Elabscience®

TET3 Polyclonal Antibody

catalog number: E-AB-93257

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description	
Reactivity	Human;Mouse;Rat
Immunogen	Recombinant fusion protein of mouse TET3
Host	Rabbit
Is otype	IgG
Purification	Affinity purification
Buffer	Phosphate buffered solution, pH 7.4, containing 0.05% stabilizer and 50% glycerol.
Applications	Recommended Dilution
WB	1:500-1:2000
Data	
Western blot analysis of extracts of Neuro-2a cells using TET3 Polyclonal Antibody at 1:500 dilution.	
Observed-MV:230 kDa	
Calculated-MV:194 kDa	
Preparation & Storage	
Storage	Store at -20°C Valid for 12 months. Avoid freeze / thaw cycles.
Shipping	The product is shipped with ice pack,upon receipt,store it immediately at the
	temperature recommended.
Background	

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Dioxygenase that catalyzes the conversion of the modified genomic base 5-methylcytosine (5mC into 5hydroxymethylcytosine (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 5carboxylcytosine (5caC. Conversion of 5mC into 5hmC, 5fC and 5caC probably constitutes the first step in cytosine demethylation. Selectively binds to the promoter region of target genes and contributes to regulate the expression of numerous developmental genes. 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. Binds preferentially to DNA containing cytidine-phosphate-guanosine (CpG dinucleotides over CpH (H=A, T, and C, hemimethylated-CpG and hemimethylated-hydroxymethyl-CpG (By similarity.

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