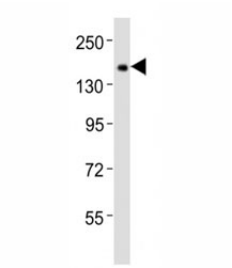
Tet1 Antibody (F53223)

Catalog No.	Formulation	Size
F53223-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F53223-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

Availability	1-3 business days
Species Reactivity	Mouse
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity
UniProt	Q3URK3
Applications	Western Blot : 1:2000
Limitations	This Tet1 antibody is available for research use only.



Western blot testing of Tet1 antibody at 1:2000 dilution + mouse F9 lysate; Predicted molecular weight : 219 kDa (mouse).

Description

Tet1 is a dioxygenase that catalyzes the conversion of the modified genomic base 5-methylcytosine (5mC) into 5-hydroxymethylcytosine (5hmC) and plays a key role in active DNA demethylation. 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. Methylation at the C5 position of cytosine bases is an epigenetic modification of the mammalian genome which plays an important role in transcriptional regulation. In addition to its role in DNA demethylation, plays a more general role in chromatin regulation. Preferentially binds to CpG-rich sequences at promoters of both transcriptionally active and Polycomb-repressed genes. 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. Also involved in transcription repression of a subset of genes through recruitment of transcriptional repressors to promoters. Involved in the balance between pluripotency and lineage commitment of cells it plays a role in embryonic stem cells maintenance and inner cell mass cell specification. [UniProt]

Application Notes

Titration of the Tet1 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

This mouse Tet1 antibody was produced from a rabbit immunized with a KLH conjugated synthetic peptide between 1845-1879 amino acids from the C-terminal region of mouse Tet1.

Storage

Aliquot the Tet1 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.