

Product datasheet

Recombinant human TET1 protein (Active) ab271753

2 Images

Description

Product name	Recombinant human TET1 protein (Active)
Purity	>= 80 % SDS-PAGE. Affinity purified.
Expression system	Baculovirus infected Sf9 cells
Accession	Q8NFU7
Protein length	Protein fragment
Animal free	No
Nature	Recombinant
Species	Human
Predicted molecular weight	80 kDa
Amino acids	1418 to 2136
Tags	DDDDK tag N-Terminus

Specifications

Our [Abpromise guarantee](#) covers the use of **ab271753** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	SDS-PAGE Functional Studies
Form	Liquid

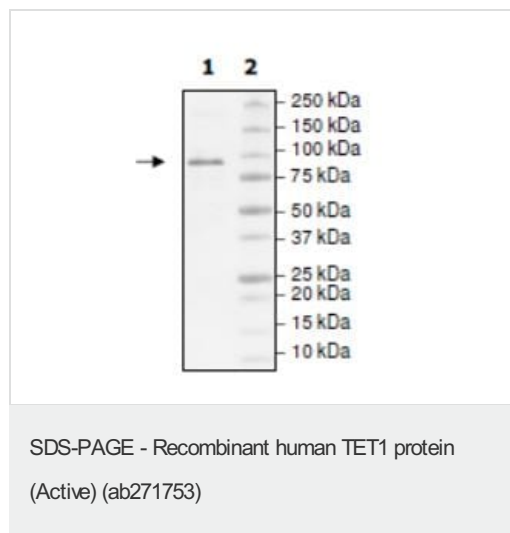
Preparation and Storage

Stability and Storage	Shipped on Dry Ice. Store at -80°C. Avoid freeze / thaw cycle. pH: 8.00 Constituents: 0.63% Tris HCl, 0.64% Sodium chloride, 0.02% Potassium chloride, 0.04% Tween, 20% Glycerol (glycerin, glycerine) 80 µg/ml DDDDK peptide This product is an active protein and may elicit a biological response in vivo, handle with caution.
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General Info

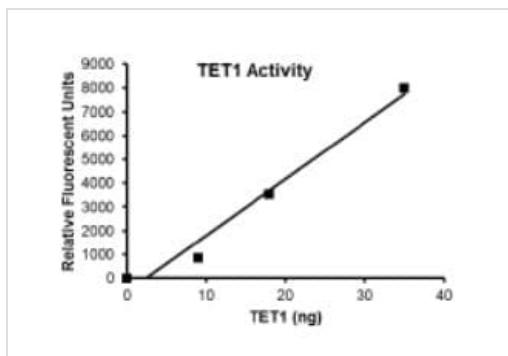
Function	Dioxygenase that catalyzes the conversion of methylcytosine (5mC) to 5-hydroxymethylcytosine (hmC). Plays a role in embryonic stem (ES) cell maintenance and inner cell mass (ICM) cell specification, possibly by participating in DNA demethylation. Specifically binds 5mC, a minor base in mammalian DNA found in repetitive DNA elements that is crucial for retrotransposon silencing and mammalian development. 5mC is present in ES cells and is enriched in the brain, especially in Purkinje neurons. The clear function of hmC is still unclear but it could constitute an intermediate component in cytosine demethylation. A role of hmC in DNA demethylation is supported by TET1 function in ES cell maintenance, which is required to prevent NANOG hypermethylation and maintain NANOG expression in ES cells.
Tissue specificity	Expressed in fetal heart, lung and brain, and in adult skeletal muscle, thymus and ovary. Not detected in adult heart, lung or brain.
Involvement in disease	Note=A chromosomal aberration involving TET1 may be a cause of acute leukemias. Translocation t(10;11)(q22;q23) with MLL. This is a rare chromosomal translocation 5' MLL-TET1 3'.
Sequence similarities	Belongs to the TET family. Contains 1 CXXC-type zinc finger.
Cellular localization	Nucleus.

Images



SDS-PAGE analysis of 1.8 µg ab271753.

Specific activity of ab271753.



Functional Studies - Recombinant human TET1 protein (Active) (ab271753)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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