

**KAT2A Antibody (C-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP13089B****Specification**

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**KAT2A Antibody (C-term) - Product Information**

Application	WB,E
Primary Accession	<a href="#">O92830</a>
Other Accession	<a href="#">O9JHD2</a> , <a href="#">NP_066564.2</a> , <a href="#">A0A0R4IXF6</a>
Reactivity	Human
Predicted	Zebrafish, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	93926
Antigen Region	611-638

**KAT2A Antibody (C-term) - Additional Information****Gene ID** 2648**Other Names**

Histone acetyltransferase KAT2A, General control of amino acid synthesis protein 5-like 2, Histone acetyltransferase GCN5, HsGCN5, Lysine acetyltransferase 2A, STAF97, KAT2A, GCN5, GCN5L2, HGCN5

**Target/Specificity**

This KAT2A antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 611-638 amino acids from the C-terminal region of human KAT2A.

**Dilution**

WB~~1:1000

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

KAT2A Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**KAT2A Antibody (C-term) - Protein Information****Name** KAT2A {ECO:0000303|PubMed:27796307, ECO:0000312|HGNC:HGNC:4201}

**Function** Protein lysine acyltransferase that can act as a acetyltransferase, glutaryltransferase, succinyltransferase or malonyltransferase, depending on the context (PubMed:[29211711](#), PubMed:[35995428](#)). Acts as a histone lysine succinyltransferase: catalyzes succinylation of histone H3 on 'Lys-79' (H3K79succ), with a maximum frequency around the transcription start sites of genes (PubMed:[29211711](#)). Succinylation of histones gives a specific tag for epigenetic transcription activation (PubMed:[29211711](#)). Association with the 2-oxoglutarate dehydrogenase complex, which provides succinyl-CoA, is required for histone succinylation (PubMed:[29211711](#)). In different complexes, functions either as an acetyltransferase (HAT) or as a succinyltransferase: in the SAGA and ATAC complexes, acts as a histone acetyltransferase (PubMed:[17301242](#), PubMed:[19103755](#), PubMed:[29211711](#)). Has significant histone acetyltransferase activity with core histones, but not with nucleosome core particles (PubMed:[17301242](#), PubMed:[19103755](#), PubMed:[21131905](#)). Has a strong preference for acetylation of H3 at 'Lys-9' (H3K9ac) (PubMed:[21131905](#)). Acetylation of histones gives a specific tag for epigenetic transcription activation (PubMed:[17301242](#), PubMed:[19103755](#), PubMed:[29211711](#)). Recruited by the XPC complex at promoters, where it specifically mediates acetylation of histone variant H2A.Z.1/H2A.Z, thereby promoting expression of target genes (PubMed:[29973595](#), PubMed:[31527837](#)). Involved in long-term memory consolidation and synaptic plasticity: acts by promoting expression of a hippocampal gene expression network linked to neuroactive receptor signaling (By similarity). Acts as a positive regulator of T-cell activation: upon TCR stimulation, recruited to the IL2 promoter following interaction with NFATC2 and catalyzes acetylation of histone H3 at 'Lys-9' (H3K9ac), leading to promote IL2 expression (By similarity). Required for growth and differentiation of craniofacial cartilage and bone by regulating acetylation of histone H3 at 'Lys-9' (H3K9ac) (By similarity). Regulates embryonic stem cell (ESC) pluripotency and differentiation (By similarity). Also acetylates non- histone proteins, such as CEBPB, PPARGC1A, PLK4 and TBX5 (PubMed:[17301242](#), PubMed:[16753578](#), PubMed:[27796307](#), PubMed:[29174768](#)). Involved in heart and limb development by mediating acetylation of TBX5, acetylation regulating nucleocytoplasmic shuttling of TBX5 (PubMed:[29174768](#)). Acts as a negative regulator of centrosome amplification by mediating acetylation of PLK4 (PubMed:[27796307](#)). Acts as a negative regulator of gluconeogenesis by mediating acetylation and subsequent inactivation of PPARGC1A (PubMed:[16753578](#), PubMed:[23142079](#)). Also acts as a histone glutaryltransferase: catalyzes glutarylation of histone H4 on 'Lys-91' (H4K91glu), a mark that destabilizes nucleosomes by promoting dissociation of the H2A-H2B dimers from nucleosomes (PubMed:[31542297](#)).

#### Cellular Location

Nucleus. Chromosome Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Note=Mainly localizes to the nucleus (PubMed:[27796307](#)). Localizes to sites of DNA damage (PubMed:[25593309](#)) Also localizes to centrosomes in late G1 and around the G1/S transition, coinciding with the onset of centriole formation (PubMed:[27796307](#)).

#### Tissue Location

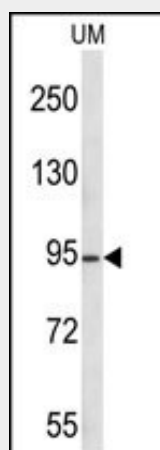
Expressed in all tissues tested.

#### KAT2A Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### KAT2A Antibody (C-term) - Images



KAT2A Antibody (C-term) (Cat. #AP13089b) western blot analysis in uterus tumor cell line lysates (35ug/lane). This demonstrates the KAT2A antibody detected the KAT2A protein (arrow).

#### **KAT2A Antibody (C-term) - Background**

KAT2A, or GCN5, is a histone acetyltransferase (HAT) that functions primarily as a transcriptional activator. It also functions as a repressor of NF-kappa-B (see MIM 164011) by promoting ubiquitination of the NF-kappa-B subunit RELA (MIM 164014) in a HAT-independent manner (Mao et al., 2009 [PubMed 19339690]).

#### **KAT2A Antibody (C-term) - References**

Terreni, M., et al. Retrovirology 7, 18 (2010) :  
Atanassov, B.S., et al. Mol. Cell 35(3):352-364(2009)  
Kelly, T.J., et al. J. Biol. Chem. 284(30):19945-19952(2009)  
Mao, X., et al. Genes Dev. 23(7):849-861(2009)  
Paolinelli, R., et al. Nat. Struct. Mol. Biol. 16(4):412-420(2009)