-Tet2 antibody ab99432

1 Image

Overview

Product name	Anti-Tet2 antibody
Description	Goat polyclonal to Tet2
Host species	Goat
Specificity	This antibody is expected to recognize both reported isoforms of Human TET2(NP_001120680.1; NP_060098.3).
Tested applications	Suitable for: IHC-P
Species reactivity	Reacts with: Human Predicted to work with: Mouse, Dog 
Immunogen	Synthetic peptide corresponding to internal amino acids 761-775 (C-PHPQSNNDQQREGSF) of both isoforms of Human TET2 (NP_001120680.1; NP_060098.3).  Run BLAST with  Run BLAST with
Positive control	Human brain lysates (Amygdala and Hippocampus) Human spleen.
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid repeated freeze / thaw cycles.
Storage buffer	pH: 7.30 Preservative: 0.02% Sodium azide Constituents: 0.5% BSA, Tris buffered saline
Purity	Immunogen affinity purified
Purification notes	Purified from goat serum by ammonium sulphate precipitation followed by antigen affinity chromatography using the immunizing peptide.

Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab99432 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		<p>Use a concentration of 2 - 6 µg/ml.</p> <p>In paraffin-embedded Human Spleen shows nuclear staining in select splenocytes.</p> <p>Never incubate primary overnight. We know a lot of customers get non-specific background after overnight incubations. We always recommend to incubate for 1h at room temp. This allows a higher signal/background ratio at better controlled conditions.</p>

Target

Function Catalyzes the conversion of methylcytosine (5mC) to 5-hydroxymethylcytosine (hmC). Plays an important role in myelopoiesis. The clear function of 5-hydroxymethylcytosine (hmC) is still unclear but it may influence chromatin structure and recruit specific factors or may constitute an intermediate component in cytosine demethylation.

Tissue specificity 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.

Involvement in disease Note=TET2 is frequently mutated in myeloproliferative disorders (MPD). These constitute a heterogeneous group of disorders, also known as myeloproliferative diseases or myeloproliferative neoplasms (MPN), characterized by cellular proliferation of one or more hematologic cell lines in the peripheral blood, distinct from acute leukemia. Included diseases are: essential thrombocythemia, polycythemia vera, primary myelofibrosis (chronic idiopathic myelofibrosis). Bone marrow samples from patients display uniformly low levels of hmC in genomic DNA compared to bone marrow samples from healthy controls as well as hypomethylation relative to controls at the majority of differentially methylated CpG sites. Defects in TET2 are a cause of polycythemia vera (PV) [MIM:263300]. A myeloproliferative disorder characterized by abnormal proliferation of all hematopoietic bone marrow elements, erythroid hyperplasia, an absolute increase in total blood volume, but also by myeloid leukocytosis, thrombocytosis and splenomegaly.

Note=TET2 is frequently mutated in systemic mastocytosis; also known as systemic mast cell disease. A condition with features in common with myeloproliferative diseases. It is a clonal disorder of the mast cell and its precursor cells. The clinical symptoms and signs of systemic mastocytosis are due to accumulation of clonally derived mast cells in different tissues, including bone marrow, skin, the gastrointestinal tract, the liver, and the spleen.

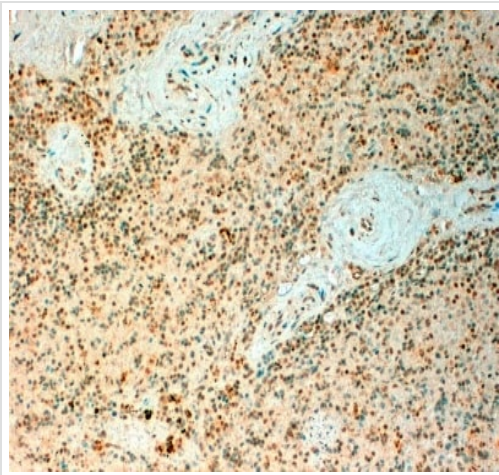
Note=TET2 is frequently mutated in myelodysplastic syndromes, a heterogeneous group of closely related clonal hematopoietic disorders. All are characterized by a hypercellular or hypocellular bone marrow with impaired morphology and maturation, dysplasia of the myeloid, megakaryocytic and/or erythroid lineages, and peripheral blood cytopenias resulting from

ineffective blood cell production. Included diseases are: refractory anemia (RA), refractory anemia with ringed sideroblasts (RARS), refractory anemia with excess blasts (RAEB), refractory cytopenia with multilineage dysplasia and ringed sideroblasts (RCMD-RS). Chronic myelomonocytic leukemia (CMML) is a myelodysplastic/myeloproliferative disease. Myelodysplastic syndromes are considered a premalignant condition in a subgroup of patients that often progresses to acute myeloid leukemia (AML). Bone marrow samples from patients display uniformly low levels of hmC in genomic DNA compared to bone marrow samples from healthy controls as well as hypomethylation relative to controls at the majority of differentially methylated CpG sites.

Sequence similarities

Belongs to the TET family.

Images



Immunohistochemical staining of paraffin embedded human spleen with ab99432 at 4 µg/mL. Heat mediated antigen retrieval was performed with citrate buffer, pH 6.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Tet2 antibody (ab99432)

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