

Anti-KAT2A Rabbit Monoclonal Antibody

Introduction

Protein lysine acyltransferase that can act both as an acetyltransferase and succinyltransferase, depending on the context (PubMed:29211711). 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). Acetylation of histones gives a specific tag for epigenetic transcription activation (PubMed:17301242, PubMed:19103755, PubMed:29211711). Involved in long-term memory consolidation and synaptic plasticity: acts by promoting expression of a hippocampal gene expression network linked to neuroactive receptor signaling. 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. Also acetylates non-histone proteins, such as CEBPB, PLK4 and TBX5 (PubMed:17301242, PubMed:29174768, PubMed:27796307). 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).

Product parameters

Alternative Names	GCN5; hGCN5; GCN5L2; PCAF-b
Gene ID	2648
Gene Name	KAT2A
SwissProt ID	Q92830
Host	Rabbit
Reactivity	Human
Molecular Weight	Calculated MW: 94 kDa; Observed MW: 94 kDa
Conjugation	Unconjugated
Ex	-
Em	-

Modification	Unmodified
Clonality	IgG
Isotype	Monoclonal Antibody
Clonality No.	AP-19H9F5
Form	Liquid
Concentration	See label
Carrier	Carrier Not Free
Immunogen	Recombinant protein of human GCN5
Purification	Affinity Purified
Buffer System	50mM Tris-Glycine (pH 7.4), 0.15M NaCl, 40% Glycerol, 0.01% Sodium azide and 0.05% BSA.
Application	WB, IP
Dilution Ratio	WB: 1/500-1/1000 IP: 1/20
Research Field	Epigenetics and Nuclear Signaling
Product Categories	Primary antibody
Shipping	Blue ice
Storage	-20°C
Expiration Date	12 months
Note	Please avoid freeze-thaw cycles.



Protocol

Configure the product according to the application range and recommended dilution ratio.

***Note:** The primary antibody dilution buffer options: WB - Primary Antibody Dilution Buffer (Cat. #: K1200, Not for HRP/AP conjugated antibodies), Immunostaining - Immunol Staining Primary Antibody Dilution Solution (Cat. #: K4655).

Note

1. This product is for scientific research use only.





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