

# Rabbit Anti-KAT5 / Tip60 antibody

## SL13686R

<b>Product Name:</b>	KAT5 / Tip60
Chinese Name:	TIP60抗体
Alias:	Tip60; 60 kDa Tat interactive protein; 60 kDa Tat-interactive protein; cPLA(2) interacting protein; cPLA(2)-interacting protein; cPLA2; cPLA2 interacting protein; ESA1; Histone acetyltransferase HTATIP; Histone acetyltransferase KAT5; HIV1 tat; HIV 1 Tat interactive protein; HIV 1 Tat interactive protein; HTATIP; HTATIP1; K(lysine) acetyltransferase 5; K-acetyltransferase 5; KAT5; KAT5_HUMAN; Lysine acetyltransferase 5; PLIP; Tat interacting protein, 60kDa; TIP.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Pig, Horse, Rabbit, Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	59kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human KAT5 / Tip60:51-150/513
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
Product Detail:	MOZ (monocytic leukemia zinc finger protein) is a chromatin-associated histone

acetyltransferase (HAT) that regulates chromatin remodeling and transcription. The MOZ gene was initially isolated as a consequence of two variant translocations that were identified in a distinct subtype of acute myeloid leukemias and resulted in the formation of MOZ fusion proteins. These fusions involve the HAT domain of MOZ with the activation domain of either transcriptional coactivator protein TIF2/GRIP1 or CBP, and lead to enhanced transcriptional activation by a mechanism involving aberrant histone acetylation. Additional MOZ related proteins, including MORF (MOZ related factor) and TIP60 (TAT interacting proteins 60), share significant similarities with MOZ including the putuative HAT domain. MORF also contains a strong transcriptional repression domain at its N terminus and a highly potent activation domain at the C terminus, suggesting that MORF has both HAT activity and contributes to the regulation of transcriptional activation. TIP60 was originally identified as a coactivator for the HIV TAT protein and also functions as a nuclear hormone receptor coactivator that enhances ligand dependent steroid receptor-mediated transactivation involving the androgen, estrogen and progesterone receptors.

#### 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.

#### **Subcellular Location:**

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.

#### **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.

#### Similarity:

Belongs to the MYST (SAS/MOZ) family.

Contains 1 C2HC-type zinc finger.

SWISS:

Q92993

Gene ID:

10524

Database links:

Entrez Gene: 10524 Human

Entrez Gene: 81601 Mouse

Entrez Gene: 192218 Rat

Omim: 601409 Human

SwissProt: Q92993 Human

SwissProt: Q8CHK4 Mouse

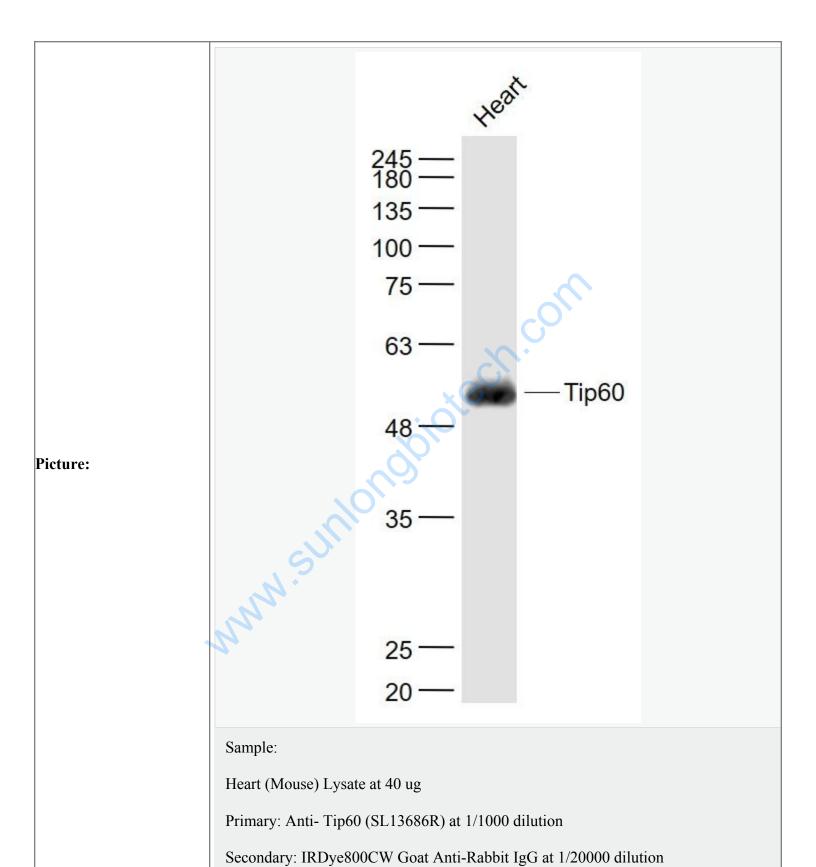
SwissProt: Q99MK2 Rat

Unigene: 397010 Human

### **Important Note:**

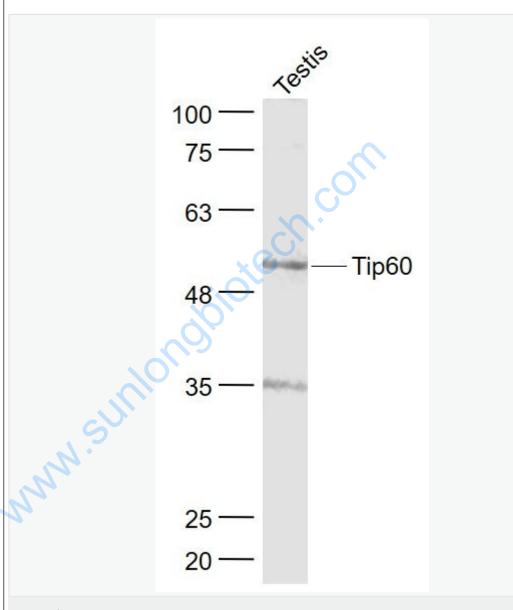
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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Predicted band size: 59 kD

Observed band size: 59 kD



# Sample:

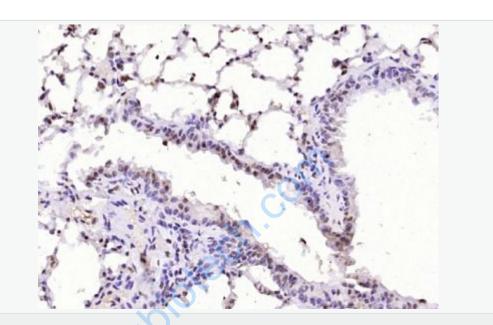
Testis (Mouse) Lysate at 40 ug

Primary: Anti- Tip60 (SL13686R) at 1/1000 dilution

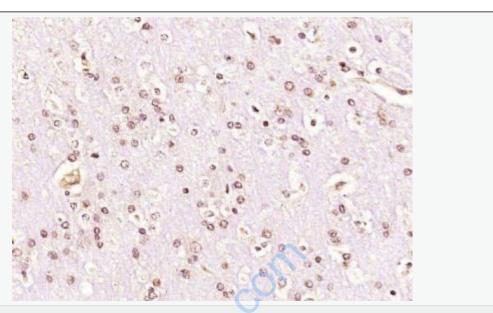
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 59 kD

Observed band size: 59 kD



Paraformaldehyde-fixed, paraffin embedded (mouse lung tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (KAT5) Polyclonal Antibody, Unconjugated (SL13686R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (rat brain tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (KAT5) Polyclonal Antibody, Unconjugated (SL13686R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.