

KAT2A Rabbit mAb
Catalog # AP75480**Specification**

KAT2A Rabbit mAb - Product Information

Application	WB
Primary Accession	Q92830
Reactivity	Human
Host	Rabbit
Clonality	Monoclonal Antibody
Calculated MW	93926

KAT2A Rabbit mAb - Additional Information**Gene ID** 2648**Other Names**
KAT2A**Dilution**
WB~~1/500-1/1000**Format**
Liquid**KAT2A Rabbit mAb - 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:29211711).

[17301242](http://www.uniprot.org/citations/17301242), PubMed: [19103755](http://www.uniprot.org/citations/19103755), PubMed: [21131905](http://www.uniprot.org/citations/21131905)). Has a strong preference for acetylation of H3 at 'Lys-9' (H3K9ac) (PubMed: [21131905](http://www.uniprot.org/citations/21131905)). Acetylation of histones gives a specific tag for epigenetic transcription activation (PubMed: [17301242](http://www.uniprot.org/citations/17301242), PubMed: [19103755](http://www.uniprot.org/citations/19103755), PubMed: [29211711](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/29973595), PubMed: [31527837](http://www.uniprot.org/citations/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, MRE11, PPARGC1A, PLK4 and TBX5 (PubMed: [16753578](http://www.uniprot.org/citations/16753578), PubMed: [17301242](http://www.uniprot.org/citations/17301242), PubMed: [27796307](http://www.uniprot.org/citations/27796307), PubMed: [29174768](http://www.uniprot.org/citations/29174768), PubMed: [38128537](http://www.uniprot.org/citations/38128537)). Involved in heart and limb development by mediating acetylation of TBX5, acetylation regulating nucleocytoplasmic shuttling of TBX5 (PubMed: [29174768](http://www.uniprot.org/citations/29174768)). Acts as a negative regulator of centrosome amplification by mediating acetylation of PLK4 (PubMed: [27796307](http://www.uniprot.org/citations/27796307)). Acts as a negative regulator of gluconeogenesis by mediating acetylation and subsequent inactivation of PPARGC1A (PubMed: [16753578](http://www.uniprot.org/citations/16753578), PubMed: [23142079](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/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 Rabbit mAb - 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 Rabbit mAb - Images

