

ARG55400 anti-TET3 antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes TET3
Tested Reactivity	Hu
Tested Application	IHC-P, WB
Specificity	At least three isoforms of TET3 are known to exist. This anti-TET3 antibody is predicted to not cross react with other TET proteins.
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	TET3
Species	Human
Immunogen	Synthetic peptide (17 aa) within aa. 1520-1570 of Human TET3.
Conjugation	Un-conjugated
Alternate Names	Methylcytosine dioxygenase TET3; B430006D22Rik; BC037432; D230004J03Rik; EC 1.14.11.n2

Application Instructions

Application table	Application	Dilution
	IHC-P	20 µg/ml
	WB	1 µg/ml
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	SK-N-SH Cell Lysate	

Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	PBS and 0.02% Sodium azide
Preservative	0.02% Sodium azide
Concentration	1 mg/ml
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.

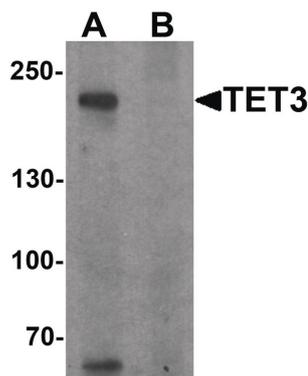
Note

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

Bioinformation

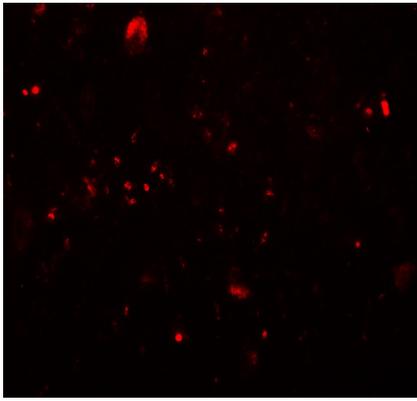
Database links	GeneID: 200424 Human Swiss-port # O43151 Human
Gene Symbol	TET3
Gene Full Name	tet methylcytosine dioxygenase 3
Background	Members of the ten-eleven translocation (TET) gene family, including TET3, play a role in the DNA methylation process (Langemeijer et al., 2009 [PubMed 19923888]). [supplied by OMIM, Nov 2010]
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



ARG55400 anti-TET3 antibody WB image

Western blot: SK-N-SH cell lysate stained with ARG55400 anti-TET3 antibody at 1 µg/ml dilution in (A) the absence and (B) the presence of blocking peptide.



ARG55400 anti-TET3 antibody IHC image

Immunohistochemistry: Human brain tissue stained with ARG55400 anti-TET3 antibody at 20 μ g/ml dilution.