
TET3 Polyclonal Antibody

(Catalog #A50520)

Background

Dioxygenase that catalyzes the conversion of the modified genomic base 5-methylcytosine (5mC) into 5-hydroxymethylcytosine (5hmC) and plays a key role in epigenetic chromatin reprogramming in the zygote following fertilization. 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. In zygotes, DNA demethylation occurs selectively in the paternal pronucleus before the first cell division, while the adjacent maternal pronucleus and certain paternally-imprinted loci are protected from this process. Participates in DNA demethylation in the paternal pronucleus by mediating conversion of 5mC into 5hmC, 5fC and 5caC. Does not mediate DNA demethylation of maternal pronucleus because of the presence of DPPA3/PGC7 on maternal chromatin that prevents TET3-binding to chromatin. 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.

Description

TET3 Polyclonal Antibody. Unconjugated. Raised in: Rabbit.

Formulation

Liquid. 0.03% Proclin 300, 50% Glycerol, 0.01M PBS, PH 7.4.

Specificity

Human

Isotype

IgG

Uniprot ID

O43151

Purification

>95%, Protein G purified

Immunogen

Recombinant Human Methylcytosine dioxygenase TET3 protein (72-335AA)

Storage

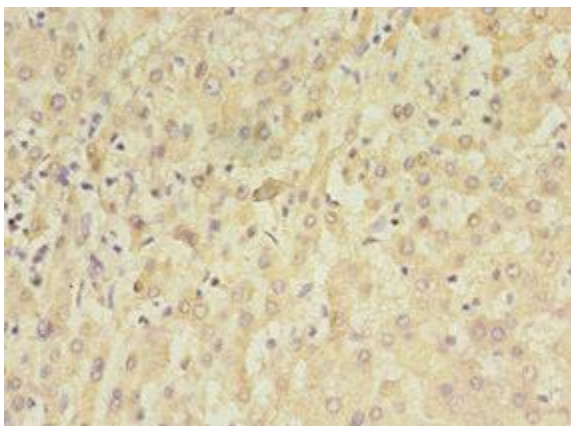
Shipped at 4°C. Upon delivery aliquot and store at -20°C (short-term) or -80°C (long-term). Avoid repeated freeze.

Alternative Names

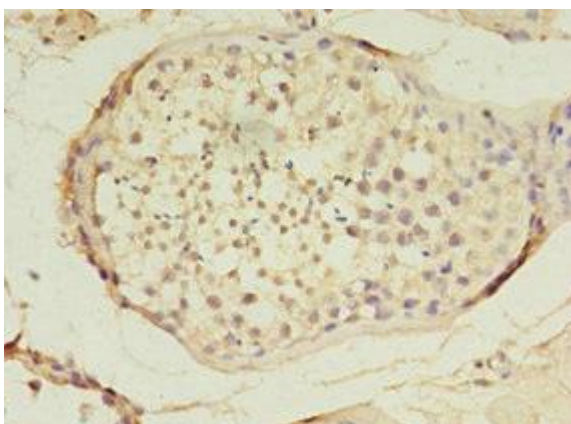
Methylcytosine dioxygenase TET3, TET3

Application

ELISA, IHC; Recommended dilution: IHC:1:20-1:200



Immunohistochemistry of paraffin-embedded human liver tissue using TET3 Antibody at dilution of 1:100



Immunohistochemistry of paraffin-embedded human testis tissue using TET3 Antibody at dilution of 1:100