

Product datasheet for TA384587M

OriGene Technologies, Inc.

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KAT2A Rabbit Monoclonal Antibody [Clone ID: R05-2C1]

Product data:

Product Type: Primary Antibodies

Clone Name: R05-2C1
Applications: IP, WB

Recommended Dilution: WB: 1/1000

IP: 1/20

Reactivity: Human
Host: Rabbit
Isotype: IgG

Clonality: Monoclonal

Immunogen: Recombinant protein of human GCN5

Formulation: 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40% Glycerol, 0.01% Sodium azide and 0.05% BSA

Concentration: lot specific

Purification: Affinity Purified Conjugation: Unconjugated

Storage: Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Stability: 1 year

Predicted Protein Size: Calculated MW: 94 kDa; Observed MW: 94 kDa

Gene Name: lysine acetyltransferase 2A

Database Link: Entrez Gene 2648 Human

Q92830





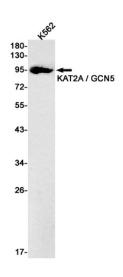
Background:

Swiss-Prot Acc.Q92830.Protein lysine acyltransferase that can act both as a 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).

Synonyms:

GCN5; GCN5L2; HGCN5; hsGCN5; MGC102791; PCAF-b; STAF97

Product images:



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