

# Product datasheet

info@arigobio.com

ARG44560 anti-TET3 antibody

Package: 50 μl Store at: -20°C

### Summary

Product Description Rabbit Polyclonal antibody recognizes TET3

Tested Reactivity Ms, Rat

Tested Application IHC-P

Host Rabbit

**Clonality** Polyclonal

Isotype IgG
Target Name TET3

Conjugation Un-conjugated

Alternate Names TET3; Tet Methylcytosine Dioxygenase 3; HCG\_40738; Methylcytosine Dioxygenase TET3; Tet Oncogene

Family Member 3; Ten-Eleven Translocation 3; MGC22014; Probable Methylcytosine Dioxygenase TET3;

Putative Methylcytosine Dioxygenase; EC 1.14.11.80; EC 1.14.11.N2; KIAA0401; BEFAHRS

#### **Application Instructions**

| Application table | Application  | Dilution      |
|-------------------|--|---------------|
|                   | IHC-P  | 1:100 - 1:500 |
| Application Note  | * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist. |               |

#### **Properties**

Form Liquid

Buffer PBS and 0.09% (W/V) Sodium azide.

Preservative 0.09% (W/V) Sodium azide

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

before use.

Note For laboratory research only, not for drug, diagnostic or other use.

### Bioinformation

Gene Symbol TET3

Gene Full Name tet methylcytosine dioxygenase 3

Background Members of the ten-eleven translocation (TET) gene family, including TET3, play a role in the DNA

methylation process (Langemeijer et al., 2009 [PubMed 19923888]). [supplied by OMIM, Nov 2010]

www.arigobio.com arigo.nuts about antibodies 1/2

Function

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. [UniProt]

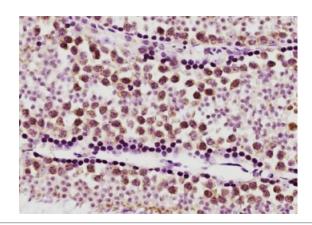
Research Area Gene Regulation antibody

Calculated Mw 194 kDa

PTM Isopeptide bond, Ubl conjugation. [UniProt]

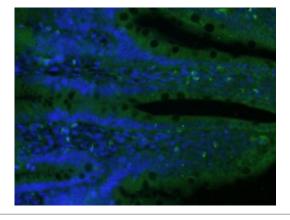
Cellular Localization Chromosome, Cytoplasm, Nucleus. [UniProt]

## **Images**



#### ARG44560 anti-TET3 antibody IHC-P image

Immunohistochemistry: Mouse testis stained with ARG44560 anti-TET3 antibody at 1:200 dilution.



#### ARG44560 anti-TET3 antibody IHC-P image

Immunohistochemistry: Rat colon stained with ARG44560 anti-TET3 antibody at 1:400 dilution.