Datasheet for ABIN5563986

Recombinant anti-TET1 antibody

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Overview

Quantity:	100 µg
Target:	TET1
Reactivity:	Mouse
Host:	Mouse
Antibody Type:	Recombinant Antibody
Clonality:	Monoclonal
Conjugate:	This TET1 antibody is un-conjugated
Application:	Western Blotting (WB)

Product Details

Brand:	AbFlex®
Isotype:	IgG2a
Characteristics:	AbFlex™ TET1 antibody was expressed as full-length IgG with mouse immunoglobulin heavy and light chains (IgG2a isotype) in mammalian 293 cells. TET1(Ten-Eleven Translocation-1, methylcytosine dioxygenase) is a protein that catalyzes the conversion of the modified genomic base 5-methylcytosine (5mC) into 5-hydroxymethylcytosine (5hmC) which can lead to cytosine demethylation by either further oxidation via TET proteins to 5-formylcytosine (5fC) and 5-carboxycytosine (5caC) or deamination into 5-hydroxymethyluracil (5hmU) and then subsequent replacement by unmethylated cytosine by the base excision repair system. Methylation at the C5 position of cytosine bases is an epigenetic modification of the mammalian genome which plays an important role in transcriptional regulation. TET1 preferentially binds to CpG-rich sequences at promoters of both transcriptionally active and

Product Details

	polycomb-repressed genes. By controlling the levels of 5mC and 5hmC at gene promoters, it may regulate the gene expression silencing induced by cytosine methylation. May have a dual function by also repressing the expression of a subset of genes through recruitment of transcriptional repressors to promoters.
Purification:	Ni-NTA

Target Details

Target:	TET1
Alternative Name:	TET1 (TET1 Products)
Molecular Weight:	215 kDa
Pathways:	Stem Cell Maintenance, Warburg Effect

Application Details

Application Notes:	ChIP-Seq: 4 µL per ChIP Western Blot: 1-2 µg/mL
Comment:	AbFlex® Recombinant Antibodies defined antibodies for highly specific, reproducible performance. AbFlex® antibodies are recombinant antibodies (rAbs) that have been generated using defined DNA sequences to produce highly specific, reproducible antibodies. The unique advantages of the AbFlex® antibody are its flexible labeling and purification options. Each AbFlex® antibody contains a Sortase recognition motif (LPXTG) to covalently add fluorophores, enzymatic substrates (HRP, AP...etc), peptides, DNA, drugs or other labels to the antibody in a directed and reproducible manner using our Sortag-IT Labeling Kits. Every antibody also contains a 6xHis tag, which can be used with nickel-based purification systems, and an avidin tag sequence for enzymatic biotin conjugation using the biotin ligase, BirA. AbFlex® antibodies are specifically labeled at the end of the constant region of the heavy chain to avoid interference with antigen recognition and functionality. This is important as it ensures the labeling process maintains the integrity of the antibody so signal is not diminished as a result of non-functional antibodies. In contrast, commonly used chemical labeling methods add labels to the antibody in a random fashion. The randomness of this process has a high potential to block the antigen-binding site and render the antibody ineffective. Chemical labeling can also deposit labels on the Fc region of the antibody which has the potential to obstruct interactions with protein A.

Application Details

Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	Purified IgG in 140 mM Hepes, pH 7.5, 70 mM NaCl, 35 mM NaOAc, 0.035 % sodium azide, and 30 % glycerol.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C