

Anti-TIP60 antibody



Description Rabbit polyclonal to TIP60.

Model STJ96029

Host Rabbit

Reactivity Human, Mouse

Applications ELISA, IF, IHC

Immunogen Synthesized peptide derived from human TIP60 around the non-

phosphorylation site of S86.

Immunogen Region 30-110 aa

Gene ID <u>10524</u>

Gene Symbol <u>KAT5</u>

Dilution range IHC 1:100-1:300IF 1:200-1:1000ELISA 1:5000

Specificity TIP60 Polyclonal Antibody detects endogenous levels of TIP60 protein.

Purification The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Note For Research Use Only (RUO).

Protein Name Histone acetyltransferase KAT5 60 kDa Tat-interactive protein Tip60 Histone

acetyltransferase HTATIP HIV-1 Tat interactive protein Lysine

acetyltransferase 5 cPLA 2-interacting protein

Molecular Weight 55 kDa

Clonality Polyclonal

Unconjugated Conjugation

Isotype IgG

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide. **Formulation**

1 mg/ml Concentration

Store at -20°C, and avoid repeat freeze-thaw cycles. **Storage Instruction**

Database Links HGNC:5275OMIM:601409

Histone acetyltransferase KAT5 60 kDa Tat-interactive protein Tip60 Histone **Alternative Names**

acetyltransferase HTATIP HIV-1 Tat interactive protein Lysine

acetyltransferase 5 cPLA 2-interacting protein

Catalytic subunit of the NuA4 histone acetyltransferase complex which is **Function**

> 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. Component of a SWR1-like complex that specifically mediates the removal of histone H2A.Z/H2AFZ from the nucleosome. In case of HIV-1 infection, interaction with the viral Tat protein leads to KAT5

polyubiquitination and targets it to degradation. Relieves NR1D2-mediated inhibition of APOC3 expression by acetylating NR1D2. Promotes FOXP3 acetylation and positively regulates its transcriptional repressor activity.

Cellular Localization Nucleus 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 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. The phosphorylated form has a higher HAT activity. Ubiquitinated by MDM2, leading to its proteasome-dependent

degradation. Autoacetylation at Lys-327 is required for proper function.

Modifications