

KAT2A RABBIT MAB

Cat.#: N262265

Product Name: Anti-KAT2A Rabbit Monoclonal Antibody

Synonyms: GCN5; hGCN5; GCN5L2; PCAF-b

UNIPROT ID: Q92830

Background: 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).

Immunogen: Recombinant protein of human GCN5

Applications: WB,IP

Recommended Dilutions: WB: 1/500-1/1000 IP: 1/20

Host Species: Rabbit

Clonality: Rabbit Monoclonal

Clone ID: R05-2C1

MW: Calculated MW: 94 kDa; Observed MW: 94 kDa

Isotype: IgG

Purification: Affinity Purified

Species Reactivity: Human

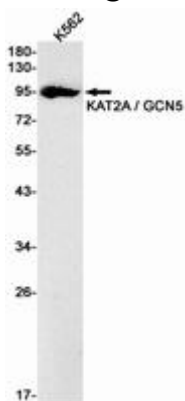
Conjugation: Unconjugated

Modification: Unmodified

Constituents: PBS (without Mg²⁺ and Ca²⁺), pH 7.3 containing 50% glycerol, 0.5% BSA and 0.02% sodium azide

Research Areas: Epigenetics and Nuclear Signaling

Storage & Shipping: Store at -20°C. Avoid repeated freezing and thawing



Western blot analysis of KAT2A / GCN5 in K562 lysates using KAT2A antibody.