abcam

Product datasheet

Anti-KAT5 / Tip60 antibody ab23886

11 Abreviews 25 References 3 Images

Overview

Product name	Anti-KAT5 / Tip60 antibody
Description	Rabbit polyclonal to KAT5 / Tip60
Host species	Rabbit
Specificity	ab23886 gives nuclear staining for Tip60 in interphase cells (see below), which is lost upon entry into mitosis (not shown). This signal can be successfully quenched using the immunizing peptide **ab26349**.
Tested applications	**Suitable for:** ICC/IF
Species reactivity	**Reacts with:** Human **Predicted to work with:** Mouse, Rat, Drosophila melanogaster, Zebrafish
Immunogen	Synthetic peptide corresponding to Human KAT5/ Tip60 aa 450 to the C-terminus (C terminal) conjugated to keyhole limpet haemocyanin. Database link: **Q92993** (Peptide available as **ab26349**)
General notes	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide Constituent: PBS Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our

scientific support team who will be happy to help.

Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab23886 in the following tested applications.

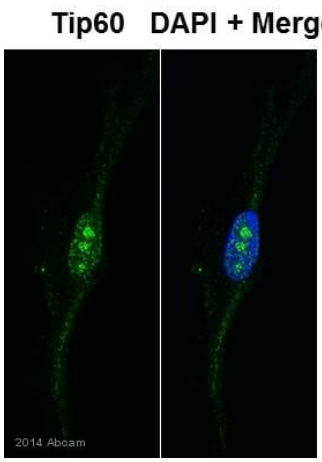
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF	★★★☆☆ **(2)**	Use a concentration of 1 µg/ml.

Target

Function	Catalytic subunit of the NuA4 histone acetyltransferase complex which is involved in transcriptional activation of select genes principally by acetylation of nucleosomal histones H4 and H2A. This modification may both alter nucleosome-DNA interactions and promote interaction of the modified histones with other proteins which positively regulate transcription. This complex may be required for the activation of transcriptional programs associated with oncogene and proto-oncogene mediated growth induction, tumor suppressor mediated growth arrest and replicative senescence, apoptosis, and DNA repair. NuA4 may also play a direct role in DNA repair when recruited to sites of DNA damage. Directly acetylates and activates ATM. In case of HIV-1 infection, interaction with the viral Tat protein leads to KAT5 polyubiquitination and targets it to degradation.
Sequence similarities	Belongs to the MYST (SAS/MOZ) family. Contains 1 C2HC-type zinc finger.
Post-translational modifications	Sumoylated by UBE2I at Lys-430 and Lys-451, leading to increase of its histone acetyltransferase activity in UV-induced DNA damage response, as well as its translocation to nuclear bodies. Phosphorylated on Ser-86 and Ser-90; enhanced during G2/M phase. Phosphorylated form has a higher activity. Ubiquitinated by MDM2, leading to its proteasome-dependent degradation.
Cellular localization	Nucleus > nucleolus. Cytoplasm > perinuclear region. Upon stimulation with EDN1, it is exported from the nucleus to the perinuclear region and UV irradiation induces translocation into punctuate subnuclear structures named nuclear bodies.

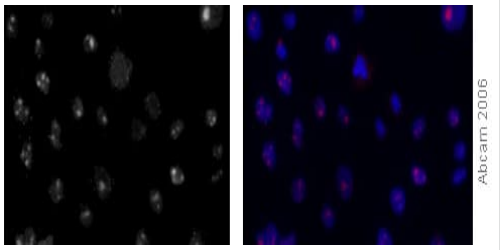
Images



Immunocytochemistry/ Immunofluorescence - Anti-KAT5 / Tip60 antibody (ab23886)

This image is courtesy of an anonymous Abreview

ab23886 staining KAT5 / Tip60 in human primary fibroblasts by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with paraformaldehyde, permeabilized with 0.2% Triton X-100 and blocked with 2% BSA for 1 hour at room temperature. Samples were incubated with primary antibody (1/500 in PBS + 2% BSA) for 2 hours. An Alexa Fluor® 488-conjugated goat anti-rabbit IgG polyclonal (1/500) was used as the secondary antibody.

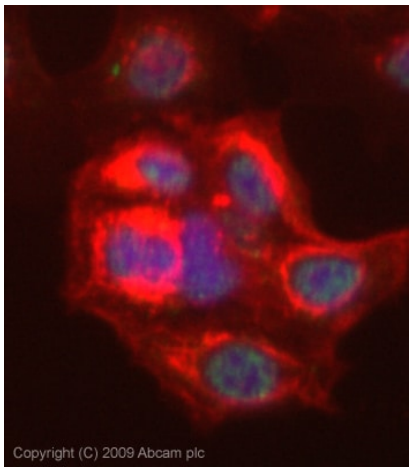


Immunocytochemistry/ Immunofluorescence - Anti-KAT5 / Tip60 antibody (ab23886)

This image is courtesy of Samantha Bennett and Bruno Amati, European Institute of Oncology

HeLa cells were plated on poly-D lysine coated cover slips, fixed with 4% w/v paraformaldehyde (10 min), permeabilised in 0.1% Triton X-100 in PBS (10 min), incubated for 1 hour at 37°C with ab23886 and stained with a FITC-conjugated secondary antibody and DAPI. Left panel: FITC signal. Right panel: FITC+DAPI.

ab23886 gives a specific nuclear staining for Tip60. Nucleoli are stained more intensely, as also demonstrated by co-staining with known nucleolar makers (not shown). The signal is blocked by pre-incubation of ab23886 with the cognate immunogenic peptide.



Immunocytochemistry/ Immunofluorescence - Anti-KAT5 / Tip60 antibody (ab23886)

ICC/IF image of ab23886 stained MCF7 cells. The cells were 100% methanol fixed (5 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab23886, 1µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.

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